

TRANSPORT ASSESSMENT

Clowes Developments (UK) Ltd

Former Landfill Site, Brockhampton West, Harts Farm Way,
Havant

February 2021

Transport Assessment

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1 Introduction

- 1.1 Vectos have been appointed by Clowes Developments (UK) Ltd to provide advice on the traffic and transport aspects in relation to the proposed development at the Former Landfill site, Brockhampton West, Harts Farm Way, Havant. The site is located within the administrative boundaries of Havant Borough Council (HBC) and Hampshire County Council (HCC). The location of the site is shown in **Figure 1**.
- 1.2 The site is situated to the south-west of Havant and Bedhampton and consists of reclaimed land, which has previously been used as landfill for a variety of refuse materials, including household waste. The site is otherwise undeveloped.
- 1.3 To the north, the site is bordered by the A27, providing connections to the wider South Coast area. To the south, the site is bordered by Harts Farm Way, which provides access to other employment uses to the east as well as connecting with the A27 via the ‘teardrop junction’. There is currently access onto the site from Harts Farm Way as well as a gravelled parking/turning area in the middle of the site.
- 1.4 The development proposals are for:
- “Outline application for the development of new employment units to provide up to 29,000 sqm (gross internal area) for flexible use across use classes E (light industrial), B2 and B8 with ancillary offices, car parking, service yards, drainage works, landscaping and associated works to prepare the site for development. All matters are reserved except the primary means of access to the site.”*
- 1.5 There are three illustrative layouts for the proposed development which can be viewed at **Appendix A**.
- 1.6 This Transport Assessment considers the potential transport effects of the proposed development in support of the planning application. Pre-application discussions with both HCC and Highways England (HE) have been held to discuss the proposed development. A Transport Scoping Note was submitted for discussion. The Scoping Note and the HCC/HE response are included for reference at **Appendix B**.
- 1.7 Following this introduction, the report is structured as follows:
- Section 2 - provides a description of the existing situation and transport networks;
 - Section 3 - considers the proposals in the context of National, Regional and Local Policy;
 - Section 4 - describes the development proposals;
 - Section 5 - presents an assessment of the likely trip generation of the scheme;
 - Section 6 - provides an assessment of the likely traffic impact of the scheme;
 - Section 7 - provides a summary and conclusion to the report.

2 Existing Conditions

- 2.1 This section of the TA provides an overview of the current accessibility of the site in terms of sustainable travel as well as a high-level review of the local highway network.

Site Location

- 2.2 The location of the site in both a strategic and local context is shown in **Figures 1** and **2**, respectively.
- 2.3 The site comprises reclaimed land, which has previously been used as landfill for a variety of refuse materials, including household waste. The site is otherwise undeveloped.

Accessibility by Non-Car Modes

- 2.4 The following section outlines the accessibility of the site by sustainable modes. A plan illustrating the connections available is included at **Figure 3**.

Walking and Cycling

- 2.5 Pedestrian access to the site is currently achieved via the existing vehicular access from Harts Farm Way. A shared footway / cycleway is provided to the south of the site on the southern side of Harts Farm Way. A pedestrian dedicated crossing with dropped kerbs and tactile paving is provided to the north-east of the site at the Harts Farm Way/A27 junction. In addition, a footway is provided on the northern side of Harts Farm Way once the carriageway has crossed over the Hermitage Stream immediately to the east of the site.
- 2.6 As show at **Figure 3**, there are shared footways / cycleways, which extend from the site north over the A27. These footway/cycleways link the site to the key residential area of Bedhampton. The shared footways / cycleways surrounding the site are of sufficient width with street lighting alongside dropped kerbs and tactile paving available to cross accesses and at junctions, including A27 on and off-slips, Bedhampton Road and the A3(M) on and off-slips.
- 2.7 A second pedestrian access is provided to the north of the site via a pedestrian footbridge over the A27. The footbridge leads from Bedhampton directly into the site. The site is bound by a PRoW to the east, that runs alongside the Hermitage Stream, which is designated as footpath Havant 30 on HCC PRoW map. In addition, Solent Way, a long-distance footpath running from Milford-on-Sea to Emsworth Harbour in its entirety, runs to the south and east of the site along the coastal footpath before joining Harts Farm Way to the east of the Hermitage Stream.
- 2.8 The section of shared footway / cycleway along Harts Farm Way forms part of National Cycle Network (NCN) Route 22 which, when complete, will link London with Portsmouth, then Brockenhurst via the Isle of Wight. Locally, the route runs from Portsmouth Harbour Railway Station before travelling north following the alignment of the M27. Upon reaching Cosham, the route continues east towards the site before continuing north to Havant Railway Station and Petersfield. This route provides access from a number of nearby key residential areas, most pertinently Havant.
- 2.9 Certain roads throughout the surrounding industrial estate, including Southmoor Lane and Brookside Road, include on-road cycle lanes. Other surrounding roads throughout the industrial estate are wide

and considered conducive to cycling. In addition, in proximity to the site, NCN Route 2 runs south towards Hayling Island and NCN Route 222 runs north towards Drayton and Farlington.

Walking and Cycling Audit

- 2.10 There are a number of local facilities within easy walking and cycling distance of the proposed development. A walking and cycling audit has been undertaken to consider accessibility to these facilities. The five routes were agreed with HCC before a site visit was undertaken. All facilities are considered below and detailed figures of the audit undertaken during the site visit is included at **Appendix C**. Unless stated otherwise the footways and pedestrian/cycle routes were all surfaced in tarmac, in good condition and fit for purpose.
- 2.11 The following walking and cycling routes were agreed with HCC to the following local facilities:
- Route 1 (walking): Tesco Extra, Solent Retail Park, Havant Town Centre, Havant Park, Havant Bus Station and Havant Railway Station
 - Route 2 (cycling): Tesco Extra, Solent Retail Park, Havant Town Centre, Havant Park, Havant Bus Station and Havant Railway Station
 - Route 3: Forty Acres Bus Stops
 - Route 4: Langstone Road Bus Stops
 - Route 5: Bedhampton Railway Station
 - Route 6: Bedhampton using Footpath 30

Route 1

- 2.12 Havant Railway Station is located approximately 2.3km to the north east of the site. Pedestrians can use the shared footway / cycleway along Harts Farm Way with dropped kerbs and tactile paving provided at crossovers and junctions.
- 2.13 Pedestrians then continue on well-maintained footways north on Brockhampton Road and east on Solent Road before turning onto a footway through Solent Retail Park. Pedestrians can then continue north on Park Road South using the wide footways, following signs towards the town centre before crossing the road using the wide pedestrian / cycle crossing.
- 2.14 Pedestrians subsequently continue east on Elm Lane where Havant Bus Station is reached which provides a number of services throughout the day. Although this can make the area busy, it provides key sustainable transport connections to the area. Using the pedestrian / cycle crossing, users will continue north on Market Parade and through a pedestrianised precinct before arriving at the railway station.

Route 2

- 2.15 The majority of this route follows NCN Route 22. This begins by cyclists using the shared footway / cycleway along Harts Farm Way. Cyclists can then continue east on the shared footway / cycleway on the northern side of Brookside Road before continuing on an off-road cycle route.
- 2.16 Cyclists continue north using the underpass beneath the A27 which is well lit before following the path running to the east of the Tesco Extra supermarket. Users can follow the off-road shared footway / cycleway north through Solent Retail Park and onto Park Road South before using the wide shared pedestrian / cycle crossing. Cyclists will subsequently turn east on Elm Lane and north on Market Parade and North Street before arriving at the railway station.

Route 3

- 2.17 The Forty Acres Bus Stops are located approximately 1km north west of the site. A footway is located on the eastern side of Harts Farm Way which provides access to a wide pedestrian / cycle crossing. Users will continue on the eastern side of the A27 dumbbell roundabout before using the crossing with dropped kerbs and tactile paving to cross to the western side of the road. Following this shared footway / cycleway for a short distance, users will then cross back to the eastern side of the road using the crossing point provided, following the signs towards Drayton and Farlington.
- 2.18 A crash barrier is provided here increasing safety for users. Pedestrians and cyclists can continue for approximately 300m using this wide shared surface. Although a road signpost is present in the centre of the path, this does not significantly restrict the effective width.
- 2.19 Users will next cross Bedhampton Hill using the crossing with dropped kerbs and tactile paving before using the signalised crossing to cross the A3(M) off slip. Cyclists must then dismount for a short section where the effective width of the path is reduced as it passes beneath the A3(M).
- 2.20 Continuing to follow the signs, users must cross the A3(M) on slip before continuing west on Havant Road where a wide, flat shared surface provides access to the eastbound bus stop. A crossing point with dropped kerbs and tactile paving provides access to the westbound bus stop.

Route 4

- 2.21 The Langstone Road Bus Stops are located approximately 1.5km east of the site. Following the shared footway / cycleway along Harts Farm Way, using the dropped kerbs and tactile paving to cross junctions where required, users will then cross the roundabout to continue east on Brookside Road.
- 2.22 Continuing on the off-road section of NCN Route 22, after approximately 400m, users will then turn south onto a public footpath which is gravelled, where cyclists must dismount. After approximately 150m, users will then turn east onto a wide, flat footway before turning south onto Langstone Road.
- 2.23 After following the shared footway / cycleway for approximately 70m, the northbound bus stop is reached, as well as a crossing point. Here users can cross onto the eastern side of Langstone Road and continue north to the southbound bus stop. This section of road, though relatively busy, has well

maintained footways and street lighting at regular intervals which provide good levels of natural surveillance.

Route 5

- 2.24 Bedhampton Railway Station is located approximately 1.7km north east of the site and is accessed by first travelling east along Harts Farm Way using the shared footway / cycleway and the crossing points where provided.
- 2.25 Pedestrians and cyclists will then turn north onto Brockhampton Road crossing over the A27. At the Brockhampton Road / Solent Road / Marples Way roundabout, due to the presence of crash barriers which increase safety for pedestrians, users are required to travel approximately 25m west along Marples Way to cross the road using a crossing with dropped kerbs.
- 2.26 Pedestrians and cyclists will travel north on Brockhampton Road for approximately 375m. Here, wide footways, crossings with dropped kerbs and tactile paving, and street lighting are present, creating a pleasant environment for users. Users will then turn west onto West Street where cyclists will be required to cycle on road to reach the railway station. The footway along the road is of sufficient width, with dropped kerbs provided to cross side roads.

Route 6

- 2.27 Footpath 30 runs to the east of the site. To access the footpath, pedestrians can either walk south through the Broadmarsh Coastal Park before joining the tarmacked footway north, or use a gravel footpath directly from Harts Farm Way.
- 2.28 Pedestrians then continue north on the footpath alongside the river, passing beneath Harts Farm Way. The footpath beyond this point until reaching the bridge to cross the A27 is largely a mud track. After crossing the bridge over the A27, users continue north to join Mill Lane. Again, this section is largely a mud track, becoming tarmacked upon crossing the railway line.
- 2.29 Pedestrians must walk on road along Mill Lane, however, during the audit, low levels of traffic were observed, reducing the likelihood of conflict between pedestrians and vehicles.
- 2.30 Upon reaching Bidbury Lane, pedestrians cross the road to use the footpath through the park. This off-road path is tarmacked with street lighting and leads to Bedhampton, a key residential area.

Public Transport

Bus Services

- 2.31 The nearest bus stops lie approximately a 1km walk to the north west of the proposed development on Havant Road (A2030) (Forty Acres). The eastbound bus stop is provided with seating, timetable information and a flag and pole arrangement, while the westbound bus stop is also provided with a bus shelter. These stops are served by the 21 and 23 bus services providing connections to Havant, Havant bus station, Portsmouth, and Southsea.
- 2.32 In addition, further bus stops are located on Langstone Road approximately a 1.5km walk east of the site. The southbound bus stop (Woodbury Avenue) is provided with timetable information and a flag

and pole arrangement, while the northbound bus stop (Langbrook Close) is also provided with a bus shelter and seating. These stops are served by the 30 and 31 bus service providing connections to Havant, Hayling Island and Eastoke.

2.33 Comprehensive services are available from Havant Bus Station approximately a 2km walk north east of the site. Services include the 20, 37 and 700 bus services providing connection to locations including Petersfield, Portsmouth, and Chichester.

2.34 A summary of the bus services that call at these stops is provided in **Table 2.1**.

Table 2.1: Existing Bus Services

Route Number	Route	Weekday Frequency
Forty Acres		
21	Havant - Leigh Park - Bedhampton - Farlington - Hilsea - Portsmouth	2 per hour
23	Leigh Park - Havant - Bedhampton - Cosham - Portsmouth – Southsea	4 per hour
Woodbury Avenue / Langbrook Close		
30	Havant - Hayling Island - Eastoke (circular)	2 per hour
31	Havant - Hayling Island - Eastoke (circular)	2 per hour
Havant Bus Station		
20	Havant - Leigh Park - Bedhampton - Purbrook - Cosham - Portsmouth	2 per hour
21	Havant - Leigh Park - Bedhampton - Farlington - Hilsea - Portsmouth	2 per hour
23	Leigh Park - Havant - Bedhampton - Cosham - Portsmouth - Southsea	4 per hour
27	Rowlands Castle - Leigh Park - Havant - Denvilles - Emsworth	1 per 2 hours
30	Havant - Hayling Island - Eastoke (circular)	2 per hour
31	Havant - Hayling Island - Eastoke (circular)	2 per hour
32	Hayling Island - Havant	1 per hour
37	Havant - Purbrook - Waterlooville - Cowplain - Horndean - Clanfield - Petersfield	1 per hour
39	Havant - Leigh Park - Bedhampton - Purbrook - Waterlooville - Wecock	3 per hour
700	Felpham – Bognor Regis – Chichester – Emsworth – Havant - Portsmouth	2 per hour

Rail Services

- 2.35 Bedhampton Railway Station is the nearest station located approximately a 1.7km walk north east of the site. The station is operated by South Western Railway.
- 2.36 In addition, Havant Railway Station is located approximately a 2.3 km walk north east of the site. The station is also operated by South Western Railway, however, a wider range of services with greater frequencies are available from this station.
- 2.37 Havant train station is located approximately 300m from Havant bus station, which can be accessed from the site by service No.23, which provides 4 buses per hour.
- 2.38 A summary of the services available from both Bedhampton and Havant Railway Station is provided in **Table 2.2**.

Table 2.2: Existing Rail Services

Destination	Weekday Frequency
Bedhampton Railway Station	
Littlehampton	1 per hour
Portsmouth & Southsea	2 per hour
Portsmouth Harbour	1 per hour
London Waterloo	1 per hour
Havant Railway Station	
Portsmouth Harbour	3 per hour
Portsmouth & Southsea	4 per hour
Brighton	2 per hour
Southampton Central	2 per hour
London Waterloo	2 per hour
London Victoria	2 per hour
Littlehampton	1 per hour

Local Highway Network

Harts Farm Way

- 2.39 Vehicle access to the site is achieved via an existing T-junction from Harts Farm Way. Harts Farm Way runs on an east-west alignment, fronting the immediate west and south of the site. The road runs between the A27 to the west and the Harts Farm Road / Brockhampton Road / Brookside Road / Southmoor Lane roundabout to the east which provides access to a predominantly industrial area. Along its length, Harts Farm Way provides a single lane carriageway in each direction with a 30mph

speed limit. To the east of the existing site access, double yellow lines run along both sides of the road restricting parking.

- 2.40 Harts Farm Way joins the A27 to the A3(M) / A27 junction. Harts Farm Way / A27 forms a dumbbell junction and provides access to Harts Farm Way to the south and the A27 to the east and west.

A27

- 2.41 The A27 forms the northern boundary of the site and runs on an east-west alignment. In its entirety it runs from its junction with the A36 in Whiteparish, Wiltshire to Penvensey, East Sussex. In proximity to the site, the road runs from the M27 in the west providing a connection to Portsmouth, past Havant continuing towards Chichester in the east. In proximity to the site, the road is a two-lane dual carriageway operating at national speed limit.
- 2.42 The site can be accessed by exiting off the Havant Bypass. The slip road to access the site from the A27 is located to the north of the site.

A3(M)

- 2.43 The A3(M) is a short section of motorway that runs on a north-south alignment to the north of the site. The road is a two-lane dual carriageway operating at national speed limit. The site can be accessed by exiting the A3(M) at junction 5 which connects to the A27, Bedhampton Hill, Havant Road and Harts Farm Way.

Personal Injury Collision Data Review

- 2.44 The National Planning Practice Guidance (NPPD) recommends that a Transport Assessment should include:

“...an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area”

- 2.45 Whilst there is nothing to suggest that the local highway network is subject to an abnormally high accident rate Personal Injury Collision (PIC) data has been requested from Hampshire Constabulary for the roads surrounding the site for the most recent five-year period (May 2015 to May 2020). This will provide an understanding of the safety of the surrounding highway network for all users and highlight any significant highway safety issues that may need to be considered. A copy of the collision report is contained within **Appendix D**.
- 2.46 The data shows that in the study area, a total of 220 collisions occurred 44 serious collisions and 176 slight collisions. No collisions resulted in fatalities.
- 2.47 In the immediate vicinity of the site there were no accident clusters (i.e., locations with seven or more accidents).
- 2.48 These 220 accidents resulted in 269 casualties, split between 225 slight casualties, 44 serious casualties and 0 fatal casualties. These 269 casualties included 92 driver/riders; 55 passengers; 54

cyclists and 21 pedestrians. The annual split based on the injury severity and type of casualty is displayed in **Table 2.3**.

Table 2.3: Summary of Collisions

Casualty	Injury Severity	Year						Total
		2015	2016	2017	2018	2019	2020	
Motor Vehicle Occupant	Fatal	0	0	0	0	0	0	0
	Serious	1	7	5	5	6	0	24
	Slight	22	42	23	32	43	8	170
Pedestrian	Fatal	0	0	0	0	0	0	0
	Serious	1	2	1	1		2	7
	Slight		6	3	1	3	1	14
Cyclists	Fatal	0	0	0	0	0	0	0
	Serious	2		3	3	4	1	13
	Slight	5	11	3	8	5	6	41

Note: Motor vehicle occupant includes driver / ride and / or passenger

2.49 Of the 220 accidents, there was the following vehicle split:

- 115 x motor vehicle with 3+ wheels;
- 52 x 2-wheeled motor vehicles;
- 54 x pedal cycles; and
- 1 x horses and other.

Serious Accidents Involving Vulnerable Road Users

2.50 Information available for serious accidents involving pedestrians and/or cyclists on within close proximity to the site are discussed below.

- **Ref: 44180031344** – Occurred on Harts Farm Way at junction with Tarmac Ltd entrance, involving a cyclist and a van. The pedal cycle was travelling north east in the cycle lane and had to take evasive avoiding action of a van turning right into Tarmac Ltd, causing the rider to fall and suffer serious injuries. The accident was attributed to both drivers failing to look properly and the van driver disobeying road markings.
- **Ref: 44200095477** – A car travelling east along Solent Road was edging forwards in traffic and collided with a cyclist who was crossing the road in between vehicles, causing serious injury. It was concluded that the driver failed to look properly and the cyclist failed to judge the vehicles path when entering the road from footway and also failed to look properly.

- 2.51 No contributing factors cited were directly linked to the road environment in the accident reports. A small minority has other possible factors such as the driver's vision being affected by dazzling sun or a slippery road surface due to weather conditions.
- 2.52 However, the majority accidents were attributed to human error factors. A review of the contributory factors of each collision showed that 58% of all collisions in the study area were caused by poor observations, citing 'failed to look properly' and/or 'failed to judge other vehicles/persons path or speed' as contributory factors.

Summary

- 2.53 The site is accessible by walking and cycling with dedicated routes leading directly to the site. Of note is the shared footway/cycleway on the southern side of Harts Farm Way which forms part of NCN Route 22. A walking and cycling audit has been undertaken which concludes that the condition of walking and cycle routes to the site from key points in the area are in good condition and fit for purpose. Nearby train stations are accessible within an acceptable cycling distance from the site and bus stops are located within walking distance from the site.
- 2.54 The site is located near to the strategic road network with immediate access to both the A27 and the A3(M). The local road network is accessible to the east of the site via the Harts Farm Way / Southmoor Lane / Brookside Road / Brockhampton Way roundabout.

3 Policy Context

Introduction

- 3.1 This section introduces policy at national, regional, and local levels, including relevant planning guidance related to transport against which the proposed development should be assessed.

National Policy

National Planning Policy Framework (February 2019)

- 3.2 The National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities and Local Government in February 2019. The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced.
- 3.3 Chapter 9 covers the promotion of 'Sustainable Transport' and states in paragraph 102 that transport issues should be considered in the earliest stages of plan-making and proposals, so that:

- "a) the potential impacts of development on transport networks can be addressed;*
- b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
- e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places."*

- 3.4 NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- "a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- b) safe and suitable access to the site can be achieved for all users; and*
- c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."*

3.5 Within the above context it is stated that all applications for developments should:

“a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character.”

3.6 As such:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe”.

National Planning Practice Guidance (2014)

3.7 The National Planning Practice Guidance (NPPG), which is published by the Ministry of Housing, Communities and Local Government, supports the overarching aims of the NPPF. Highways and transportation matters are dealt with by the NPPG under the heading of *“Travel Plans, Transport Assessments and Statements”*.

3.8 The NPPG recommends, where possible, the following information be included in Transport Assessments:

- Information about the proposed development and site layout;
- Information about the surrounding area including highway network, transport provision and collision data;
- Existing traffic flows;
- Trip generation for the proposed development and an assessment of the impact of the local highway network; and
- Description of measures to mitigate any residual impacts of the proposed development.

3.9 The NPPG recommends, where possible, the following information be included in Travel Plans:

- Benchmark travel data and existing travel habits;
- Information about the proposed development and expected trip generation;

- Identify specific outcomes, targets and measures with monitoring and management arrangements; and
- Consider proposals that reduce the need to travel to the proposed development as well as improvements to public transport.

Regional Policy

Hampshire Local Transport Plan 3, 2011-2031 (April 2013)

- 3.10 Hampshire's Local Transport Plan sets out a long-term vision for how the transport network of Hampshire will develop over the next 20 years. Their aim is *"to provide safe, efficient and reliable ways to get around a prospering and sustainable Hampshire."*
- 3.11 The document outlines three main priorities namely:
- "Main Priority 1: To support economic growth by ensuring the safety, soundness and efficiency of the transport network in Hampshire.*
- Main Priority 2: Provide a safe, well-maintained, and more resilient road network in Hampshire as the basic transport infrastructure of the county on which all forms of transport directly or indirectly depend, and the key to continued casualty reduction.*
- Main Priority 3: Manage traffic to maximise the efficiency of existing network capacity, improving journey time reliability and reducing emissions, thereby supporting the efficient and sustainable movement of people and goods."*
- 3.12 For the South Hampshire area, a number of outcomes are listed including:
- "Reduced dependence on the private car through an increased number of people choosing public transport and the 'active travel' modes of walking and cycling...*
- Improved awareness of the different travel options available to people for their journeys, enabling informed choices about whether people travel, and how."*

Local Policy

Havant Borough Core Strategy (March 2011)

- 3.13 The Core Strategy sets the planning framework for the Borough to 2026. It describes the council's long-term vision and objectives for the development in the Borough.
- 3.14 Policy CS2 'Employment' notes that the council will seek to accommodate 162,000 sqm of new employment floorspace 2006 – 2026 including:
- 75,000sqm of B1
 - 45,500sqm of B2

- 41,500sqm of B8

3.15 Policy CS20 'Transport and Access Strategy' states development will be permitted that:

- *"Does not increase congestion and promotes better use of existing transport networks..."*
- *Maintains or improves the range of transport modes accessible to the uses of the development site with specific emphasis on public transport, especially high quality/frequency buses and includes walking and cycling where appropriate."*

3.16 Policy DM11 'Planning for More Sustainable Travel' notes:

"The council will seek to ensure that every opportunity is taken to increase integration of sustainable travel modes and availability of non-motorised modes by appropriate measures including:

- *Securing on-site and/or off-site interventions that promote integrated travel and access by non-motorised modes.*
- *Requiring safe and secure vehicular and cycle parking and turning facilities to adopted standards.*
- *Securing appropriate improvements to public and community transport (including infrastructure requirements) in accordance with the Hampshire Local Transport Plan and (where applicable) the relevant sub-regional transport strategy.*
- *Proposals for reducing opportunities for informal parking in the area surrounding the development where this would impact on the capacity, operation and safety of the local highway network and/or the amenity of the locality.*
- *Ensuring that new developments are located and designed at the outset to encourage lower vehicle speeds and safe, permeable, inclusive layouts that integrate with existing pedestrian, cycle and public transport routes. This will facilitate and encourage short distance trips by cycle and walking, including to public transport interchanges."*

3.17 Similarly, Policy DM12 'Mitigating the Impacts of Travel', states that:

"New Developments will be required to mitigate their travel impact, including the environmental impacts of travel (such as noise, air and visual pollution) and impacts on amenity, health and climate change by ensuring that, where relevant, the following criteria are met:

- *Adequate provision is made for integrated and improved transport infrastructure or appropriate mitigation measures, through direct improvements and S106 contributions in accordance with the Hampshire County Council Transport Contributions Policy.*
- *The submission of a transport assessment and travel plan alongside any planning application on proposals for major development or where a proposal is likely to have significant transport implications.*

- *The submission of a transport statement must accompany planning applications to explain changes to travel demand.*
- *A bond is provided which will be used to mitigate negative travel impacts of the development, should the travel plan fail to achieve its targets. This bond will be held by the relevant local transport authority.*
- *In relation to outline planning applications, a framework for the preparation of travel assessments and travel plans will be submitted with the planning application proposals.”*

3.18 Policy DM14 ‘Car and Cycle Parking on Development (excluding residential)’ notes that:

“Development will only be permitted where it provides parking for cars, motor cycles and cycles in accordance with the relevant standards. Such parking provision must be appropriately located in relation to the development and be practical for its intended use.”

3.19 Policy DM16 ‘Freight Transport’ states that:

“Freight movements resulting from a development should not impact negatively on the environment or the quality of life of those who live and work nearby. Where such developments will have a negative impact on the capacity, operation and safety of transport networks, appropriate mitigation measures should form part of the application for consideration by the council.

- *Proposals generating significant freight or goods movements should have good access to transport networks. Preferred sites for such development will be those which have the potential for rail access. The provision of rail freight will be encouraged wherever possible. Otherwise, such development should be located where there is ready access to roads which are higher in the road hierarchy and where sensitive areas are less likely to be affected by heavy goods vehicles; and*
- *Proposals should make reference to and be in accordance with, the Hampshire Freight Strategy.”*

Havant Borough Local Plan (Allocations) (July 2014)

3.20 The Local Plan (Allocations) identifies sites allocated for specific uses within the Borough up to 2026.

3.21 Within Policy HB2 ‘Havant & Bedhampton Employment Allocations’, the site is allocated for employment development as site BD11 ‘Brockhampton West’. As such, planning permissions will be granted provided the proposals are broadly consistent to the indicative floorspace of 23,400 sqm and take account of site-specific requirements as set out below.

3.22 The site is described as a *“High quality gateway employment site that could provide up to 23,400 square metres of new manufacturing and/or warehousing floorspace, supporting between 334 and 650 jobs”.*

- 3.23 One of the existing constraints of the site is that it is *“Located in close proximity to the A3(M) Junction 5 and could have an impact on the Strategic Road Network.”*
- 3.24 The existing transport provision of this site is detailed as a *“Cycle path running along Harts Farm Way provides access to the Havant Borough Cycle Network”* and *“Good connectivity between Portsmouth and the employment areas nearby.”*
- 3.25 The site-specific development requirements include:
- *“Access from Harts Farm Way to be provided to the satisfaction of the highway authority...”*
 - *“Potential mitigation measures to ensure the safe and efficient operation of the Strategic Road Network to the satisfaction of the Highways Agency.”*
- 3.26 As such, in line with NPPF guidance, when considering development proposals, a presumption in favour of sustainable development will be applied, with planning applications that accord with policies in the Local Plan approved without delay unless material consideration indicates otherwise (Policy AL1: Policy in Favour of Sustainable Development).

Draft Havant Borough Local Plan 2036

- 3.27 The Pre-Submission version with changes of the Draft Havant Borough Local Plan 2036 was considered and agreed by the Cabinet on 1st July 2020 and by Full Council on 9th September 2020. A consultation will follow before being submitted to the Secretary of State for independent examination.
- 3.28 As contained in the existing Local Plan, the site is allocated for development as site C10 ‘Brockhampton West’. This includes *“Employment development of about 20,000 square metres (Classes B1, B2 and B8)”* which will be permitted where a number of documents are provided including a Transport Assessment and Travel Plan. In addition, there is a requirement to safeguard footpath Havant 30 and enhance pedestrian and cycle routes between the site and Solent Way and NCN Route 22.
- 3.29 IN2 ‘Improving transport infrastructure’ states development will be supported which improves accessibility to employment that provides transport options that promote equality.
- 3.30 Furthermore IN3 ‘Transport and parking’ states development proposals will be permitted where:
- “a. Safe and suitable access to the site is provided for all people and modes of transport;*
 - b. Sustainable modes of travel are encouraged and supported through on and/or off-site measures;*
 - c. The site layout encourages lower vehicle speeds, and prioritises the safe and convenient movement of pedestrians and cyclists within the site;*
 - d. Pedestrian and cycle routes are provided which conveniently reach all parts of the site, and link with the wider network beyond the site, providing a high level of permeability;*

- e. Any existing public rights of way are safeguarded and where appropriate improved, and new routes provided where appropriate;*
- f. The streets and public and private parking areas contribute positively to the design of the development and deliver a high quality public realm, including the use of high quality materials and integration of landscaping;*
- g. Sufficient visibility and lighting is provided for the safe and convenient use of the roads, cycle routes, walking routes and parking places;*
- h. Adequate provision is made for varying sizes of vehicles, including refuse and emergency vehicles, to access all parts of the site, park, load, unload and turn safely and conveniently;*
- i. Provision is made for the parking of cars, motor cycles and cycles in line with Council standards;*
- j. Electric Vehicle charging infrastructure is provided for:*
 - i. Each new residential unit with private off-street parking;*
 - ii. An appropriate number of spaces in shared parking at residential and commercial development where long-term parking for staff or residents is provided.*
- k. Where required, a satisfactory Transport Statement or Transport Assessment is submitted in support of the planning application to evaluate transport impacts, and to demonstrate that proposed transport improvements will meet the needs of the development and mitigate adverse impacts;*
- l. The traffic generated by the development, taking into account any proposed avoidance and mitigation measures, would not result in severe cumulative impacts on the transport network or the environment;*
- m. A Travel Plan is provided in support of a planning application where appropriate in relation to the scale and type of development."*

Havant Borough Council Parking Supplementary Planning Document (September 2019)

- 3.31 The Parking Supplementary Planning Document (SPD) sets out the off-street parking standards relating to new development in the Borough.
- 3.32 **Table 3.1** summarises the parking standards relevant to the proposed development.

Table 3.1: Havant Parking Standards

Land use	Minimum car parking standard	Minimum cycle parking standard		Motorcycle parking standard	Disabled parking standard
		Long stay (GEA)	Short stay (GEA)		
B1(c) Light Industry	1 space per 45 sqm	1 stand per 250 sqm	1 stand per 500 sqm	1 space per 25 car parking spaces	5% of total allocation
B2 General Industrial	1 space per 45 sqm	1 stand per 350 sqm	1 stand per 350 sqm		
B8 Warehouse	1 space per 90 sqm	1 stand per 500 sqm	1 stand per 1,000 sqm		

Note: Long stay cycle parking to be at least the greater of the spaces per GEA identified or 1 space per 8 staff

- 3.33 Within the document, it is noted that, where commercial developments are proposed, parking requirements for each element should be calculated individually. As such, parking requirements should be applied to the proportion of the total floor area for each use.

Summary

- 3.34 A review of the policy at national, regional, and local level highlights a need for the site to be located in an accessible location by sustainable modes. This has been demonstrated in **Section 2** with the proximity to NCN Route 22, being within walking distance of bus stops and cycling distance of rail services. In addition, the site accords to the proposed employment land use as contained within Havant Borough's Local Plan (Allocations). Further details will be provided in the following sections of the report as to how the proposed development accords to relevant policy including parking provision to standard, suitable access for all users as well as no significant adverse transport impact as result of the proposed development. It is, therefore, considered that the proposed development accords with national, regional, and local transport policy.

4 Development Proposals

- 4.1 This section of the report sets out the development proposals for the site including access, parking, and servicing.

Overview

- 4.2 The proposed development comprises:

Outline application for the development of new employment units to provide up to 29,000 sqm (gross internal area) for flexible use across use classes E (light industrial), B2 and B8 with ancillary offices, car parking, service yards, drainage works, landscaping and associated works to prepare the site for development. All matters are reserved except the primary means of access to the site.

- 4.3 The form of the proposed units has not yet been defined and as such three illustrative layouts are contained at **Appendix A**.
- 4.4 Whilst the form of the proposed buildings has not yet been defined, three illustrative layouts will be submitted demonstrating use of the site for one-, two- and three-unit schemes. The floorspace associated with each layout is as follows:
- One-unit scheme: 28,392sqm (GIA)
 - Two-unit scheme: 27,985sqm (GIA)
 - Three-unit scheme: 27,471sqm (GIA)

Access Arrangements

Vehicular

- 4.5 The indicative layout plans illustrate two means of access to the site. These will be taken via priority T-junctions onto Harts Farm Way as shown in **Appendix A**. The primary means of access will be formed at the eastern end of the site with flexibility sought for a second means of access to the west of the site.
- 4.6 The existing access junction to the east of the site will be removed as part of the development. This will be replaced with a priority T-junction which will be used as the primary access. In line with guidance set out within Manual for Streets (MfS) for 30mph roads, appropriate visibility splays of 2.4 x 43m can be achieved at the primary site access. A preliminary plan of the proposed primary access can be viewed at **Appendix E**.
- 4.7 If the proposed secondary access to the west comes forward this will be used by staff to access the car parking areas. The second access will not be used by HGVs to access the service yards. Following discussions with HCC it was agreed that the required visibility splays should be provided in accordance with observed speeds on Harts Farm Way. Drawing 205467/PD06 Rev A at **Appendix F** demonstrates that the appropriate visibility splays can be achieved.

Pedestrian

- 4.8 A new pedestrian access will be provided to the west of the site on Harts Farm Way. The proposed pedestrian access will link the site to the existing pedestrian crossing facilities at the Harts Farm Way / A27 junction, creating permeability between the site and the surrounding area and existing pedestrian/cycle network.
- 4.9 The proposed pedestrian access can be viewed on the illustrative plans at **Appendix A**.

Parking

- 4.10 The indicative layout plans as shown at **Appendix A** detail the level of parking to be provided with each layout. The proposed level of provision associated with each layout is shown in **Table 4.1**.

Table 4.1: Proposed Parking Provision

Layout	Car parking provision	Cycle parking provision	Disabled parking provision	HGV loading dock provision
One-unit scheme	315	88	16	25
Two-unit scheme	311	84	16	14
Three-unit scheme	305	88	16	14

- 4.11 The car and cycle parking requirements have been calculated considering HBC's Parking SPD (September 2019). Based on the proposed floor areas of the indicative layouts, the car parking requirements for E (B1c), B2 and B8 land use have been calculated and are shown in **Table 4.2**.

Table 4.2: E (B1c), B2 and B8 Parking Standards and Requirements

Land use	Minimum car parking standard	Minimum cycle parking standard	
		Long stay (GEA)	Short stay (GEA)
Standards			
E (B1c)	1 space per 45 sqm	1 stand per 250 sqm	1 stand per 500 sqm
B2	1 space per 45 sqm	1 stand per 350 sqm	1 stand per 350 sqm
B8	1 space per 90 sqm	1 stand per 500 sqm	1 stand per 1,000 sqm
One-unit scheme (28,392sqm) requirements			
E (B1c)	631	114	57
B2	631	81	81
B8	315	57	28
Two-unit scheme (27,985sqm) requirements			
E (B1c)	622	112	56
B2	622	80	80
B8	311	56	28
Three-unit scheme (27,471sqm) requirements			

Land use	Minimum car parking standard	Minimum cycle parking standard	
		Long stay (GEA)	Short stay (GEA)
Standards			
E (B1c)	610	110	55
B2	610	78	78
B8	305	55	27

- 4.12 Where a development comprises a mix of uses, the parking standards should be applied to the proportion of the total floor area represented by each use. Given the flexibility sought across E/B2/B8, the final quantum of each proposed use is not yet known. Therefore, the car parking layouts, as shown at **Appendix A**, are indicative and will be revised once the occupier of the site is known under reserved matters applications.
- 4.13 As such, from **Table 4.1** it can be seen that the parking proposed as part of the development is provided to B8 standard. If an E or B2 occupier is interested in occupying the site, a revised layout with increased levels of car parking would be provided. Occupiers for B2 and or B1c use have lower requirements for HGV access, so additional car parking could be located within the service yard areas that will not be used for servicing.
- 4.14 With regards to parking for people with disabilities, disabled parking should be provided at 5% of the total allocation. The illustrative layouts included at **Appendix A** shows that disabled parking is provided in line with the 5% allocation required.
- 4.15 In addition, motorcycle parking is shown in the illustrated layouts included at **Appendix A**.

Servicing

- 4.16 As noted above under the car parking standards, HGV loading bays will be provided for each unit as shown within the illustrative layouts contained at **Appendix A**. Swept path analysis has been undertaken and is shown at **Appendix G**. This shows that a 16.5m articulated vehicle is able to access each respective loading dock safely.

Sustainable Transport

- 4.17 As summarised in **Section 2**, the site is situated immediately adjacent to a network of pedestrian and cycle routes, which link the site to the surrounding residential areas to the north of the A27. Access to bus stops, which provide onward links to Havant Bus Station and Train Station can also be easily accessed from the site by the existing pedestrian network.
- 4.18 As noted above, a new pedestrian footway to the west of the site will link the proposed development directly to the existing pedestrian crossing at the A27/Harts Farm Way junction and cycle network. Thus, affording employees of the site good sustainable accessibility to the site. The proposed development will provide facilities including covered and secure cycle parking, which will encourage employees and visitors to cycle to the site.

Travel Plan

- 4.19 As part of the proposed development, a Framework Travel Plan will be submitted in support of the planning application and is contained at **Appendix H**. A Framework Travel Plan is primarily aimed at reducing the proportion of employees travelling to work as single occupancy car drivers. A series of measures will be developed in order to encourage a reduction in vehicle trips generated by employees. The measures include:
- Up-to-date details of bus services, including route information and service frequencies, will be permanently on display. National Rail Journey Planner websites and enquiry phone numbers will be provided through all relevant means.
 - Information and advice concerning safe cycle routes to the site and other cycle information will be posted at a prominent location within the employee area of the site.
 - Employees will be encouraged to car share.
- 4.20 As detailed above, as part of the development proposals, cycle parking will be provided in secure covered locations.

5 Traffic Generation

- 5.1 This section of the report provides a forecast for the trips expected to be generated in relation to the proposed development.

Proposed Scheme Trip Generation

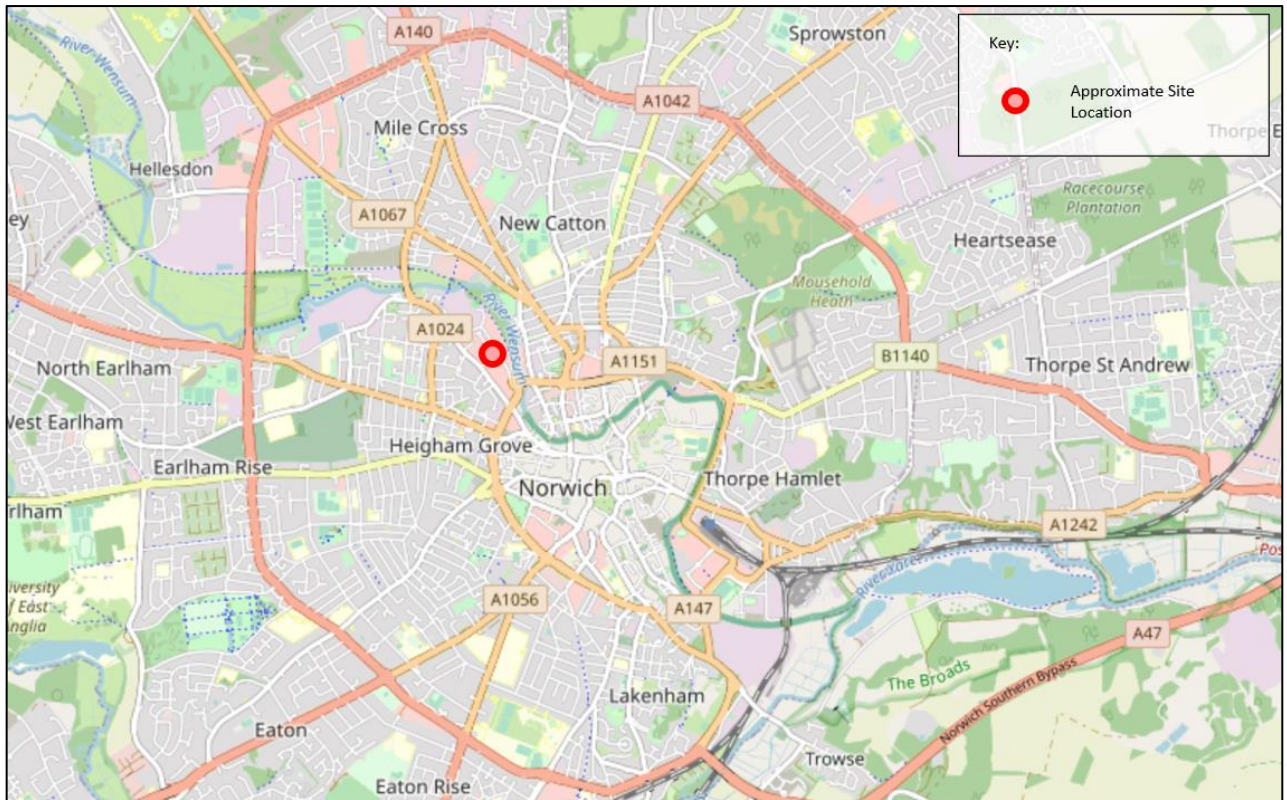
- 5.2 As detailed in **Section 4**, the form of the proposed units has not yet been identified, and as such three illustrative layouts are provided. To provide a robust assessment of the number of trips to be generated by the proposed development, the highest level of floorspace, 29,000sqm (GIA) as stated in the development description, has been assessed to provide a worst-case assessment. The trip generation for each land use has been presented for context. It should be noted that any office (B1a) space will be ancillary and therefore is assumed to be included within the trip rates of the site selected from TRICS.

E and B2 Trip Rates

- 5.3 To estimate the number of trips generated by the proposed development, the TRICS database has been interrogated to ascertain appropriate E and B2 land use trip rates. The following parameters were selected to derive the most representative vehicle trip rates for each respective land use:
- Land use: Employment;
 - Sub land use: Industrial unit;
 - Calculation option: Multi-modal vehicles;
 - Regions: England, except Greater London;
 - Range selected: 2,500 to 80,000sqm;
 - Actual range: 3,035 to 43,325sqm;
 - Location types: Edge of town;
 - Sub location: Industrial Zone, Built-Up Zone and No Sub Category; and
 - Date range: 04/07/00 to 24/09/19
- 5.4 To distinguish between E and B2 uses, the site selection feature in TRICS was used to deselect sites surveyed with only E uses or only B2 uses to derive appropriate trip rates for the opposing land use, i.e., E sites were deselected to derive a trip rate for B2.
- 5.5 It should be noted that the number of surveys available between 2012 and 2019 were limited within the selected location types. Therefore, the date range was increased to 2000 to 2019 to ensure a representative selection of sites were available.
- 5.6 The full TRICS output for both the E and B2 trip rates is included at **Appendix I**.

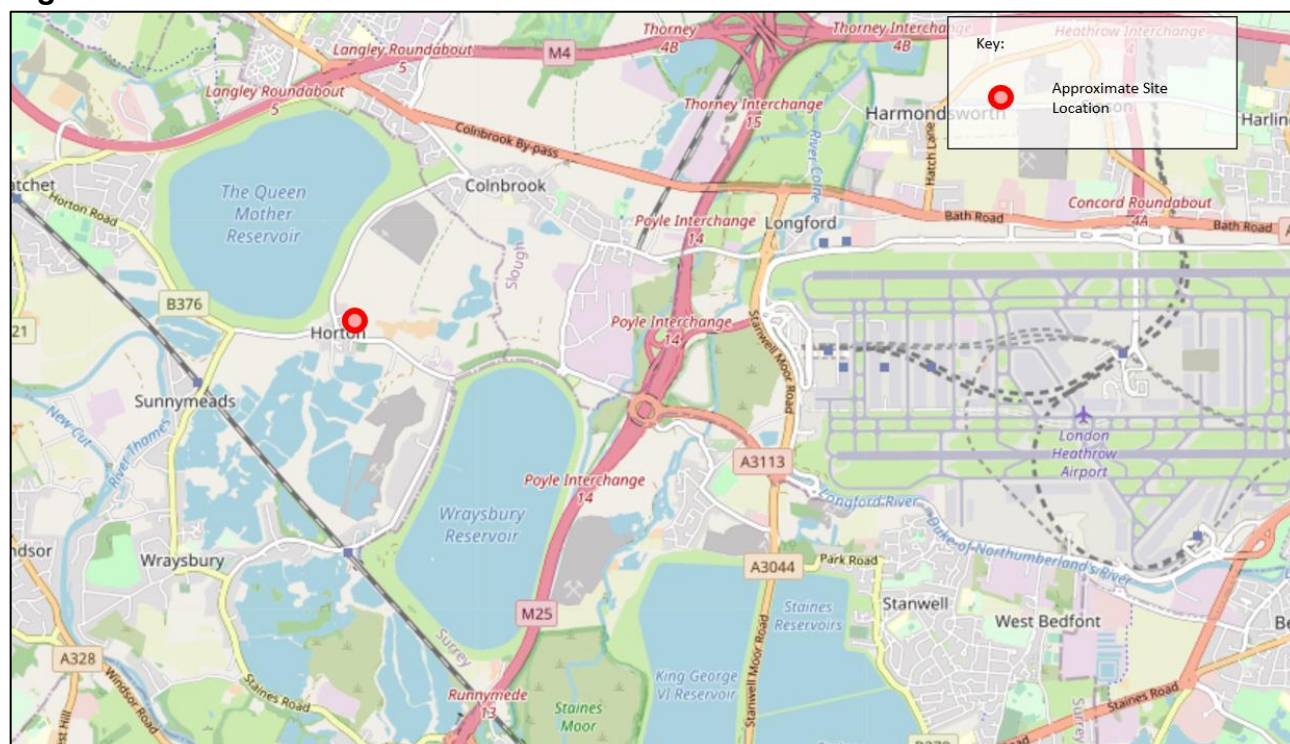
B8 Trip Rates

- 5.7 With regard to B8 trip rates, the data available in the TRICS database was not deemed representative of the site and its location during pre-application discussions with HCC and Highways England. The B8 trip rates presented to HCC and Highways England from TRICS during pre-application discussions only surveyed two sites.
- NF-02-G-01, Parcelforce, Baker Street, Norwich – 1,600sqm
 - SO-02-G-01, DHL, Horton Road, Slough – 15,583sqm
- 5.8 These two sites do not provide a particularly representative sample size to forecast the trip generation for the proposed development to be considered. Furthermore, when considering the floor areas of the proposed development and that of the survey sites above it is evident that they do not provide a particularly good comparison to the base the forecasted trip generation on. Particularly, NF-02-G-01 which is less than 10% of the proposed sites floor area. SO-02-G-01 provides a better comparison in terms of size, however, the location of both do not have the benefits of the proposed development.
- 5.9 The proposed development is located immediately adjacent to the strategic road network with particularly easy access to both the A27, A3 and A3(M). The proposed development is also located on the edge of an already developed industrial area and to the south of a well-developed residential area. The location provides quick and efficient routing for distributions services onto the strategic road network.
- 5.10 When comparing the two sites provided from the TRICS database their locations do not have the same benefits as that of the proposed development. NF-02-G-01 is located on a small industrial estate on the edge of Norwich City Centre (**Figure 4**) and has poor access to the strategic road network.

Figure 4: Site Location of NF-02-G-01

- 5.11 As shown in **Figure 5**, when considering SO-02-G-01 the site is located on the outskirts of Heathrow Airport in between the M4 and the M25, which is not dissimilar to the location of the proposed development as easy access to the strategic road network is provided. However, SO-02-G-01 is located in an area where several of the industrial operations are linked to the airport, this is of particular note on Poyle Industrial Estate which surrounds the site. Due to its proximity to Heathrow Airport and the large amount of cargo which comes through the airport it is felt the resulting trip rates for the site will be unrealistically high for a development located where the proposed site is located. It is therefore considered that the site NF-02-G-01 would not provide a representative trip rate to assess the proposed development.

Figure 5: Site Location of SO-02-G-01



- 5.12 It is considered that the above sites do not provide a representative base to forecast the proposed trips for the development site.
- 5.13 In light of this, trip rates have been extracted from a similar development at Littlebrook, Dartford. For this proposed development, the TNT Dartford Depot to the north of Dartford Town Centre was surveyed and trip rates derived. The TNT Dartford Depot site is located in a similar location to the proposed development, adjacent to M25 Junction 1a, on the outskirts of Dartford Town Centre and within an existing industrial area. In addition, it should be noted that these trip rates have been previously accepted by both HE and Kent County Council (KCC).
- 5.14 The survey data is provided at **Appendix J**.
- 5.15 The resultant vehicle and HGV trip rates for E, B2 and B8 uses and subsequent trips are illustrated in **Table 5.1** below for the one-unit scheme.

Table 5.1: Total Vehicle and HGV Trips and [Trip Rates]

Time Period	Total Vehicles			HGVs		
	Use Class E					
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Weekday AM Peak (08:00-09:00)	121 [0.417]	25 [0.086]	146 [0.503]	4 [0.014]	3 [0.012]	8 [0.026]
Weekday PM Peak (17:00-18:00)	12 [0.042]	90 [0.309]	102 [0.351]	1 [0.002]	1 [0.005]	2 [0.007]
Daily	513 [1.769]	526 [1.815]	1,039 [3.584]	37 [0.129]	38 [0.132]	76 [0.261]
Time Period	Total Vehicles			HGVs		
	Use Class B2					
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Weekday AM Peak (08:00-09:00)	130 [0.447]	26 [0.088]	155 [0.535]	6 [0.019]	4 [0.015]	10 [0.034]
Weekday PM Peak (17:00-18:00)	11 [0.038]	91 [0.315]	102 [0.353]	1 [0.004]	2 [0.006]	3 [0.010]
Daily	538 [1.855]	555 [1.913]	1,093 [3.768]	53 [0.183]	40 [0.138]	93 [0.321]
Time Period	Total Vehicles			HGVs		
	Use Class B8					
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Weekday AM Peak (08:00-09:00)	42 [0.146]	23 [0.081]	66 [0.227]	14 [0.049]	12 [0.041]	26 [0.089]
Weekday PM Peak (17:00-18:00)	38 [0.130]	35 [0.122]	73 [0.251]	19 [0.065]	2 [0.008]	21 [0.073]
Daily	247 [0.850]	209 [0.720]	455 [1.570]	93 [0.319]	62 [0.213]	154 [0.531]

- 5.16 **Table 5.1** shows that if the one-unit scheme were 100% E land use, this would generate 1,039 two-way vehicle movements daily. In comparison, if the development were 100% B2 land use, this would generate 1,093 two-way vehicle movements daily and if the development were 100% B8, this would generate 455 two-way vehicle movements daily. These numbers represent the worst-case scenario for each proposed land use when applied to 29,000sqm.

Trip Distribution

- 5.17 The distribution of vehicles onto the local highway network generated by the proposed development has been undertaken using 2011 Census Origin-Destination data (Location of usual residence and place of work by method of travel to work (WU03EW)). At the pre-application stage, a traffic distribution was submitted to HCC based on the Middle Super Output Area (MSOA) Havant 018. Comments received from HCC requested that the traffic distribution be reassigned using Lower Super Output Area (LSOA) 018F.
- 5.18 Investigating the data available from the 2011 Census, the lowest scale of data available under Origin-Destination (dataset WU03EW) which is required to create the traffic distribution is Mid-Layer. Therefore, as Lower-Layer data is not available from the 2011 Census it is not possible to redistribute the forecasted trip generation using Origin-Destination data for Havant 018F.
- 5.19 At the pre-application meeting it was raised by both HCC and HE that they were concerned about the weight of the trips being distributed west on Harts Farm Way and it was stated by HCC that there are suitable routes to the east of the development site that should be considered.
- 5.20 In light of these comments, the proposed traffic distribution was revised using Census data for the neighbouring MSOA, Havant 014. Havant 014 contains Langstone Technology Park and Solent Retail Park, both large employment trip attractors within Havant. It is considered that by using this MSOA as a proxy for the site, it offers a more realistic trip distribution utilising both routes to the west and east on Harts Farm Way.
- 5.21 Vehicle trips have subsequently been assigned to the most appropriate routes based on their destination within the network using Google Maps. Google Maps was set to a neutral weekday and with an arrival time of 09:00am. The resulting trip distribution is shown in **Table 5.2**.

Table 5.2: Trip Distribution

Route	Network Entry	Percentage Distribution
1	Harts Farm Way West via A3 North	22%
2	Harts Farm Way West via A27 East	11%
3	Harts Farm Way West via A27 West	28%
4	Harts Farm Way West via Bedhampton Hill	10%
5	Harts Farm Way East via Brockhampton Road	23%
6	Harts Farm Way West via A3 Havant Road	6%

- 5.22 **Table 5.2** indicates that approximately 23% of traffic will arrive / depart the site from the east on Harts Farm Way, travelling through the roundabout between Brockhampton Road, Brookside Road, Southmoor Lane and Harts Farm Way. The remaining 77% of traffic will arrive /depart the site from the west on Harts Farm Way via the A3 / A27 junction.

5.23 Traffic flow diagrams showing the proposed distribution of development traffic can be viewed at **Appendix K.**

6 Assessment of Traffic Impact

6.1 This section of the report provides an assessment of the expected traffic impact as a result of the trips generated in relation to the proposed development. It is informed by the following inputs:

- Baseline traffic flow data;
- Development trip generation, distribution, and assignment; and
- Traffic growth.

The Study Network

6.2 In determining the highway impact of the development, the following junctions are included in the study network and have been assessed. The study network has been agreed with HCC and HE:

- A27 / Harts Farm Way (Teardrop) Roundabout
- Rusty Cutter Roundabout
- Proposed Site Accesses

Baseline Traffic Flow Data

6.3 Due to the current Covid-19 pandemic, it was not possible to undertake traffic surveys that would be representative of traffic conditions at the junctions. Therefore, traffic flow data was obtained from the consented application to the north west of the site for the development of 320 dwellings (app ref: AAP/18/00450: Land at Forty Acres Farm, Havant Road, Havant).

6.4 The application identified the network peaks as 07:30-08:30 and 16:00-17:00. For assessment purposes we have used the observed peak as identified from the survey data but to ensure a robust assessment have applied the peak development traffic between 08:00-09:00 am and 17:00-18:00 to the observed peak.

Traffic Growth

6.5 To ensure a robust assessment for the purposes of highway capacity analysis, both 2025 and 2030 future scenarios have been assessed as requested by HCC.

6.6 To account for traffic growth from the surveyed year (2016) to the base year (2020) and future base years (2025 and 2030) when the development will be completed, TEMPro 7.2 has been used to obtain a growth factor. The software uses a number of forecasts for population, employment, and households by car ownership to forecast changes in trip ends. The growth factor derived from TEMPro for the AM and PM peak periods are presented below in **Table 6.1**.

Table 6.1: TEMPro Growth Factors

Time Period	Growth Factor
2016 to 2020	
AM Peak (08:00-09:00)	1.0669
PM Peak (17:00-18:00)	1.0627
2016 to 2025	
AM Peak (08:00-09:00)	1.1462
PM Peak (17:00-18:00)	1.1399
2016 to 2030	
AM Peak (08:00-09:00)	1.2114
PM Peak (17:00-18:00)	1.0205

Scenarios

- 6.7 The traffic impact assessment is based on the following scenarios, with each considering the AM and PM peak hours, as described above:
- 2016 Observed Traffic Flows
 - 2020 Base Year
 - 2020 Base Year + Development
 - 2025 Future Base Year
 - 2025 Future Base Year + Development
 - 2030 Future Base Year
 - 2030 Future Base Year + Development

- 6.8 As noted in **Section 5**, only the worst-case scenario has been assessed, namely the one-unit scheme operating wholly under B2 land use.

Site Access

- 6.9 The following subsections demonstrate the results of the junction capacity analysis undertaken with the provision of the primary site access only, as well as the provision of both the primary and secondary site accesses.

Primary Site Access

- 6.10 The primary site access has been designed as a priority T junction off Harts Farm Way. As such, the junction has been modelled using industry standard PICADY software. The results of the capacity analysis with the provision of the primary site access only are demonstrated in **Table 6.2** and the full output can be found at **Appendix L**.
- 6.11 It is important to note that this access has only been modelled for the 'with development' scenarios as the construction of the junction will only come forward under the development proposals.

Table 6.2: Primary Site Access Junction Modelling Results

	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2020 Base Year + Development						
Stream B-C	0.0	11.72	0.02	0.1	7.84	0.05
Stream B-A	0.2	22.45	0.14	0.4	18.69	0.29
Stream C-AB	0.3	6.59	0.13	0.0	3.07	0.02
2025 Future Base Year + Development						
Stream B-C	0.0	12.64	0.03	0.1	8.03	0.05
Stream B-A	0.2	27.15	0.17	0.5	21.14	0.31
Stream C-AB	0.4	6.62	0.14	0.0	2.96	0.03
2030 Future Base Year + Development						
Stream B-C	0.0	13.52	0.03	0.1	8.20	0.05
Stream B-A	0.2	32.69	0.19	0.5	23.78	0.34
Stream C-AB	0.4	6.66	0.15	0.0	2.88	0.04

Note: Arm A - Harts Farm Way (EB), Arm B - Site Access, Arm C - Harts Farm Way (WB)

- 6.12 The results in **Table 6.2** show that the junction operates well within capacity in all scenarios assessed with an RFC of no greater than 0.34. As such, traffic would not face any significant delay when travelling through the junction.

Primary and Secondary Site Accesses

- 6.13 The following subsections consider the capacity of the primary and secondary site accesses if both are provided. As outlined in **Section 4**, if the secondary access to the west comes forward, this would be used only by staff to access the car parking areas and not by HGVs to access the service yards.
- 6.14 It has been assumed that all staff travelling from the west, including from the A3(M), A27, Bedhampton Hill and Havant Road, would access the site using the secondary access, with staff travelling from the local area and arriving via Brockhampton Road using the primary site access. As above, all HGVs will use the primary access to the site. As such, throughout the day, approximately 64% of traffic would use the secondary site access and 36% would use the primary site access.

Primary Site Access

- 6.15 As above, the primary site access junction has been modelled using industry standard PICADY software. The results of the capacity analysis when the primary access is provided alongside the secondary access are demonstrated in **Table 6.3** and the full output can be found at **Appendix M**.

Table 6.3: Primary Site Access Junction Modelling Results

	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2020 Base Year + Development						
Stream B-C	0.0	10.23	0.02	0.0	5.83	0.04
Stream B-A	0.1	20.71	0.05	0.0	16.68	0.02
Stream C-AB	0.3	6.34	0.12	0.0	3.06	0.02
2025 Future Base Year + Development						
Stream B-C	0.0	10.96	0.02	0.0	5.91	0.04
Stream B-A	0.1	24.30	0.06	0.0	18.20	0.02
Stream C-AB	0.3	6.36	0.13	0.0	2.96	0.03
2030 Future Base Year + Development						
Stream B-C	0.0	11.63	0.02	0.0	5.99	0.04
Stream B-A	0.1	28.30	0.06	0.0	19.72	0.02
Stream C-AB	0.4	6.39	0.14	0.0	2.88	0.04

Note: Arm A - Harts Farm Way (EB), Arm B - Site Access, Arm C - Harts Farm Way (WB)

- 6.16 The results in **Table 6.3** show that the junction operates well within capacity in all scenarios assessed with an RFC of no greater than 0.14. As such, traffic would not face any significant delay when travelling through the junction.

Secondary Site Access

- 6.17 The secondary site access has been designed as a priority T junction off Harts Farm Way. As such, the junction has been modelled using industry standard PICADY software. The results of the capacity analysis when the secondary access is provided alongside the primary access are demonstrated in **Table 6.4** and the full output can be found at **Appendix N**.

Table 6.4: Secondary Site Access Junction Modelling Results

	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2020 Base Year + Development						
Stream B-C	0.0	0.00	0.00	0.0	0.00	0.00
Stream B-A	0.1	24.29	0.11	0.5	22.66	0.32
Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00
2025 Future Base Year + Development						
Stream B-C	0.0	0.00	0.00	0.0	0.00	0.00
Stream B-A	0.1	29.10	0.12	0.5	25.92	0.35
Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00
2030 Future Base Year + Development						
Stream B-C	0.0	0.00	0.00	0.0	0.00	0.00
Stream B-A	0.2	34.84	0.15	0.6	29.51	0.38
Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00

Note: Arm A - Harts Farm Way (EB), Arm B - Site Access, Arm C - Harts Farm Way (WB)

- 6.18 The results in **Table 6.4** show that the junction operates well within capacity in all scenarios assessed with an RFC of no greater than 0.38. As such, traffic would not face any significant delay when travelling through the junction.

Wider Highway Network

- 6.19 Modelling of the Teardrop and Rusty Cutter roundabouts have been undertaken using the model contained within the approved residential scheme to the north west of the site (app ref: AAP/18/00450: Land at Forty Acres Farm, Havant Road, Havant). This model has been approved by both HCC and HE and includes the proposed improvements to be delivered as part of the residential scheme.

A27 / Harts Farm Way (Teardrop) Roundabout

- 6.20 This junction is designed as a partially traffic signal-controlled dumbbell roundabout. The junction has signals operating the A27 off-slip and the A27 circulatory arm from the Rusty Cutter roundabout. The Harts Farm Way arm and A27 eastbound junctions are therefore controlled by give way movements. Therefore, the junction has been modelled using industry standard LinSig software. The results of the modelling are summarised in **Table 6.5** and the full output can be found at **Appendix O**.

Table 6.5: A27 / Harts Farm Way (Teardrop) Roundabout Modelling Results

Lane	AM Peak		PM Peak	
	Deg Sat	MMQ	Deg Sat	MMQ
2016 Observed Traffic Flows				
A27 SB Link Road - left turn	42.5%	0.4	46.1%	0.4
A27 SB Link Road - ahead	72.3%	1.3	34.0	0.3
A27 WB Off Slip - Lanes 1/2	42.9%	3.7	37.2	2.8
A27 WB Off Slip Lane 3	77.5%	9.0	63.2	5.6
Harts Farm Way	23.7%	0.7	66.3	3.5
Circ (East) Lane 1	66.8%	6.8	27.1	1.7
Circ (East) Lanes 2/3	77.0%	7.6	49.8	3.3
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: 16.1%		PRC: 35.7%	
2020 Base Year				
A27 SB Link Road - left turn	45.3%	0.4	48.9%	0.5
A27 SB Link Road - ahead	77.1%	1.7	36.2%	0.3
A27 WB Off Slip - Lanes 1/2	49.3%	4.4	49.4%	3.9
A27 WB Off Slip Lane 3	79.0%	9.3	63.6%	5.5
Harts Farm Way	21.8%	0.7	72.0%	5.1
Circ (East) Lane 1	72.2%	7.8	27.0%	1.7
Circ (East) Lanes 2/3	81.2%	8.9	50.4%	3.4
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: 10.8%		PRC: 25.0%	
2020 Base Year + Development				
A27 SB Link Road - left turn	45.3%	0.4	48.9%	0.5
A27 SB Link Road - ahead	81.9%	2.2	36.7%	0.3
A27 WB Off Slip - Lanes 1/2	55.1%	5.0	54.1%	4.2
A27 WB Off Slip Lane 3	79.8%	9.2	65.9%	5.6
Harts Farm Way	26.3%	0.6	77.4%	6.2
Circ (East) Lane 1	75.0%	8.6	25.2%	1.6
Circ (East) Lanes 2/3	82.9%	9.7	48.3%	3.3
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: 8.6%		PRC: 16.3%	
2025 Future Base Year				
A27 SB Link Road - left turn	48.7%	0.5	52.5%	0.6
A27 SB Link Road - ahead	82.9%	2.4	38.8%	0.3
A27 WB Off Slip - Lanes 1/2	62.7%	6.0	59.4%	4.8
A27 WB Off Slip Lane 3	82.1%	9.9	69.2%	6.2
Harts Farm Way	34.8%	0.4	76.9%	6.3
Circ (East) Lane 1	74.9%	8.6	28.4%	1.9
Circ (East) Lanes 2/3	83.2%	9.8	51.3%	3.5
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: 8.2%		PRC: 17.0%	

Lane	AM Peak		PM Peak	
	Deg Sat	MMQ	Deg Sat	MMQ
2025 Future Base Year + Development				
A27 SB Link Road - left turn	48.7%	0.5	52.5%	0.6
A27 SB Link Road - ahead	87.7%	3.5	39.2%	0.3
A27 WB Off Slip - Lanes 1/2	63.0%	6.0	65.0%	5.4
A27 WB Off Slip Lane 3	82.1%	9.9	72.2%	6.4
Harts Farm Way	37.7%	0.4	83.4%	7.0
Circ (East) Lane 1	81.5%	10.3	26.7%	1.8
Circ (East) Lanes 2/3	87.4%	11.8	49.2%	3.4
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: 2.6%		PRC: 7.9%	
2030 Future Base Year				
A27 SB Link Road - left turn	51.4%	0.5	55.5%	0.6
A27 SB Link Road - ahead	87.6%	3.4	41.0%	0.3
A27 WB Off Slip - Lanes 1/2	69.0%	6.9	54.3%	4.6
A27 WB Off Slip Lane 3	83.9%	10.3	60.6%	5.4
Harts Farm Way	41.1%	0.4	87.7%	7.4
Circ (East) Lane 1	80.1%	9.8	38.9%	2.4
Circ (East) Lanes 2/3	86.9%	11.4	62.9%	4.4
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: 2.7%		PRC: 2.6%	
2030 Future Base Year + Development				
A27 SB Link Road - left turn	51.4%	0.5	55.5%	0.6
A27 SB Link Road - ahead	92.4%	5.6	41.4%	0.4
A27 WB Off Slip - Lanes 1/2	75.5%	7.9	46.2%	3.8
A27 WB Off Slip Lane 3	85.5%	10.5	63.2%	6.0
Harts Farm Way	45.4%	0.4	88.7%	9.2
Circ (East) Lane 1	82.6%	10.9	48.6%	3.0
Circ (East) Lanes 2/3	88.2%	12.7	67.3%	4.8
	Cycle Time: 51 seconds		Cycle Time: 43 seconds	
	PRC: -2.7%		PRC: 1.5%	

- 6.21 **Table 6.5** shows that the traffic associated with the proposed development results in only a negligible increase in queuing at the junction. It is therefore deemed that the development traffic would have a minimal impact on the operation of the Teardrop roundabout.

Rusty Cutter Roundabout

- 6.22 This junction is designed as a partially traffic signal-controlled roundabout. The roundabout has signals operating on the A3(M) southbound off-slip, A3(M) northbound off-slip and the south and north circulatory sections. The remaining arms are controlled by give way movements. Therefore, the junction has been modelled using industry standard LinSig software. The results of the modelling are summarised in **Table 6.6** and the full output can be found at **Appendix P**.

Table 6.6: Rusty Cutter Roundabout Modelling Results

Lane	AM Peak		PM Peak	
	Deg Sat	MMQ	Deg Sat	MMQ
2016 Observed Traffic Flows				
A3 NB Off-Slip - Left Turn	4.5%	0.5	9.4%	0.8
A3 NB Off-Slip - Ahead	76.4%	12.6	73.8%	9.3
A2030 Havant Rd - Entry Lanes 1/2	36.3%	1.5	51.6%	2.4
A2030 Havant Rd - Entry Lane 3	48.1%	2.1	34.8%	1.1
A3 SB Off-Slip - Entry Lanes 1/2	75.8%	9.3	76.8%	8.5
A3 SB Off-Slip - Entry Lane 3	36.1%	4.5	45.5%	4.3
Bedhampton Hill - Entry	48.2%	2.2	37.5%	2.3
A27 Link - Entry Lane 1	22.2%	0.1	28.7%	0.2
A27 Link - Entry Lanes 2/3	53.9%	0.7	65.1%	2.0
Circ (South) - Lane 1	73.1%	9.8	72.1%	11.2
Circ (South) - Lane 2	73.7%	10.3	73.6%	11.3
Circ (South) - Lane 3	71.6%	10.5	72.7%	10.6
Circ (North) - Lane 1	64.8%	6.9	74.8%	8.5
Circ (North) - Lane 2	59.8%	4.8	20.5%	1.3
Circ (North) - Lane 3	59.5%	4.8	19.0%	1.2
	Cycle Time: 72 seconds		Cycle Time: 64 seconds	
	PRC: 17.8%		PRC: 17.2%	
2020 Base Year Flows				
A3 NB Off-Slip - Left Turn	4.7%	0.5	10.0%	0.9
A3 NB Off-Slip - Ahead	79.0%	13.8	78.3%	10.5
A2030 Havant Rd - Entry Lanes 1/2	41.3%	2.0	57.8%	3.2
A2030 Havant Rd - Entry Lane 3	54.0%	2.8	38.9%	1.4
A3 SB Off-Slip - Entry Lanes 1/2	81.0%	10.5	81.6%	9.8
A3 SB Off-Slip - Entry Lane 3	38.5%	4.9	48.2%	4.6
Bedhampton Hill - Entry	55.1%	2.7	41.2%	2.6
A27 Link - Entry Lane 1	24.2%	0.2	29.7%	0.2
A27 Link - Entry Lanes 2/3	58.8%	1.3	69.8%	2.8
Circ (South) - Lane 1	80.8%	11.5	77.1%	12.5
Circ (South) - Lane 2	81.1%	11.9	78.0%	12.4
Circ (South) - Lane 3	79.6%	12.3	77.0%	11.7
Circ (North) - Lane 1	69.1%	7.8	79.5%	8.4
Circ (North) - Lane 2	63.8%	5.5	21.7%	1.3
Circ (North) - Lane 3	63.5%	5.5	20.2%	1.3
	Cycle Time: 72 seconds		Cycle Time: 64 seconds	
	PRC: 11.0%		PRC: 10.3%	
2020 Base Year + Development Flows				
A3 NB Off-Slip - Left Turn	4.7%	0.5	10.0%	0.9
A3 NB Off-Slip - Ahead	83.1%	15.4	78.8%	10.6
A2030 Havant Rd - Entry Lanes 1/2	42.1%	2.0	59.1%	3.3
A2030 Havant Rd - Entry Lane 3	56.7%	3.0	39.8%	1.5

Lane	AM Peak		PM Peak	
	Deg Sat	MMQ	Deg Sat	MMQ
A3 SB Off-Slip - Entry Lanes 1/2	81.5%	10.6	79.7%	9.3
A3 SB Off-Slip - Entry Lane 3	37.4%	4.8	45.9%	4.5
Bedhampton Hill - Entry	59.6%	3.0	41.5%	2.6
A27 Link - Entry Lane 1	23.6%	0.2	31.2%	0.2
A27 Link - Entry Lanes 2/3	59.3%	1.5	70.4%	2.8
Circ (South) - Lane 1	81.2%	11.9	77.9%	12.7
Circ (South) - Lane 2	81.8%	12.3	79.6%	12.9
Circ (South) - Lane 3	80.1%	12.4	78.5%	12.2
Circ (North) - Lane 1	72.5%	8.5	83.1%	11.6
Circ (North) - Lane 2	69.8%	6.8	22.7%	1.4
Circ (North) - Lane 3	69.7%	6.7	21.1%	1.3
	Cycle Time: 72 seconds		Cycle Time: 64 seconds	
	PRC: 8.3%		PRC: 8.3%	
2025 Future Base Year Flows				
A3 NB Off-Slip - Left Turn	5.0%	0.5	10.7%	0.9
A3 NB Off-Slip - Ahead	84.8%	16.0	84.2%	12.1
A2030 Havant Rd - Entry Lanes 1/2	47.8%	2.4	66.4%	4.2
A2030 Havant Rd - Entry Lane 3	62.2%	3.4	44.8%	1.9
A3 SB Off-Slip - Entry Lanes 1/2	87.0%	12.6	87.5%	11.6
A3 SB Off-Slip - Entry Lane 3	41.4%	5.4	51.9%	5.1
Bedhampton Hill - Entry	64.2%	3.5	46.1%	3.0
A27 Link - Entry Lane 1	19.8%	0.1	32.9%	0.2
A27 Link - Entry Lanes 2/3	64.9%	2.4	75.6%	4.0
Circ (South) - Lane 1	86.3%	14.9	82.6%	14.3
Circ (South) - Lane 2	87.0%	14.8	83.6%	14.2
Circ (South) - Lane 3	86.2%	14.4	82.6%	13.5
Circ (North) - Lane 1	74.3%	9.8	85.3%	11.0
Circ (North) - Lane 2	68.5%	7.8	23.4%	1.4
Circ (North) - Lane 3	68.2%	7.8	21.6%	1.3
	Cycle Time: 72 seconds		Cycle Time: 64 seconds	
	PRC: 3.4%		PRC: 2.9%	
2025 Future Base Year+ Development Flows				
A3 NB Off-Slip - Left Turn	5.0%	0.5	10.7%	0.9
A3 NB Off-Slip - Ahead	89.0%	18.1	84.6%	12.2
A2030 Havant Rd - Entry Lanes 1/2	48.8%	2.4	67.7%	4.3
A2030 Havant Rd - Entry Lane 3	65.3%	3.5	45.9%	2.1
A3 SB Off-Slip - Entry Lanes 1/2	87.4%	12.8	85.4%	11.0
A3 SB Off-Slip - Entry Lane 3	40.2%	5.2	49.4%	5.0
Bedhampton Hill - Entry	69.4%	4.0	46.4%	3.0
A27 Link - Entry Lane 1	22.7%	0.1	33.8%	0.3
A27 Link - Entry Lanes 2/3	65.4%	2.4	76.9%	4.2
Circ (South) - Lane 1	87.0%	15.1	83.9%	14.6
Circ (South) - Lane 2	87.4%	15.0	85.0%	14.8

Lane	AM Peak		PM Peak	
	Deg Sat	MMQ	Deg Sat	MMQ
Circ (South) - Lane 3	86.7%	14.6	84.0%	14.1
Circ (North) - Lane 1	77.8%	10.5	89.1%	14.2
Circ (North) - Lane 2	74.8%	9.1	24.4%	1.4
Circ (North) - Lane 3	74.6%	9.1	22.6%	1.4
	Cycle Time: 72 seconds		Cycle Time: 64 seconds	
	PRC: 1.1%		PRC: 1.0%	
2030 Future Base Year Flows				
A3 NB Off-Slip - Left Turn	5.2%	0.6	11.4%	1.0
A3 NB Off-Slip - Ahead	88.8%	19.7	89.0%	14.1
A2030 Havant Rd - Entry Lanes 1/2	53.5%	3.5	74.7%	5.2
A2030 Havant Rd - Entry Lane 3	69.6%	4.6	50.3%	2.4
A3 SB Off-Slip - Entry Lanes 1/2	88.8%	16.3	92.5%	14.4
A3 SB Off-Slip - Entry Lane 3	39.5%	5.6	54.8%	5.5
Bedhampton Hill - Entry	73.0%	4.7	50.6%	3.8
A27 Link - Entry Lane 1	21.3%	0.1	32.7%	0.2
A27 Link - Entry Lanes 2/3	69.4%	3.4	81.2%	5.3
Circ (South) - Lane 1	88.8%	15.7	87.5%	16.3
Circ (South) - Lane 2	88.8%	16.8	88.4%	16.3
Circ (South) - Lane 3	87.7%	17.1	87.3%	15.4
Circ (North) - Lane 1	87.1%	13.6	90.2%	15.1
Circ (North) - Lane 2	80.2%	10.3	24.8%	1.4
Circ (North) - Lane 3	80.2%	10.3	22.8%	1.3
	Cycle Time: 80 seconds		Cycle Time: 64 seconds	
	PRC: 1.4%		-2.8%	
2030 Future Base Year + Development Flows				
A3 NB Off-Slip - Left Turn	5.1	0.6	11.4%	1.0
A3 NB Off-Slip - Ahead	90.0%	22.8	89.5%	14.3
A2030 Havant Rd - Entry Lanes 1/2	54.4%	3.9	76.2%	5.6
A2030 Havant Rd - Entry Lane 3	73.1%	5.5	51.5%	2.4
A3 SB Off-Slip - Entry Lanes 1/2	91.0%	21.0	92.7%	14.5
A3 SB Off-Slip - Entry Lane 3	38.1%	5.9	54.8%	5.5
Bedhampton Hill - Entry	78.9%	10.0	50.9%	3.8
A27 Link - Entry Lane 1	24.2%	0.2	36.0%	0.3
A27 Link - Entry Lanes 2/3	69.3%	3.5	82.5%	5.8
Circ (South) - Lane 1	89.9%	17.1	89.0%	16.9
Circ (South) - Lane 2	89.9%	18.3	89.5%	17.1
Circ (South) - Lane 3	88.0%	18.7	88.6%	16.2
Circ (North) - Lane 1	89.3%	15.7	91.2%	15.0
Circ (North) - Lane 2	85.6%	13.3	25.0%	1.3
Circ (North) - Lane 3	85.4%	13.2	23.0%	1.2
	Cycle Time: 88 seconds		Cycle Time: 64 seconds	
	PRC: -1.1%		-3.0%	

- 6.23 **Table 6.6** shows that the traffic associated with the proposed development results in only a negligible increase in queuing at the junction. It is therefore deemed that the development traffic would have a minimal impact on the operation of the Rusty Cutter roundabout.

Summary

- 6.24 This section has considered the impact of the development traffic on the proposed site access, the Teardrop roundabout, and the Rusty Cutter roundabout in future year scenarios.
- 6.25 The site access junction operated within capacity in all future scenarios assessed and as such, traffic would not face significant delay when travelling through the junction.
- 6.26 The traffic modelling demonstrates that the proposed development will have a negligible impact on the operation of the Teardrop and Rusty Cutter junctions.
- 6.27 It is considered that the analysis presented for the 2020 + Development scenario demonstrates the direct impact of the proposed development on the Teardrop and Rusty Cutter junctions. The additional future year scenarios present a cumulative assessment and therefore include other potential developments. In this scenario, as noted above, both junctions' operation within capacity during both peak periods with the inclusion of development traffic.
- 6.28 It is therefore considered that the junction capacity analysis demonstrates that the proposed development would not have a severe impact on the operation of the local highway network.

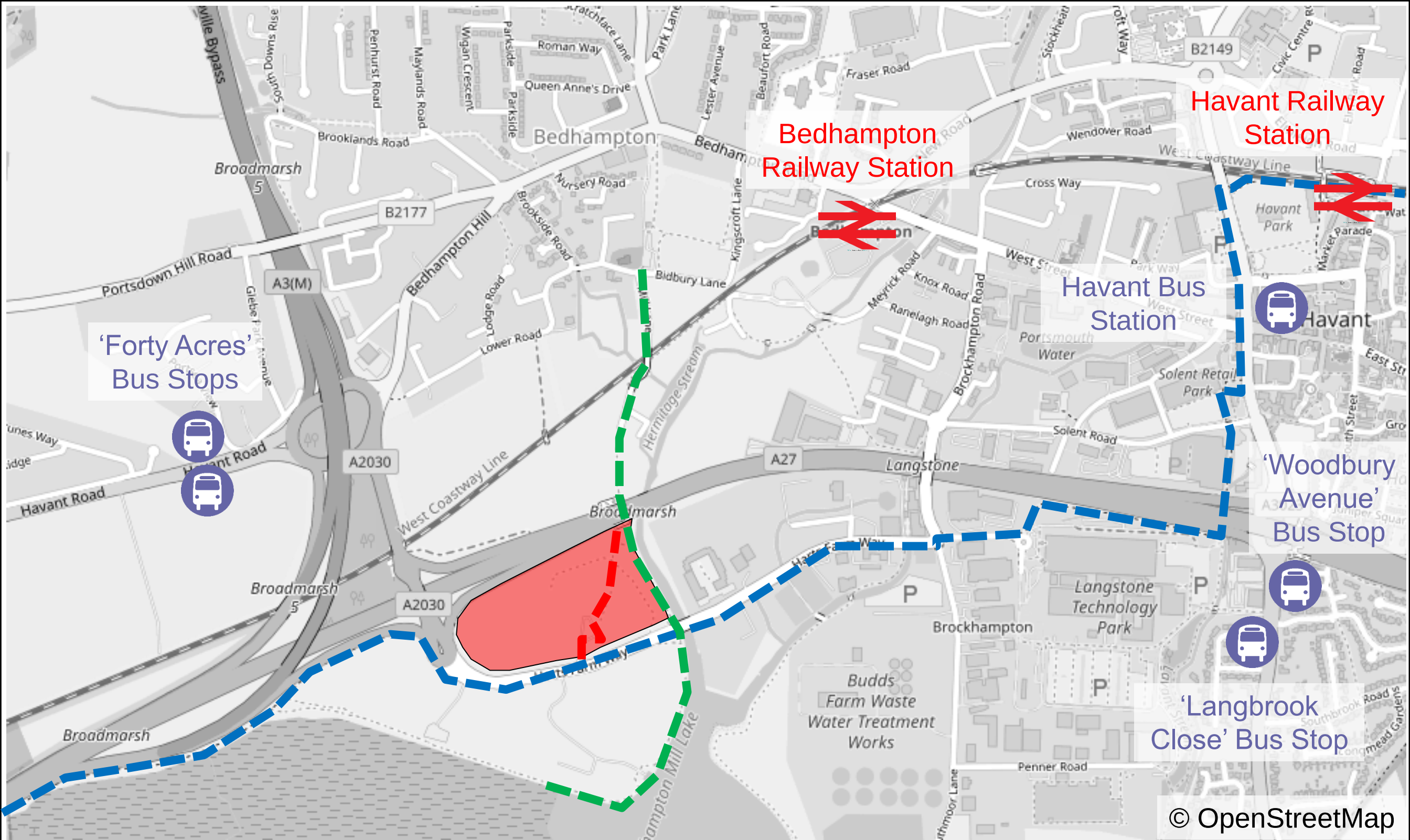
7 Summary and Conclusions

- 7.1 Vectos have been appointed by Clowes Developments (UK) Ltd to provide advice on the traffic and transport aspects in relation to the proposed development on land to the west of Brockhampton, Havant.
- 7.2 The site comprises undeveloped land and is bound by the A27 Havant Bypass to the north, the Hermitage Stream to the east and Harts Farm Way to the south and west. The site is located immediately to the south east of the A27 / Harts Farm Way junction. Vehicular access to the site is achieved via an existing T-junction from Harts Farm Way.
- 7.3 The development proposals are for:
- “Outline application for the development of new employment units to provide up to 29,000 sqm (gross internal area) for flexible use across use classes E (light industrial), B2 and B8 with ancillary offices, car parking, service yards, drainage works, landscaping and associated works to prepare the site for development. All matters are reserved except the primary means of access to the site.”*
- 7.4 Local policy supports the planning application of the proposed development with the site allocated for employment development under Policy HB2 as site BD11 ‘Brockhampton West’ within the Havant Borough Council Local Plan (Allocations) document.
- 7.5 The site is accessible by walking and cycling with dedicated routes leading directly to the site. Nearby train stations are accessible within an acceptable cycling distance from the site and bus stops are located within walking distance from the site. This supports policy aims of ensuring development is accessible by sustainable modes.
- 7.6 An assessment has been undertaken of the entire 29,000sqm operating wholly as either Use Class E, B2 or B8, which indicates that B2 land use generated the greatest number of trips in relation to the proposed development with 155 and 102 two-way movements during the AM and PM peak hour, respectively.
- 7.7 Junction capacity analysis was therefore undertaken at the proposed site access, the Teardrop roundabout, and the Rusty Cutter roundabout under the entire 29,000sqm operating wholly under B2 land use. This indicated that the site access junctions, with either only the single access or both the primary and secondary access, operated within capacity in all scenarios assessed. In addition, the traffic associated with the proposed development will result in only a minor increase in queuing at both the Teardrop and Rusty Cutter roundabouts.

Conclusion

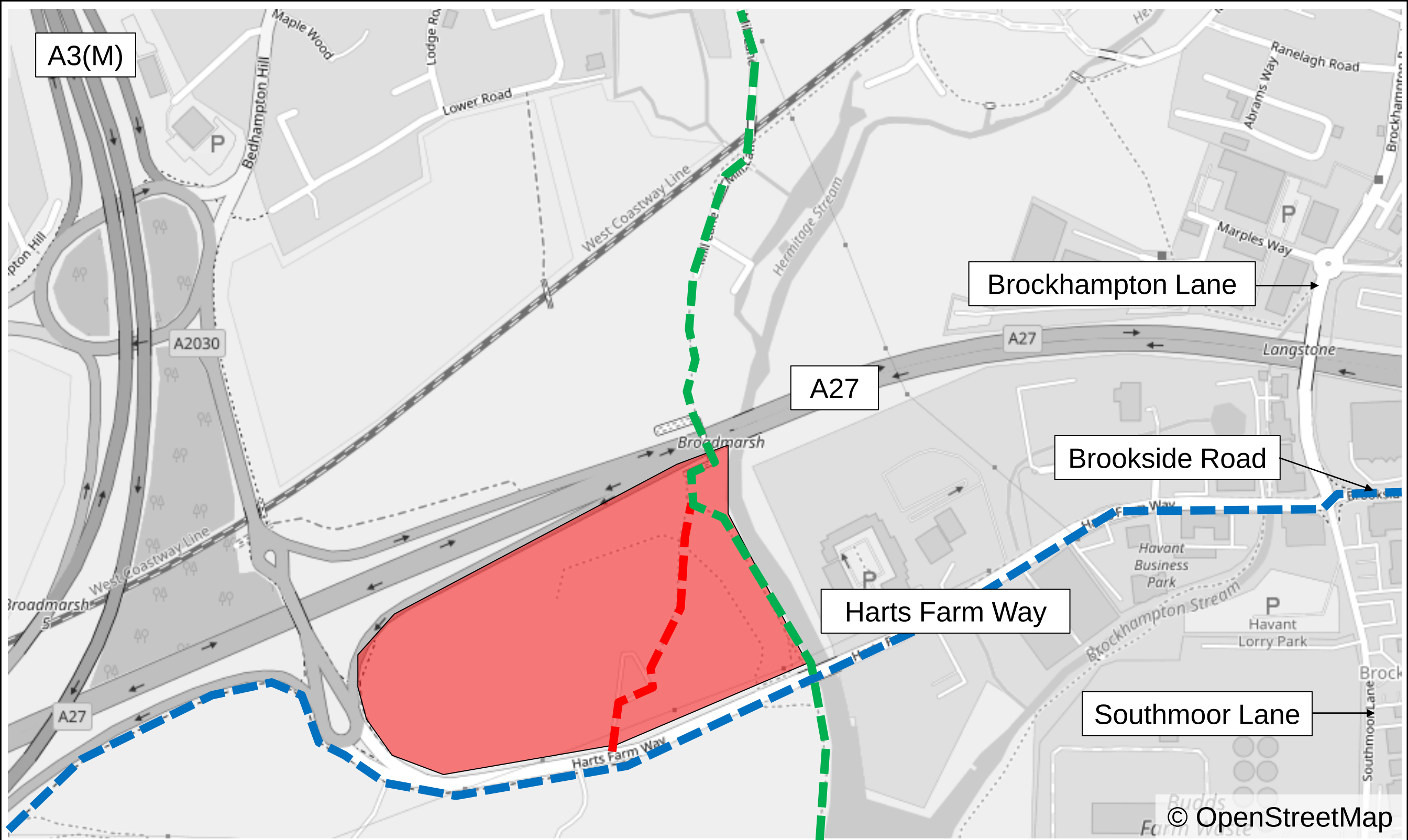
- 7.8 It is therefore concluded that the proposed development at the site would not result in a severe or material impact in transport terms. As such, there are no transport reasons why the proposed development cannot come forward and be granted planning permission.

Figures

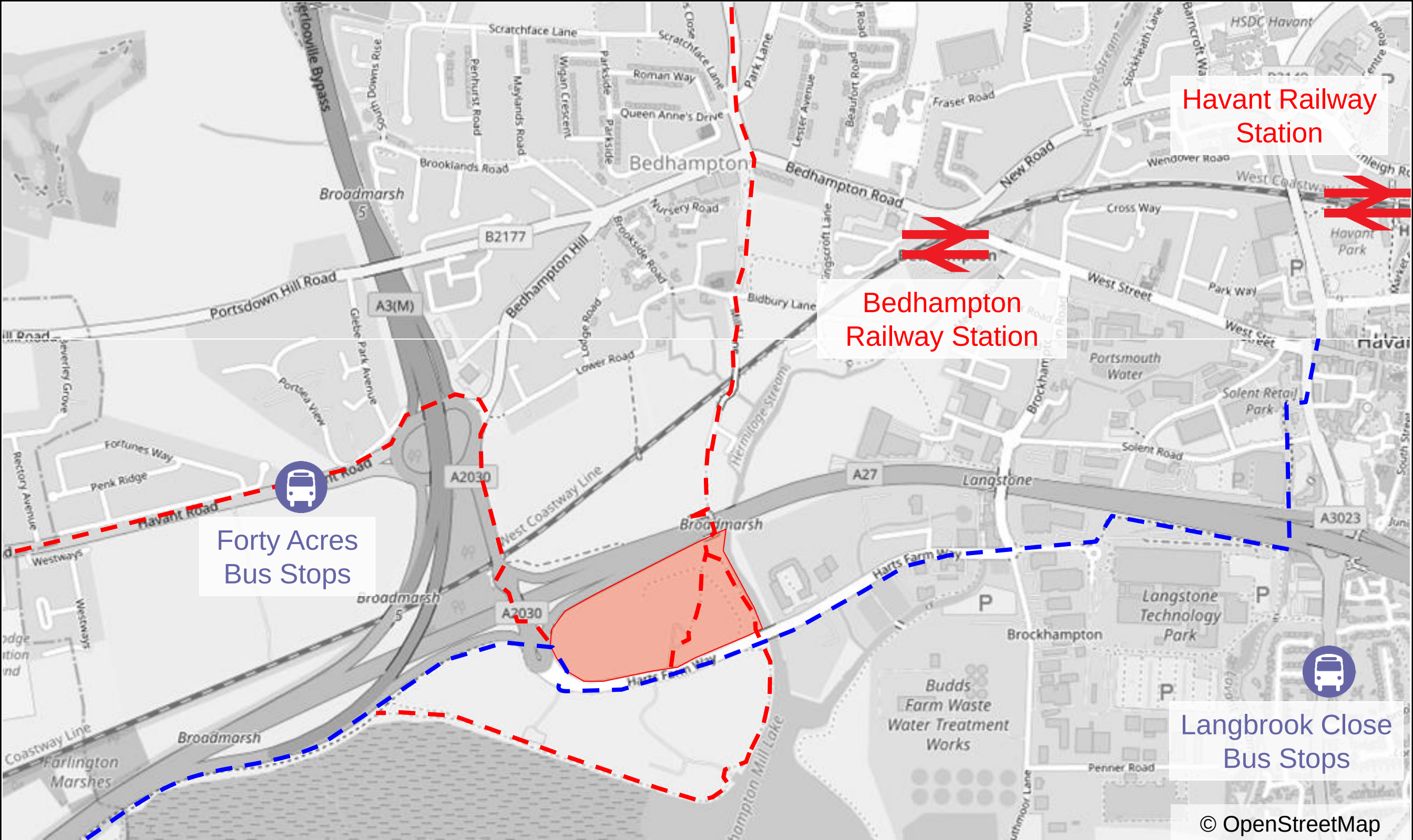


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Key: Site Boundary NCN Route 22 Havant 30 Footpath Undesignated Footpath Railway Station Bus Stop				Harts Farm Way, Brockhampton West		Clowes Developments (UK) Ltd.	
Strategic Site Location				 Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.uk		DRAWING REFERENCE: Figure 1	
DRAWN:	SB	CHECKED:	HA	DATE:	21/10/2020	SCALES:	NTS



Key: Site Boundary NCN Route 22 Havant 30 Footpath Undesignated Footpath	Harts Farm Way, Brockhampton West	Clowes Developments (UK) Ltd.
	Local Site Location	vectos. Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.uk
	DRAWN: SB CHECKED: HA DATE: 21/10/2020 SCALES: NTS	DRAWING REFERENCE: Figure 2



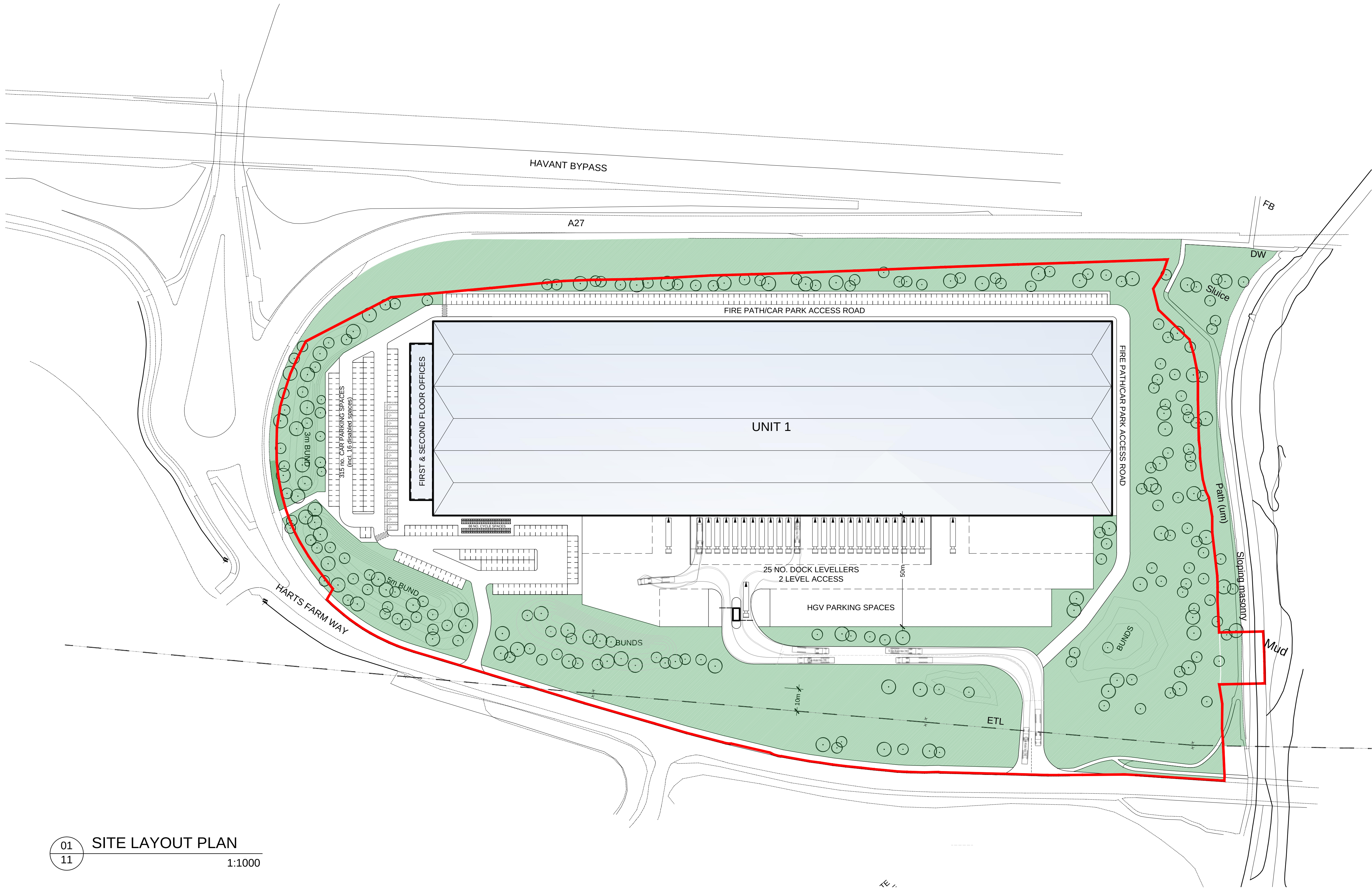
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Key:	
	Site Location
	Bus Stops
	Railway Stations
	NCN Route 22
	Footways

Harts Farm Way, Havant			
Sustainable Transport Connections			
DRAWN:	CHECKED:	DATE:	SCALES:
HA	AW	09/02/2021	NTS

Clowes Developments (UK) Ltd.
vectos.
Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.uk
DRAWING REFERENCE: Figure 3

Appendix A



01 SITE LAYOUT PLAN
11 1:1000

NOTES:

SUBJECT TO STATUTORY CONSENTS

SUBJECT TO SURVEY

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AREA SCHEDULE		
GIA		
1	sqm	sqft
Unit	27,094	291,630
First & Second Floor Offices	1,298	13,970
Subtotal	28,392	305,600
TOTAL	28,392	305,600
SITE AREA (APPROX.)	Ha	acres
	8.307	20.528

E	28/01/2021	Car and cycle parking updated, boundary updated to include drainage connection	AH	AC
D	14/01/2021	Secondary site access shown, parking numbers & roof plan updated	AH	AC
C	02/10/2020	Access road updated	PB	AC
B	23/09/2020	Car parking spaces relocated	PB	AC
A	02/07/2020	Offices revised. Proposed site boundary updated.	PB	AC
-	01/07/2020	First Issue	PB	AC
REV	DATE	NOTE	DRAW	CHK



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DRAWING

SITE LAYOUT PLAN

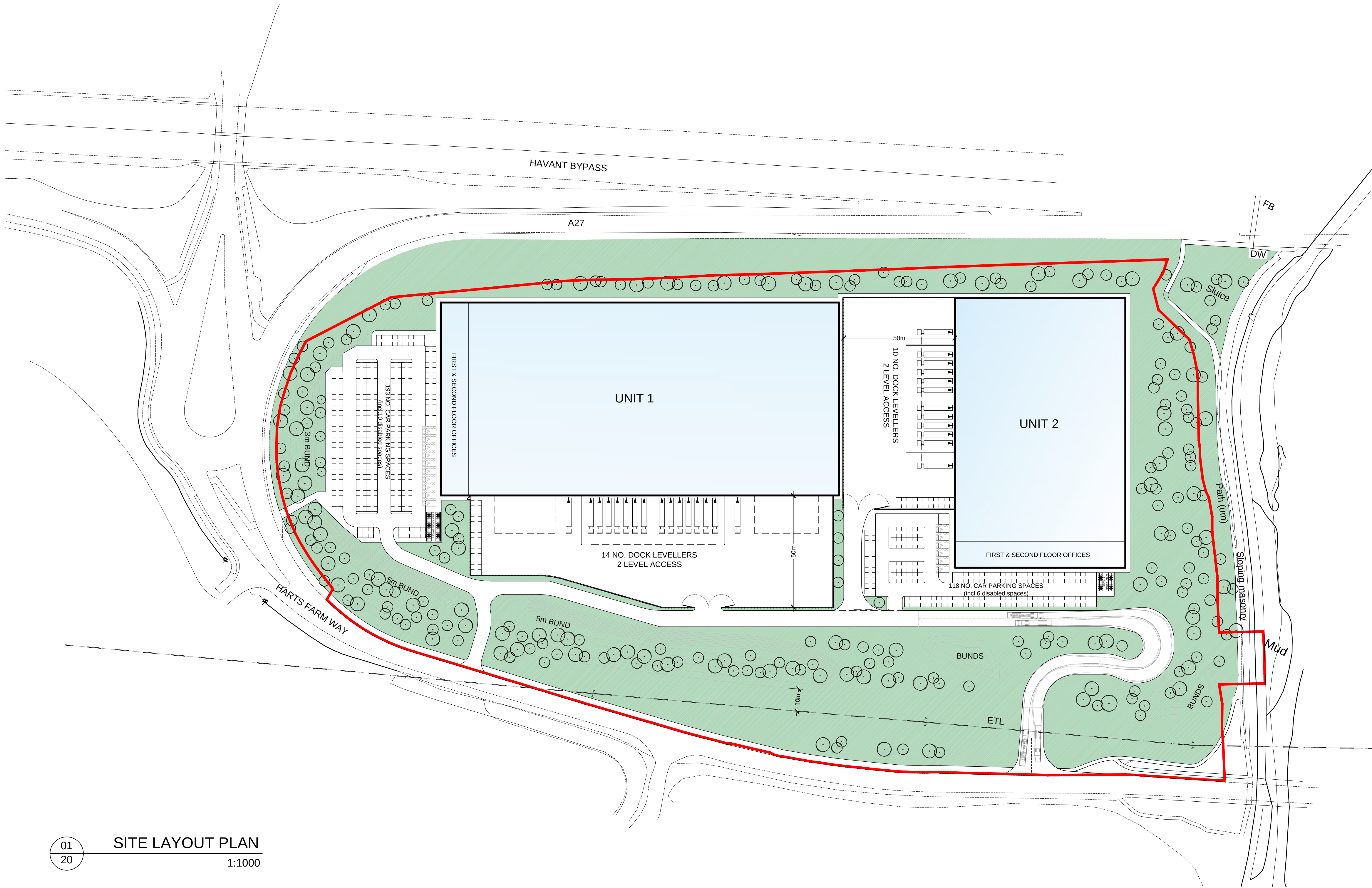
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	STATUS	CHECKED
	FEASIBILITY	AC

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AREA SCHEDULE		
GIA		
1	sqm	sqft
Unit	15,353	165,260
2 Storey Offices	1,924	20,710
Subtotal	17,277	185,970
2	sqm	sqft
Unit	9,086	97,800
2 Storey Offices	1,622	17,460
Subtotal	10,708	115,260
TOTAL	27,985	301,230
SITE AREA (APPROX.)	Ha	acres
	8.308	20.528

D	28/01/2021	Car and cycle parking updated, boundary updated to include drainage connection	AH	AC
C	14/01/2021	Secondary site access shown	AH	AC
B	06/10/2020	Access road updated	PB	AC
A	24/09/2020	Area schedule updated	PB	AC
-	24/09/2020	First Issue	PB	AC
REV	DATE	NOTE	DRAW	CHK



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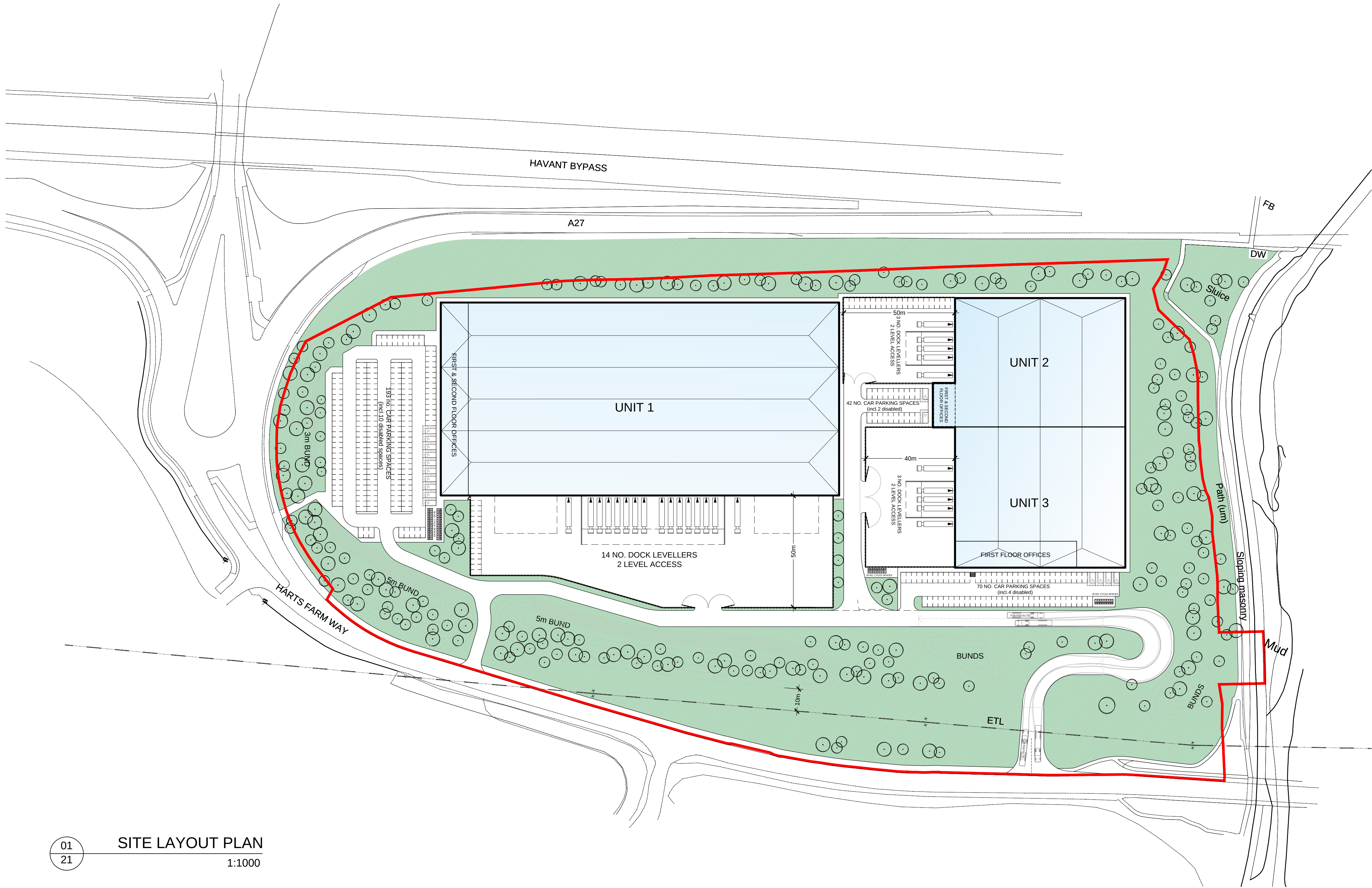
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STATUS	CHECKED
FEASIBILITY	AC

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01
21

SITE LAYOUT PLAN

1:1000

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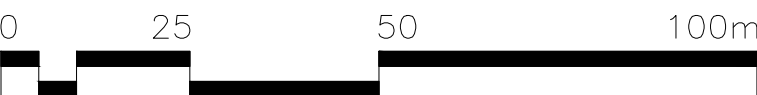
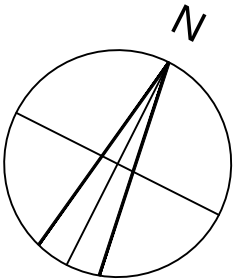
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AREA SCHEDULE		
GIA		
1	sqm	sqft
Unit	15,353	165,260
2 Storey Offices	1,924	20,710
Subtotal	17,277	185,970
2	sqm	sqft
Unit	4,525	48,705
2 Storey Offices	360	3,875
Subtotal	4,885	52,580
3	sqm	sqft
Unit	4,734	50,955
First floor offices	575	6,190
Subtotal	5,309	57,145
TOTAL	27,471	295,695
SITE AREA (APPROX.)		
	Ha	acres
	8.308	20.528

D	28/01/2021	Car and cycle parking updated, steps shown to Unit 3 carpark, boundary updated to include drainage connection	AH	AC
C	14/01/2021	Secondary site access shown, existing trees hidden	AH	AC
B	08/10/2020	Existing trees shown	PB	AC
A	02/10/2020	Access road updated	PB	AC
-	24/09/2020	First Issue	PB	AC
REV	DATE	NOTE	DRAW	CHK



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FEASIBILITY

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Appendix B

Harts Farm Way, Brockhampton West

Transport Scoping Note

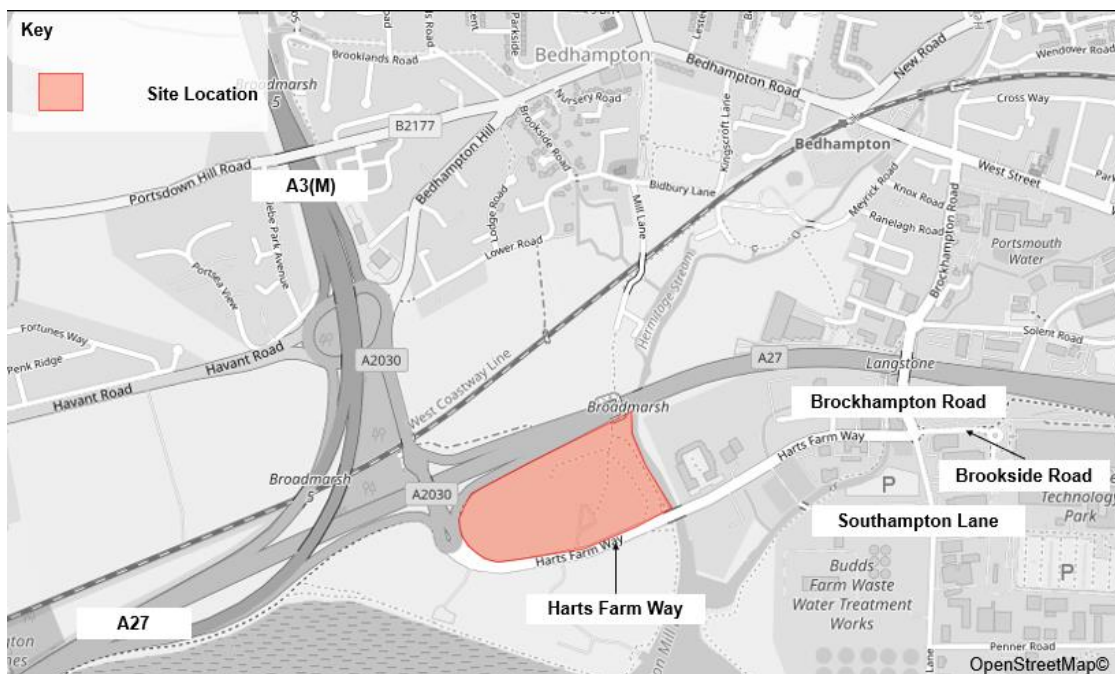
1st September 2020

N01/AW/Scoping Note

Introduction

1. Vectos have been appointed by Exton Estates Ltd to provide traffic and transport advice regarding the proposed development on land to the west of Brockhampton, Havant.
2. The site is located immediately to the south-east of the A27/Harts Farm Way junction. The site is bound by the A27 to the north, Harts Farm Way to the west and south and a river to the east. The location of the site can be viewed in **Figure 1** below.
3. The site is allocated for employment use under Policy HB2 (BD11) of the adopted Havant Borough Local Plan (Allocations) Development Plan Document.
4. The applicant is seeking planning permission for 23,227 sqm of flexible B1c/B2/B8 land uses. Associated service yards, car parking, cycle parking and landscaping will be provided. A plan of the proposed development can be viewed at **Appendix A**.

Figure 1: Site Location Plan



Scope of Transport Assessment

5. This scoping note has been prepared to seek agreement from Hampshire County Council (HCC) as part of pre-application engagement of the proposed scope of the transport assessment to be undertaken as part of the planning submission for the site.
6. The TA will be structured as follows:
 - Chapter 1 - Introduction
 - Chapter 2 - Existing Conditions
 - Chapter 3 - Policy Context
 - Chapter 4 - Development Proposals
 - Chapter 6 - Traffic Generation
 - Chapter 7 - Assessment of Traffic Impact
 - Chapter 8 - Summary and Conclusions
7. The following sections of this scoping document address each proposed Chapter of the TA in turn, describing the proposed content of each, beginning at Chapter 2.
8. This scoping note seeks agreement on the key transport matters for the site which will inform the structure and content of the future transport assessment required.

Existing Conditions

Highway Network

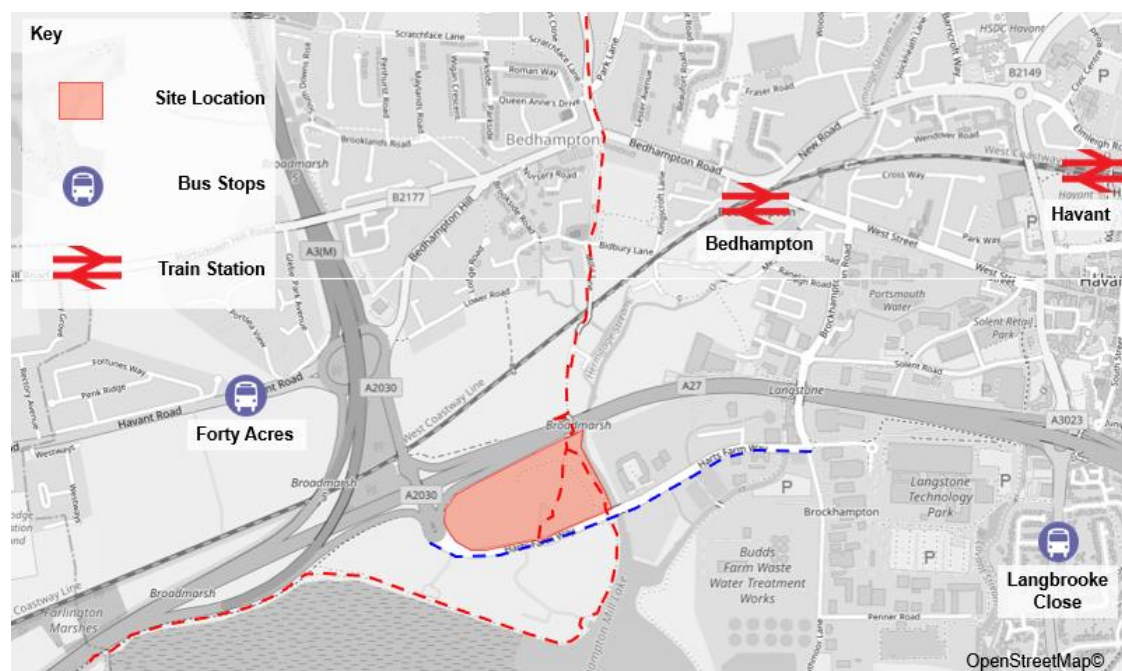
9. A plan of the strategic highway network is shown in **Figure 1** above.
10. Vehicle access to the site is achieved via an existing T-junction from Harts Farm Way. The access is opposite another existing access junction to Broadmarsh Coastal Park to the south of Harts Farm Way.
11. Harts Farm Way is a single carriageway with street lighting provided on either side of the carriageway. A shared footway-cycleway on the southern side of the carriageway.
12. Harts Farm Way leads from the A27 Havant Bypass, to the northwest, towards a predominantly industrial area to the east. Harts Farm Way is one of two access roads to this industrial area. The second is Brockhampton Road, which travels over the A27 and leads towards the centres of Bedhampton and Havant.
13. Harts Farm Way joins the A27 to the A3(M) and A27 junction. The Harts Farm Way and A27 junction is a dumbbell roundabout and allows access to the east on the A27 and Harts Farm Way to the south. The A27 west can also be accessed via a slip road.

14. The junction between the A27 and A3(M) to the north provides access to London via the A3 to the north, Portsmouth via the A27 to west and Chichester via the A27 east. Bedhampton and Drayton can also access via the junction to the east of west of the A3(M) junction.
15. To the east Harts Farm Way provides access to a predominantly industrial area. Once the road has crossed over the tributary to the Solent, a footway is provided on the northern side of the carriageway and the shared footway/cycleway continues on the southern side of the carriageway, with street lighting on both sides. This section of Harts Farm Way has several access junctions, which provide access to separate industrial units. Harts Farm Way finishes at a roundabout between Harts Farm Way, Southampton Lane, Brockhampton Road and Brookside Road. The roundabout provides access to the remainder of the industrial area.

Accessibility by Non-Car Modes

16. A plan of local pedestrian facilities, cycle routes, nearby bus stops and the nearest train station can be viewed at **Figure 2**.

Figure 2: Existing Pedestrian, Cycle and Public Transport Facilities



17. Pedestrian access to the site is currently via the existing vehicle access from Harts Farm Way. As described previously a shared footway/cycleway is provided along the southern side of Harts Farm Way for its entire length. A footway is provided on the northern side once the carriageway has travelled over the tributary of the Solent immediately to the east of the site. The footways are lit at regular intervals for the entire length to ensure pedestrian and cyclist safety.
18. A secondary pedestrian access is provided to the north of the site via a pedestrian footbridge over the A27. The footbridge leads from Bedhampton directly into the site. The footpath, which is not designated on HCC Public Rights of Way (PRoW) Map, crosses diagonally across

the site to the vehicular access on Harts Farm Way. The site is bound by a PRoW to the east, which is designated as a Footpath on Route 30 on HCC PRoW map.

19. The nearest pedestrian crossing to the site is found at the junction between Harts Farm Way and the A27.
20. Regarding cycling, as described above, a shared footway/cycleway travels along Harts Farm Way which forms part of National Cycle Network (NCN) Route 22. NCN Route 22 is a long-distance route between London and Portsmouth.
21. No further designated cycle routes can be found near the site. However, the surrounding roads throughout the industrial estate are wide, have slow speed limits and are conducive to cycling.
22. As shown on **Figure 2**, the nearest bus stop to the site are located on Longstone Road to the east and Havant Road to the north. These are approximately 1.15km and 1.8km walking distance, respectively. Each stop is served by two services which are summarised below in **Table 1**.

Table 1: Summary of Bus Services

Service	Route	Frequency		
		Mon-Fri	Sat	Sun
Langbrook Close				
30	Havant Bus Station – Sandy Point	Every 40 Minutes	Every 40 Minutes	Every 1 Hours
31		Every 2 Hours	Every 2 Hours	Every 2 Hours
Forty Acres				
21	Havant Bus Station – The Hard, Portsmouth	Every 15 minutes	Every 15 minutes	Every 20 Minutes
23	Leigh Park – Southsea	Every 10 Minutes	Every 15 Minutes	Every 20 Minutes

23. The nearest train stations are Bedhampton and Havant which are 1km and 1.85km, as the crow flies, from the site access, respectively.
24. Havant is served by Great Western Railways, Southern and South West Railways providing services to London, Portsmouth, Southampton, Littlehampton and Brighton. Bedhampton is served by Southern and South West Railways providing services between London, Portsmouth, Southampton and Littlehampton.

Summary

25. The site is accessible by walking and cycling with dedicated routes leading directly to the site, of note is the shared footway/cycleway on the southern side of Harts Farm Way. Nearby train stations are accessible with an acceptable cycling distance from the site and bus stops are located within walking distance from the site.

26. The site is located near to the strategic road network with immediate access to both the A27 and the A3(M). The local road network is accessible to the east of the site via the junction between Harts Farm Way, Southampton Lane, Brookside Road and Brockhampton Way.

Policy Context

27. The proposals described previously will be assessed in the context of current and emerging planning policy/guidance at national, regional and local level. It is proposed the following documents be reviewed within the transport assessment:
- National Planning Policy Framework (NPPF), February 2019.
 - National Planning Practice Guidance, 2014.
 - Hampshire Local Transport Plan 3, 2011 – 2031; and
 - HBC Core Strategy, March 2011.

Development Proposals

28. A plan of the proposed development can be viewed at **Appendix A**.
29. The proposed development would comprise a modern employment unit within use classes B1c/B2/B8 with ancillary offices, car parking, cycle parking, service yards, loading docks and landscaping. It is proposed to submit a planning application to provide 23,227 sqm of B1c/B2/B8.

Vehicle Access

30. The site will be accessed via two priority T junctions, shown at **Appendix B**, from Harts Farm Way. The existing access junction will be removed as part of the development. The proposed access to the west of the site will provide direct access to the car park. The proposed eastern access will provide direct access to the service yard.
31. Furthermore, appropriate visibility splays of 2.4 x 43m, in line with the guidance set out within MfS for 30mph roads, can be achieved at the site access.

Pedestrian Access

32. A new pedestrian access will be provided located to the west of the site on Harts Farm Way. The proposed pedestrian access will link the site to the pedestrian crossing facilities at the Harts Farm Way/A27 junction.

Car and Cycle Parking

33. The proposed layout, shown at **Appendix A**, shows that 251 car parking spaces will be provided with 13 of these being for blue badge holders. The plan also shows that 25 loading docks will be provided and 72 cycle parking spaces.

34. The car and cycle parking requirements have been calculated considering Havant Borough Council Parking Supplementary Planning Guidance (July 2016, partially updated September 2019) car and cycle parking standards. **Table 2** shows a summary of the vehicle and cycle parking requirements for B1c/B2/B8 uses.

Table 2: Car and Cycle Parking Standards

Class	Specific Land Use	Vehicles (Minimum)	Bicycles (Minimum)	
			Long-stay	Short stay
B1c	Light industrial	1 space per 45 sqm	1 stand per 250 sqm	1 stand per 500sqm GEA
B2	General Industrial	1 space per 45sqm	1 stand per 350 sqm	1 stand per 500sqm GEA
B8	Storage & Distribution	1 space per 90sqm	1 stand per 500sqm	1 stand per 1,000sqm GEA

35. Where a development comprises a mix of uses, the parking standards should be applied to the proportion of the total floor area represented by each use. Given the flexibility sought across B1c/B2/B8 the final quantum of each proposed uses is not yet known.
36. The plan included at **Appendix A** shows 251 car parking spaces and 72 cycle parking spaces, in line with the standards for a B8 use for car parking. However, the developer would like to maintain maximum flexibility for future occupiers and are therefore applying for a flexible use of B1c/B2/B8 uses. If a B1c or B2 occupier is interested in occupying the site, a revised layout with increased level of car parking would be provided.
37. With regard for parking for people with disabilities, this according to HBC car parking standards, parking for disabled people should be provided as 5% of the total allocation. The plan included at **Appendix A** shows that 13 car parking spaces will be allocated for blue badge holders, in line with the 5% required.

Servicing

38. As described previously, 25 loading docks will be provided for the single unit. Swept path analysis will be undertaken as part of the submitted Transport Assessment, which will demonstrate that a 16.5m articulated vehicle is able to access each respective loading dock safely.

Sustainable Transport Strategy

39. As part of the proposed development, a Framework Travel Plan will be produced and submitted in support of the planning application. A Framework Travel Plan is primarily aimed at reducing the proportion of employees travelling to work as single occupancy car drivers. A series of measures will be developed in order to encourage a reduction in vehicle trips generated by employees. The measures include:

- Up-to-date details of bus services, including route information and service frequencies, will be permanently on display. National rail Journey Planner websites and enquiry phone numbers will be provided through all relevant means.
 - Information and advice concerning safe cycle routes to the site and other cycle information will be posted at a prominent location within the employee area of the site.
 - Employees will be encouraged to car share.
40. As part of the development proposals, cycle parking will be provided in secure covered locations.

Trip Generation & Distribution

41. The current proposals include for 23,227sqm of B1c/B2/B8 floorspace. To estimate the number of trips generated by the proposed development the TRICS database has been interrogated. The following criteria was applied, in order to derive the most representative vehicle trip rates for each respective land use:

B1c/B2

- Land use: Employment.
 - Sub Land Use: Industrial Unit.
 - Calculation Output: Multi-Modal.
 - Regions: England, except Greater London.
 - Range Selected: 2,500 to 80,000sqm.
 - Actual Range: 3,035 to 80,000sqm.
 - Location Types: Edge of Town.
 - Sub Location: Industrial Zone, Built-Up Zone, No Subcategory; and
 - Date Range: 04/07/00 to 24/09/19.
42. To distinguish between B1c and B2 uses, the site selection feature in TRICS was used to deselect sites surveyed with only B1c uses or only B2 uses to derive appropriate trip rates for the opposing land use i.e. B1c sites were deselected to derive a trip rate for B2.
43. It should also be noted the number of surveys available between 2012 and 2019 were limited within the selected locations types. Therefore, the date range was increased to 2000 to 2019 to ensure a representative selection of sites were available.

B8

- Land use: Employment.
- Sub Land Use: Warehousing (Commercial).

- Calculation Output: Multi-modal.
- Regions: England, except Greater London.
- Range Selected: 1,976 to 80,066sqm
- Actual Range: 1,976 to 30,685sqm
- Location Types: Edge of Town.
- Sub Location: Industrial Zone and No Subcategory.
- Date Range: 06/09/02 to 03/04/19

44. The full TRICS output is included at **Appendix C**. The resultant trip rates and subsequent vehicle trips generated by the proposed use is summarised in **Table 3** below. To understand the likely volume of traffic the proposed development could generate, the trip rates summarised within **Table 3** have been applied to the full quantum of development for each proposed land use.

Table 3: Total Vehicle Trips and [Trip Rates]

Period	B1c		
	Arrive	Depart	Total
Weekday AM Peak (08:00-09:00)	97 [0.417]	20 [0.086]	117 [0.503]
Weekday PM Peak (17:00-18:00)	10 [0.042]	72 [0.309]	82 [0.351]
Daily	411 [1.769]	422 [1.815]	832 [3.584]
Period	B2		
	Arrive	Depart	Total
Weekday AM Peak (08:00-09:00)	104 [0.447]	20 [0.088]	124 [0.535]
Weekday PM Peak (17:00-18:00)	9 [0.038]	73 [0.315]	82 [0.353]
Daily	431 [1.855]	444 [1.913]	875 [3.768]
Period	B8		
	Arrive	Depart	Total
Weekday AM Peak (08:00-09:00)	43 [0.183]	11 [0.049]	54 [0.232]
Weekday PM Peak (17:00-18:00)	6 [0.025]	39 [0.167]	45 [0.192]
Daily	406 [1.747]	363 [1.561]	768 [3.308]

45. **Table 3** shows that if the development were 100% B1c this would generate 832 two-way vehicle movements. In comparison if the development were 100% B2, this would generate

875 two-way vehicle movements and if the development were 100% B8 this would generate 768 two-way vehicle movements. A range of vehicle trips have been shown above applied to the full proposed floorspace to demonstrate the worst case for each proposed land use.

Traffic Distribution

46. The distribution of employment vehicle trips generated by the proposed development will be based on Census origin-destination data for Havant 018 Mid-Layer Super Output Area (MOSA), which encompass the site.
47. Vehicle trips will be assigned to the most appropriate routes based on their destination within the network. Based on the above, **Table 4** below summarises the proposed trip distribution.

Table 4: Proposed Traffic Distribution

Route	Network Entry	Percentage Distribution
1	Harts Farm Way via A3 North	38%
2	Harts Farm Way via A27 East	12%
3	Harts Farm Way via A27 West	27%
4	Harts Farm Way via Bedhampton Hill	20%
5	Harts Farm Way via Brockhampton Hill	3%
Total		100%

Assessment of Traffic Impact

48. The trip distribution data indicates that approximately 97% of vehicle trips will arrive/depart the site from the west on Harts Farm Way via the A3/A27 junction whilst the remaining 3% of development traffic will travel from the east on Harts Farm Way via the roundabout between Harts Farm Way, Brockhampton Road, Southampton Lane and Brookside Road.
49. On this basis, it is considered that junction modelling will be required at the A27/A3 junction to demonstrate that the junction has the capacity to accommodate the forecasted development flows generated by the proposals and that there will not be a material impact on this junction.
50. Once distributed, beyond these two junctions it is anticipated that the proposed development will generate a minimal number of additional vehicle trips at the junctions on the surrounding highways network during the peak periods. It is, therefore, concluded that no further assessment would be required in terms of the impact of the proposed scheme beyond the A27/A3 junction.
51. Traffic flows will be sought from traffic surveys, however, due to the COVID-19 health pandemic and due to the junction being part of the trunk road network it may not be possible to gather representative data for the junction. If this is not possible data will be retrieved from either existing planning applications for example the residential application to the northwest of the site for 320 dwellings (application reference AAP/18/00450, Land at

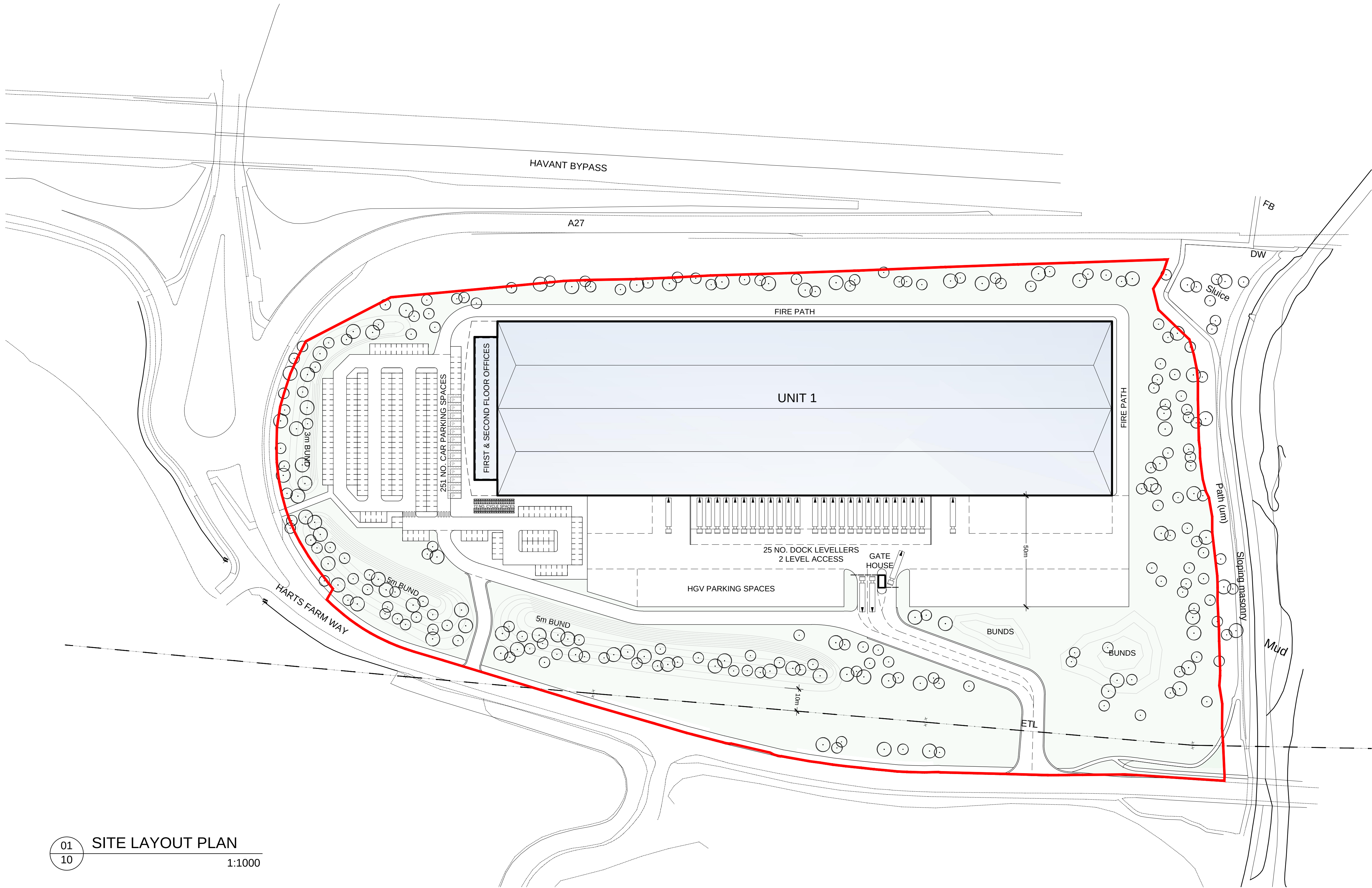
Forty Acres Farm, Havant Road, Havant) or from, WebTRIS /DfT counters which are located within the area surrounding the junction which can be utilised.

Summary and Conclusions

52. It is intended that the content of this scoping note will be agreed with HBC as being an appropriate basis for the Transport Assessment. We seek agreement/advice on the following:

- Proposed access arrangements.
- Proposed parking provision.
- Proposed trip rates.
- Proposed distribution; and
- Traffic assessment scope.

APPENDIX A



NOTES:

SUBJECT TO STATUTORY CONSENTS

SUBJECT TO SURVEY

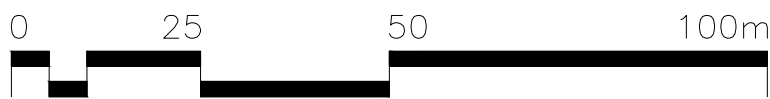
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AREA SCHEDULE

1	sqm	sqft
Unit	22,042	237,250
First & Second Floor Offices	1,185	12,750
Subtotal	23,227	250,000

TOTAL	23,227	250,000
-------	--------	---------

SITE AREA (APPROX.)	Ha	acres
	8.307	20.528

C	29/07/2020	Offices and access road updated	GZ	AC
B	02/07/2020	Proposed site boundary updated	PB	AC
A	30/06/2020	Landscaping updated. Vehicular entrance revised.	PB	AC
-	22/06/2020	First Issue	GZ	AC
REV	DATE	NOTE	DRAW	CHK



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DATE	SCALE	DRAWN
JUNE 2020	1:1000 & 1:500 @ A1	GZ

STATUS	CHECKED
FEASIBILITY	AC

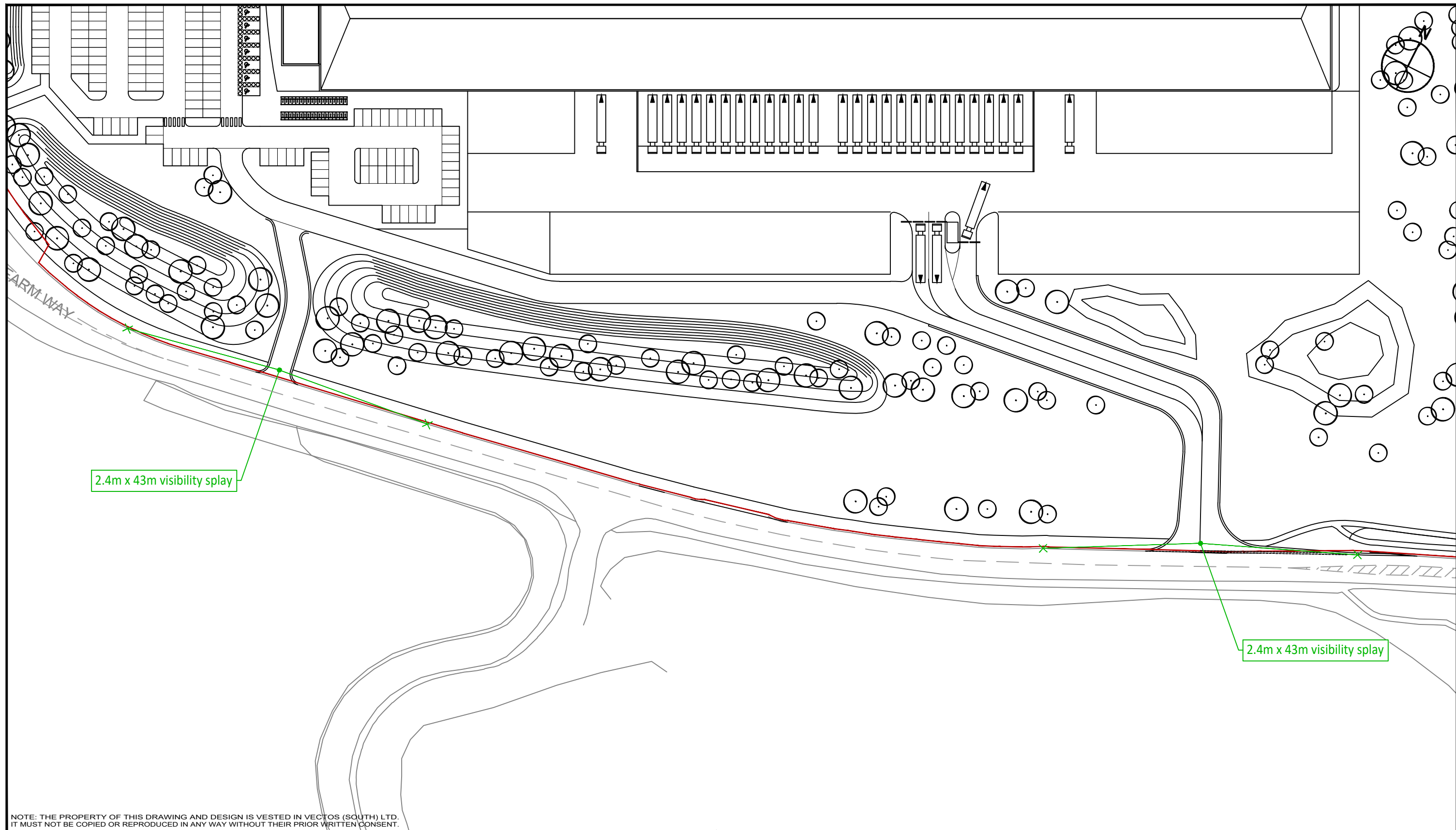
DRAWING NUMBER

31383 / FE / 10 C

01 SITE LAYOUT PLAN

10 1:1000

APPENDIX B



REV.	DETAILS	DRAWN	CHECKED	DATE	Notes:	Harts Farm Way, Havant		Exton Estates	
A	Architect layout updated.	JB	AW	01.09.2020	1. This is not a construction drawing and is intended for illustrative purposes only. 2. White lining is indicative only. 3. Layout is based on MSA drawing: 31383-FE-08 Site Layout Plan	Proposed Site Access Review		 Network Building, 97 Tottenham Court Road, London W1T 4TP t: 020 7580 7373 e: enquiries@vectos.co.uk	
		DRAWN: JB	CHECKED: AW	DATE: 29.06.2020	SCALES: 1:1000 at A3	DRAWING NUMBER: 205465/PD01		REVISION: A	

APPENDIX C

Calculation Reference: AUDIT-152301-200827-0852

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 MULTI-MODAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	CW CORNWALL	1 days
	DC DORSET	2 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	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: 3035 to 43325 (units: sqm)
 Range Selected by User: 2500 to 80000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 04/07/00 to 24/09/19

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

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	1 days
Thursday	2 days

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

Selected survey types:

Manual count	7 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	7
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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
Built-Up Zone	1
No Sub Category	2

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection:

Use Class:

B1	5 days
B2	1 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 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	3 days
125,001 to 250,000	3 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	2 days
1.1 to 1.5	4 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:

Not Known	2 days
No	5 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	7 days
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This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	CW-02-C-02 NORMANDY WAY BODMIN	LIGHTING COMPANY	CORNWALL
	Edge of Town Industrial Zone Total Gross floor area:	17675 sqm	
	Survey date: WEDNESDAY	06/06/07	Survey Type: MANUAL
2	DC-02-C-02 HAMPSHIRE ROAD WEYMOUTH CHICKERELL	NEWSPAPER HQ	DORSET
	Edge of Town Industrial Zone Total Gross floor area:	3035 sqm	
	Survey date: TUESDAY	04/07/00	Survey Type: MANUAL
3	DC-02-C-07 MERCERY ROAD WEYMOUTH	NEW LOOK	DORSET
	Edge of Town No Sub Category Total Gross floor area:	5467 sqm	
	Survey date: MONDAY	07/07/08	Survey Type: MANUAL
4	DS-02-C-01 STUBLEY LANE NEAR SHEFFIELD DRONFIELD	BAKERY	DERBYSHIRE
	Edge of Town No Sub Category Total Gross floor area:	23500 sqm	
	Survey date: THURSDAY	22/06/06	Survey Type: MANUAL
5	NF-02-C-01 KERRISON ROAD NORWICH	INDUSTRIAL UNIT	NORFOLK
	Edge of Town Built-Up Zone Total Gross floor area:	32000 sqm	
	Survey date: THURSDAY	16/11/00	Survey Type: MANUAL
6	NF-02-C-02 HARDWICK ROAD KINGS LYNN	GROCERY FACTORY	NORFOLK
	Edge of Town Industrial Zone Total Gross floor area:	43325 sqm	
	Survey date: MONDAY	19/09/05	Survey Type: MANUAL
7	WM-02-C-03 DOWNING STREET SMETHWICK	INDUSTRIAL GLASS	WEST MIDLANDS
	Edge of Town Industrial Zone Total Gross floor area:	5070 sqm	
	Survey date: TUESDAY	06/11/12	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
CH-02-C-01	Not comparable to B1C

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	18582	0.101	7	18582	0.018	7	18582	0.119
07:30 - 08:00	7	18582	0.227	7	18582	0.032	7	18582	0.259
08:00 - 08:30	7	18582	0.261	7	18582	0.044	7	18582	0.305
08:30 - 09:00	7	18582	0.156	7	18582	0.042	7	18582	0.198
09:00 - 09:30	7	18582	0.078	7	18582	0.035	7	18582	0.113
09:30 - 10:00	7	18582	0.046	7	18582	0.032	7	18582	0.078
10:00 - 10:30	7	18582	0.052	7	18582	0.048	7	18582	0.100
10:30 - 11:00	7	18582	0.044	7	18582	0.045	7	18582	0.089
11:00 - 11:30	7	18582	0.044	7	18582	0.038	7	18582	0.082
11:30 - 12:00	7	18582	0.045	7	18582	0.044	7	18582	0.089
12:00 - 12:30	7	18582	0.053	7	18582	0.068	7	18582	0.121
12:30 - 13:00	7	18582	0.055	7	18582	0.066	7	18582	0.121
13:00 - 13:30	7	18582	0.098	7	18582	0.066	7	18582	0.164
13:30 - 14:00	7	18582	0.125	7	18582	0.062	7	18582	0.187
14:00 - 14:30	7	18582	0.073	7	18582	0.173	7	18582	0.246
14:30 - 15:00	7	18582	0.058	7	18582	0.052	7	18582	0.110
15:00 - 15:30	7	18582	0.063	7	18582	0.077	7	18582	0.140
15:30 - 16:00	7	18582	0.042	7	18582	0.099	7	18582	0.141
16:00 - 16:30	7	18582	0.043	7	18582	0.091	7	18582	0.134
16:30 - 17:00	7	18582	0.034	7	18582	0.250	7	18582	0.284
17:00 - 17:30	7	18582	0.022	7	18582	0.142	7	18582	0.164
17:30 - 18:00	7	18582	0.020	7	18582	0.167	7	18582	0.187
18:00 - 18:30	7	18582	0.016	7	18582	0.078	7	18582	0.094
18:30 - 19:00	7	18582	0.013	7	18582	0.046	7	18582	0.059
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.769			1.815			3.584

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:	3035 - 43325 (units: sqm)
Survey date range:	04/07/00 - 24/09/19
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	18582	0.002	7	18582	0.001	7	18582	0.003
07:30 - 08:00	7	18582	0.003	7	18582	0.004	7	18582	0.007
08:00 - 08:30	7	18582	0.007	7	18582	0.005	7	18582	0.012
08:30 - 09:00	7	18582	0.007	7	18582	0.007	7	18582	0.014
09:00 - 09:30	7	18582	0.005	7	18582	0.007	7	18582	0.012
09:30 - 10:00	7	18582	0.005	7	18582	0.003	7	18582	0.008
10:00 - 10:30	7	18582	0.005	7	18582	0.007	7	18582	0.012
10:30 - 11:00	7	18582	0.005	7	18582	0.005	7	18582	0.010
11:00 - 11:30	7	18582	0.008	7	18582	0.006	7	18582	0.014
11:30 - 12:00	7	18582	0.011	7	18582	0.008	7	18582	0.019
12:00 - 12:30	7	18582	0.009	7	18582	0.011	7	18582	0.020
12:30 - 13:00	7	18582	0.007	7	18582	0.006	7	18582	0.013
13:00 - 13:30	7	18582	0.008	7	18582	0.007	7	18582	0.015
13:30 - 14:00	7	18582	0.008	7	18582	0.008	7	18582	0.016
14:00 - 14:30	7	18582	0.005	7	18582	0.009	7	18582	0.014
14:30 - 15:00	7	18582	0.010	7	18582	0.008	7	18582	0.018
15:00 - 15:30	7	18582	0.005	7	18582	0.005	7	18582	0.010
15:30 - 16:00	7	18582	0.003	7	18582	0.006	7	18582	0.009
16:00 - 16:30	7	18582	0.003	7	18582	0.005	7	18582	0.008
16:30 - 17:00	7	18582	0.005	7	18582	0.004	7	18582	0.009
17:00 - 17:30	7	18582	0.001	7	18582	0.001	7	18582	0.002
17:30 - 18:00	7	18582	0.001	7	18582	0.004	7	18582	0.005
18:00 - 18:30	7	18582	0.004	7	18582	0.003	7	18582	0.007
18:30 - 19:00	7	18582	0.002	7	18582	0.002	7	18582	0.004
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.129			0.132			0.261

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	18582	0.002	7	18582	0.000	7	18582	0.002
07:30 - 08:00	7	18582	0.021	7	18582	0.002	7	18582	0.023
08:00 - 08:30	7	18582	0.005	7	18582	0.000	7	18582	0.005
08:30 - 09:00	7	18582	0.002	7	18582	0.000	7	18582	0.002
09:00 - 09:30	7	18582	0.001	7	18582	0.000	7	18582	0.001
09:30 - 10:00	7	18582	0.002	7	18582	0.001	7	18582	0.003
10:00 - 10:30	7	18582	0.000	7	18582	0.001	7	18582	0.001
10:30 - 11:00	7	18582	0.002	7	18582	0.002	7	18582	0.004
11:00 - 11:30	7	18582	0.000	7	18582	0.000	7	18582	0.000
11:30 - 12:00	7	18582	0.001	7	18582	0.000	7	18582	0.001
12:00 - 12:30	7	18582	0.000	7	18582	0.000	7	18582	0.000
12:30 - 13:00	7	18582	0.002	7	18582	0.001	7	18582	0.003
13:00 - 13:30	7	18582	0.005	7	18582	0.000	7	18582	0.005
13:30 - 14:00	7	18582	0.004	7	18582	0.002	7	18582	0.006
14:00 - 14:30	7	18582	0.000	7	18582	0.012	7	18582	0.012
14:30 - 15:00	7	18582	0.002	7	18582	0.000	7	18582	0.002
15:00 - 15:30	7	18582	0.000	7	18582	0.002	7	18582	0.002
15:30 - 16:00	7	18582	0.001	7	18582	0.003	7	18582	0.004
16:00 - 16:30	7	18582	0.000	7	18582	0.006	7	18582	0.006
16:30 - 17:00	7	18582	0.001	7	18582	0.021	7	18582	0.022
17:00 - 17:30	7	18582	0.000	7	18582	0.004	7	18582	0.004
17:30 - 18:00	7	18582	0.000	7	18582	0.002	7	18582	0.002
18:00 - 18:30	7	18582	0.000	7	18582	0.002	7	18582	0.002
18:30 - 19:00	7	18582	0.000	7	18582	0.002	7	18582	0.002
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.051			0.063			0.114

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL VEHICLE OCCUPANTS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	18582	0.124	7	18582	0.017	7	18582	0.141
07:30 - 08:00	7	18582	0.253	7	18582	0.025	7	18582	0.278
08:00 - 08:30	7	18582	0.293	7	18582	0.045	7	18582	0.338
08:30 - 09:00	7	18582	0.175	7	18582	0.044	7	18582	0.219
09:00 - 09:30	7	18582	0.085	7	18582	0.036	7	18582	0.121
09:30 - 10:00	7	18582	0.050	7	18582	0.035	7	18582	0.085
10:00 - 10:30	7	18582	0.056	7	18582	0.054	7	18582	0.110
10:30 - 11:00	7	18582	0.054	7	18582	0.052	7	18582	0.106
11:00 - 11:30	7	18582	0.050	7	18582	0.042	7	18582	0.092
11:30 - 12:00	7	18582	0.052	7	18582	0.052	7	18582	0.104
12:00 - 12:30	7	18582	0.059	7	18582	0.078	7	18582	0.137
12:30 - 13:00	7	18582	0.063	7	18582	0.081	7	18582	0.144
13:00 - 13:30	7	18582	0.116	7	18582	0.078	7	18582	0.194
13:30 - 14:00	7	18582	0.144	7	18582	0.067	7	18582	0.211
14:00 - 14:30	7	18582	0.100	7	18582	0.200	7	18582	0.300
14:30 - 15:00	7	18582	0.079	7	18582	0.060	7	18582	0.139
15:00 - 15:30	7	18582	0.093	7	18582	0.083	7	18582	0.176
15:30 - 16:00	7	18582	0.052	7	18582	0.126	7	18582	0.178
16:00 - 16:30	7	18582	0.046	7	18582	0.105	7	18582	0.151
16:30 - 17:00	7	18582	0.036	7	18582	0.296	7	18582	0.332
17:00 - 17:30	7	18582	0.023	7	18582	0.161	7	18582	0.184
17:30 - 18:00	7	18582	0.021	7	18582	0.197	7	18582	0.218
18:00 - 18:30	7	18582	0.017	7	18582	0.095	7	18582	0.112
18:30 - 19:00	7	18582	0.014	7	18582	0.051	7	18582	0.065
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.055			2.080			4.135

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL PEDESTRIANS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	18582	0.006	7	18582	0.003	7	18582	0.009
07:30 - 08:00	7	18582	0.024	7	18582	0.001	7	18582	0.025
08:00 - 08:30	7	18582	0.018	7	18582	0.002	7	18582	0.020
08:30 - 09:00	7	18582	0.013	7	18582	0.003	7	18582	0.016
09:00 - 09:30	7	18582	0.015	7	18582	0.008	7	18582	0.023
09:30 - 10:00	7	18582	0.008	7	18582	0.009	7	18582	0.017
10:00 - 10:30	7	18582	0.009	7	18582	0.006	7	18582	0.015
10:30 - 11:00	7	18582	0.006	7	18582	0.003	7	18582	0.009
11:00 - 11:30	7	18582	0.003	7	18582	0.006	7	18582	0.009
11:30 - 12:00	7	18582	0.005	7	18582	0.007	7	18582	0.012
12:00 - 12:30	7	18582	0.010	7	18582	0.025	7	18582	0.035
12:30 - 13:00	7	18582	0.028	7	18582	0.028	7	18582	0.056
13:00 - 13:30	7	18582	0.038	7	18582	0.016	7	18582	0.054
13:30 - 14:00	7	18582	0.025	7	18582	0.019	7	18582	0.044
14:00 - 14:30	7	18582	0.014	7	18582	0.037	7	18582	0.051
14:30 - 15:00	7	18582	0.000	7	18582	0.009	7	18582	0.009
15:00 - 15:30	7	18582	0.002	7	18582	0.021	7	18582	0.023
15:30 - 16:00	7	18582	0.002	7	18582	0.020	7	18582	0.022
16:00 - 16:30	7	18582	0.003	7	18582	0.009	7	18582	0.012
16:30 - 17:00	7	18582	0.009	7	18582	0.028	7	18582	0.037
17:00 - 17:30	7	18582	0.006	7	18582	0.010	7	18582	0.016
17:30 - 18:00	7	18582	0.002	7	18582	0.018	7	18582	0.020
18:00 - 18:30	7	18582	0.000	7	18582	0.006	7	18582	0.006
18:30 - 19:00	7	18582	0.002	7	18582	0.005	7	18582	0.007
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.248			0.299			0.547

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL PUBLIC TRANSPORT USERS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	18582	0.010	7	18582	0.000	7	18582	0.010
07:30 - 08:00	7	18582	0.009	7	18582	0.000	7	18582	0.009
08:00 - 08:30	7	18582	0.001	7	18582	0.000	7	18582	0.001
08:30 - 09:00	7	18582	0.001	7	18582	0.000	7	18582	0.001
09:00 - 09:30	7	18582	0.002	7	18582	0.000	7	18582	0.002
09:30 - 10:00	7	18582	0.000	7	18582	0.000	7	18582	0.000
10:00 - 10:30	7	18582	0.000	7	18582	0.000	7	18582	0.000
10:30 - 11:00	7	18582	0.000	7	18582	0.000	7	18582	0.000
11:00 - 11:30	7	18582	0.002	7	18582	0.000	7	18582	0.002
11:30 - 12:00	7	18582	0.000	7	18582	0.000	7	18582	0.000
12:00 - 12:30	7	18582	0.000	7	18582	0.000	7	18582	0.000
12:30 - 13:00	7	18582	0.000	7	18582	0.000	7	18582	0.000
13:00 - 13:30	7	18582	0.001	7	18582	0.001	7	18582	0.002
13:30 - 14:00	7	18582	0.000	7	18582	0.000	7	18582	0.000
14:00 - 14:30	7	18582	0.002	7	18582	0.015	7	18582	0.017
14:30 - 15:00	7	18582	0.001	7	18582	0.002	7	18582	0.003
15:00 - 15:30	7	18582	0.001	7	18582	0.018	7	18582	0.019
15:30 - 16:00	7	18582	0.000	7	18582	0.003	7	18582	0.003
16:00 - 16:30	7	18582	0.000	7	18582	0.009	7	18582	0.009
16:30 - 17:00	7	18582	0.000	7	18582	0.005	7	18582	0.005
17:00 - 17:30	7	18582	0.002	7	18582	0.003	7	18582	0.005
17:30 - 18:00	7	18582	0.000	7	18582	0.003	7	18582	0.003
18:00 - 18:30	7	18582	0.000	7	18582	0.001	7	18582	0.001
18:30 - 19:00	7	18582	0.000	7	18582	0.000	7	18582	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.032			0.060			0.092

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.

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VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL TOTAL PEOPLE

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	18582	0.142	7	18582	0.020	7	18582	0.162
07:30 - 08:00	7	18582	0.307	7	18582	0.028	7	18582	0.335
08:00 - 08:30	7	18582	0.318	7	18582	0.046	7	18582	0.364
08:30 - 09:00	7	18582	0.191	7	18582	0.047	7	18582	0.238
09:00 - 09:30	7	18582	0.103	7	18582	0.044	7	18582	0.147
09:30 - 10:00	7	18582	0.060	7	18582	0.045	7	18582	0.105
10:00 - 10:30	7	18582	0.065	7	18582	0.061	7	18582	0.126
10:30 - 11:00	7	18582	0.062	7	18582	0.057	7	18582	0.119
11:00 - 11:30	7	18582	0.055	7	18582	0.048	7	18582	0.103
11:30 - 12:00	7	18582	0.057	7	18582	0.058	7	18582	0.115
12:00 - 12:30	7	18582	0.069	7	18582	0.102	7	18582	0.171
12:30 - 13:00	7	18582	0.093	7	18582	0.110	7	18582	0.203
13:00 - 13:30	7	18582	0.160	7	18582	0.095	7	18582	0.255
13:30 - 14:00	7	18582	0.173	7	18582	0.088	7	18582	0.261
14:00 - 14:30	7	18582	0.116	7	18582	0.263	7	18582	0.379
14:30 - 15:00	7	18582	0.081	7	18582	0.071	7	18582	0.152
15:00 - 15:30	7	18582	0.096	7	18582	0.125	7	18582	0.221
15:30 - 16:00	7	18582	0.055	7	18582	0.152	7	18582	0.207
16:00 - 16:30	7	18582	0.049	7	18582	0.130	7	18582	0.179
16:30 - 17:00	7	18582	0.046	7	18582	0.350	7	18582	0.396
17:00 - 17:30	7	18582	0.031	7	18582	0.178	7	18582	0.209
17:30 - 18:00	7	18582	0.022	7	18582	0.220	7	18582	0.242
18:00 - 18:30	7	18582	0.017	7	18582	0.103	7	18582	0.120
18:30 - 19:00	7	18582	0.015	7	18582	0.058	7	18582	0.073
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.383			2.499			4.882

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.

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Calculation Reference: AUDIT-152301-200827-0821

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 MULTI-MODAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	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: 3035 to 43325 (units: sqm)
 Range Selected by User: 2500 to 80000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 04/07/00 to 24/09/19

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

Selected survey days:

Monday	2 days
Tuesday	1 days
Thursday	3 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:

Edge of Town	6
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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	3
Built-Up Zone	1
No Sub Category	2

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

Secondary Filtering selection:

Use Class:

B1	3 days
B2	2 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®.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	2 days
20,001 to 25,000	1 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	4 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	1 days
1.1 to 1.5	4 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:

Not Known	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	6 days
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This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	CH-02-C-01	BAKERY	CESHIRE
	GADBROOK PARK		
	NORTHWICH		
	HIGH SHURLACH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	15000 sqm	
	Survey date: THURSDAY	21/06/07	Survey Type: MANUAL
2	DC-02-C-02	NEWSPAPER HQ	DORSET
	HAMPSHIRE ROAD		
	WEYMOUTH		
	CHICKERELL		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3035 sqm	
	Survey date: TUESDAY	04/07/00	Survey Type: MANUAL
3	DC-02-C-07	NEW LOOK	DORSET
	MERCERY ROAD		
	WEYMOUTH		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	5467 sqm	
	Survey date: MONDAY	07/07/08	Survey Type: MANUAL
4	DS-02-C-01	BAKERY	DERBYSHIRE
	STUBLEY LANE		
	NEAR SHEFFIELD		
	DRONFIELD		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	23500 sqm	
	Survey date: THURSDAY	22/06/06	Survey Type: MANUAL
5	NF-02-C-01	INDUSTRIAL UNIT	NORFOLK
	KERRISON ROAD		
	NORWICH		
	Edge of Town		
	Built-Up Zone		
	Total Gross floor area:	32000 sqm	
	Survey date: THURSDAY	16/11/00	Survey Type: MANUAL
6	NF-02-C-02	GROCERY FACTORY	NORFOLK
	HARDWICK ROAD		
	KINGS LYNN		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	43325 sqm	
	Survey date: MONDAY	19/09/05	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
CW-02-C-02	Not comparable to B2 Use
WM-02-C-03	Not comparable to B2 Use

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.076	6	20388	0.050	6	20388	0.126
07:30 - 08:00	6	20388	0.199	6	20388	0.029	6	20388	0.228
08:00 - 08:30	6	20388	0.279	6	20388	0.045	6	20388	0.324
08:30 - 09:00	6	20388	0.168	6	20388	0.043	6	20388	0.211
09:00 - 09:30	6	20388	0.077	6	20388	0.035	6	20388	0.112
09:30 - 10:00	6	20388	0.051	6	20388	0.038	6	20388	0.089
10:00 - 10:30	6	20388	0.052	6	20388	0.053	6	20388	0.105
10:30 - 11:00	6	20388	0.052	6	20388	0.043	6	20388	0.095
11:00 - 11:30	6	20388	0.047	6	20388	0.043	6	20388	0.090
11:30 - 12:00	6	20388	0.045	6	20388	0.047	6	20388	0.092
12:00 - 12:30	6	20388	0.049	6	20388	0.062	6	20388	0.111
12:30 - 13:00	6	20388	0.065	6	20388	0.066	6	20388	0.131
13:00 - 13:30	6	20388	0.112	6	20388	0.069	6	20388	0.181
13:30 - 14:00	6	20388	0.135	6	20388	0.065	6	20388	0.200
14:00 - 14:30	6	20388	0.081	6	20388	0.198	6	20388	0.279
14:30 - 15:00	6	20388	0.065	6	20388	0.066	6	20388	0.131
15:00 - 15:30	6	20388	0.069	6	20388	0.079	6	20388	0.148
15:30 - 16:00	6	20388	0.052	6	20388	0.109	6	20388	0.161
16:00 - 16:30	6	20388	0.034	6	20388	0.084	6	20388	0.118
16:30 - 17:00	6	20388	0.041	6	20388	0.215	6	20388	0.256
17:00 - 17:30	6	20388	0.023	6	20388	0.135	6	20388	0.158
17:30 - 18:00	6	20388	0.015	6	20388	0.180	6	20388	0.195
18:00 - 18:30	6	20388	0.032	6	20388	0.096	6	20388	0.128
18:30 - 19:00	6	20388	0.036	6	20388	0.063	6	20388	0.099
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.855			1.913			3.768

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.

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Parameter summary

Trip rate parameter range selected:	3035 - 43325 (units: sqm)
Survey date date range:	04/07/00 - 24/09/19
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.003	6	20388	0.005	6	20388	0.008
07:30 - 08:00	6	20388	0.003	6	20388	0.006	6	20388	0.009
08:00 - 08:30	6	20388	0.011	6	20388	0.007	6	20388	0.018
08:30 - 09:00	6	20388	0.008	6	20388	0.008	6	20388	0.016
09:00 - 09:30	6	20388	0.012	6	20388	0.007	6	20388	0.019
09:30 - 10:00	6	20388	0.011	6	20388	0.005	6	20388	0.016
10:00 - 10:30	6	20388	0.007	6	20388	0.007	6	20388	0.014
10:30 - 11:00	6	20388	0.011	6	20388	0.005	6	20388	0.016
11:00 - 11:30	6	20388	0.011	6	20388	0.006	6	20388	0.017
11:30 - 12:00	6	20388	0.014	6	20388	0.007	6	20388	0.021
12:00 - 12:30	6	20388	0.008	6	20388	0.007	6	20388	0.015
12:30 - 13:00	6	20388	0.010	6	20388	0.004	6	20388	0.014
13:00 - 13:30	6	20388	0.014	6	20388	0.008	6	20388	0.022
13:30 - 14:00	6	20388	0.008	6	20388	0.006	6	20388	0.014
14:00 - 14:30	6	20388	0.009	6	20388	0.008	6	20388	0.017
14:30 - 15:00	6	20388	0.009	6	20388	0.006	6	20388	0.015
15:00 - 15:30	6	20388	0.006	6	20388	0.006	6	20388	0.012
15:30 - 16:00	6	20388	0.006	6	20388	0.007	6	20388	0.013
16:00 - 16:30	6	20388	0.001	6	20388	0.003	6	20388	0.004
16:30 - 17:00	6	20388	0.007	6	20388	0.004	6	20388	0.011
17:00 - 17:30	6	20388	0.002	6	20388	0.002	6	20388	0.004
17:30 - 18:00	6	20388	0.002	6	20388	0.004	6	20388	0.006
18:00 - 18:30	6	20388	0.008	6	20388	0.007	6	20388	0.015
18:30 - 19:00	6	20388	0.002	6	20388	0.003	6	20388	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.183			0.138			0.321

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
07:30 - 08:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
08:00 - 08:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
08:30 - 09:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
09:00 - 09:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
09:30 - 10:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
10:00 - 10:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
10:30 - 11:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
11:00 - 11:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
11:30 - 12:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
12:00 - 12:30	6	20388	0.001	6	20388	0.000	6	20388	0.001
12:30 - 13:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
13:00 - 13:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
13:30 - 14:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
14:00 - 14:30	6	20388	0.001	6	20388	0.000	6	20388	0.001
14:30 - 15:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
15:00 - 15:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
15:30 - 16:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
16:00 - 16:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
16:30 - 17:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
17:00 - 17:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
17:30 - 18:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
18:00 - 18:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
18:30 - 19:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.002			0.000			0.002

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.006	6	20388	0.002	6	20388	0.008
07:30 - 08:00	6	20388	0.020	6	20388	0.001	6	20388	0.021
08:00 - 08:30	6	20388	0.009	6	20388	0.001	6	20388	0.010
08:30 - 09:00	6	20388	0.002	6	20388	0.000	6	20388	0.002
09:00 - 09:30	6	20388	0.001	6	20388	0.000	6	20388	0.001
09:30 - 10:00	6	20388	0.002	6	20388	0.001	6	20388	0.003
10:00 - 10:30	6	20388	0.000	6	20388	0.002	6	20388	0.002
10:30 - 11:00	6	20388	0.002	6	20388	0.002	6	20388	0.004
11:00 - 11:30	6	20388	0.000	6	20388	0.001	6	20388	0.001
11:30 - 12:00	6	20388	0.001	6	20388	0.000	6	20388	0.001
12:00 - 12:30	6	20388	0.000	6	20388	0.002	6	20388	0.002
12:30 - 13:00	6	20388	0.002	6	20388	0.001	6	20388	0.003
13:00 - 13:30	6	20388	0.008	6	20388	0.002	6	20388	0.010
13:30 - 14:00	6	20388	0.007	6	20388	0.001	6	20388	0.008
14:00 - 14:30	6	20388	0.002	6	20388	0.017	6	20388	0.019
14:30 - 15:00	6	20388	0.001	6	20388	0.001	6	20388	0.002
15:00 - 15:30	6	20388	0.000	6	20388	0.004	6	20388	0.004
15:30 - 16:00	6	20388	0.001	6	20388	0.003	6	20388	0.004
16:00 - 16:30	6	20388	0.000	6	20388	0.006	6	20388	0.006
16:30 - 17:00	6	20388	0.002	6	20388	0.020	6	20388	0.022
17:00 - 17:30	6	20388	0.000	6	20388	0.004	6	20388	0.004
17:30 - 18:00	6	20388	0.000	6	20388	0.002	6	20388	0.002
18:00 - 18:30	6	20388	0.000	6	20388	0.003	6	20388	0.003
18:30 - 19:00	6	20388	0.002	6	20388	0.002	6	20388	0.004
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.068			0.078			0.146

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL VEHICLE OCCUPANTS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.081	6	20388	0.057	6	20388	0.138
07:30 - 08:00	6	20388	0.213	6	20388	0.033	6	20388	0.246
08:00 - 08:30	6	20388	0.310	6	20388	0.045	6	20388	0.355
08:30 - 09:00	6	20388	0.188	6	20388	0.046	6	20388	0.234
09:00 - 09:30	6	20388	0.086	6	20388	0.037	6	20388	0.123
09:30 - 10:00	6	20388	0.056	6	20388	0.043	6	20388	0.099
10:00 - 10:30	6	20388	0.057	6	20388	0.060	6	20388	0.117
10:30 - 11:00	6	20388	0.063	6	20388	0.049	6	20388	0.112
11:00 - 11:30	6	20388	0.055	6	20388	0.047	6	20388	0.102
11:30 - 12:00	6	20388	0.052	6	20388	0.056	6	20388	0.108
12:00 - 12:30	6	20388	0.056	6	20388	0.073	6	20388	0.129
12:30 - 13:00	6	20388	0.076	6	20388	0.084	6	20388	0.160
13:00 - 13:30	6	20388	0.133	6	20388	0.087	6	20388	0.220
13:30 - 14:00	6	20388	0.160	6	20388	0.074	6	20388	0.234
14:00 - 14:30	6	20388	0.110	6	20388	0.230	6	20388	0.340
14:30 - 15:00	6	20388	0.088	6	20388	0.075	6	20388	0.163
15:00 - 15:30	6	20388	0.102	6	20388	0.087	6	20388	0.189
15:30 - 16:00	6	20388	0.063	6	20388	0.137	6	20388	0.200
16:00 - 16:30	6	20388	0.040	6	20388	0.101	6	20388	0.141
16:30 - 17:00	6	20388	0.045	6	20388	0.243	6	20388	0.288
17:00 - 17:30	6	20388	0.025	6	20388	0.150	6	20388	0.175
17:30 - 18:00	6	20388	0.016	6	20388	0.211	6	20388	0.227
18:00 - 18:30	6	20388	0.033	6	20388	0.111	6	20388	0.144
18:30 - 19:00	6	20388	0.037	6	20388	0.069	6	20388	0.106
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.145			2.205			4.350

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL PEDESTRIANS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.006	6	20388	0.009	6	20388	0.015
07:30 - 08:00	6	20388	0.019	6	20388	0.001	6	20388	0.020
08:00 - 08:30	6	20388	0.017	6	20388	0.002	6	20388	0.019
08:30 - 09:00	6	20388	0.014	6	20388	0.006	6	20388	0.020
09:00 - 09:30	6	20388	0.011	6	20388	0.005	6	20388	0.016
09:30 - 10:00	6	20388	0.005	6	20388	0.006	6	20388	0.011
10:00 - 10:30	6	20388	0.004	6	20388	0.005	6	20388	0.009
10:30 - 11:00	6	20388	0.007	6	20388	0.006	6	20388	0.013
11:00 - 11:30	6	20388	0.002	6	20388	0.007	6	20388	0.009
11:30 - 12:00	6	20388	0.007	6	20388	0.004	6	20388	0.011
12:00 - 12:30	6	20388	0.010	6	20388	0.022	6	20388	0.032
12:30 - 13:00	6	20388	0.025	6	20388	0.024	6	20388	0.049
13:00 - 13:30	6	20388	0.038	6	20388	0.014	6	20388	0.052
13:30 - 14:00	6	20388	0.026	6	20388	0.020	6	20388	0.046
14:00 - 14:30	6	20388	0.011	6	20388	0.043	6	20388	0.054
14:30 - 15:00	6	20388	0.001	6	20388	0.013	6	20388	0.014
15:00 - 15:30	6	20388	0.001	6	20388	0.029	6	20388	0.030
15:30 - 16:00	6	20388	0.002	6	20388	0.023	6	20388	0.025
16:00 - 16:30	6	20388	0.004	6	20388	0.010	6	20388	0.014
16:30 - 17:00	6	20388	0.005	6	20388	0.025	6	20388	0.030
17:00 - 17:30	6	20388	0.003	6	20388	0.011	6	20388	0.014
17:30 - 18:00	6	20388	0.002	6	20388	0.019	6	20388	0.021
18:00 - 18:30	6	20388	0.001	6	20388	0.007	6	20388	0.008
18:30 - 19:00	6	20388	0.006	6	20388	0.009	6	20388	0.015
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.227			0.320			0.547

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL PUBLIC TRANSPORT USERS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.011	6	20388	0.000	6	20388	0.011
07:30 - 08:00	6	20388	0.011	6	20388	0.001	6	20388	0.012
08:00 - 08:30	6	20388	0.001	6	20388	0.000	6	20388	0.001
08:30 - 09:00	6	20388	0.002	6	20388	0.002	6	20388	0.004
09:00 - 09:30	6	20388	0.002	6	20388	0.000	6	20388	0.002
09:30 - 10:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
10:00 - 10:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
10:30 - 11:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
11:00 - 11:30	6	20388	0.002	6	20388	0.000	6	20388	0.002
11:30 - 12:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
12:00 - 12:30	6	20388	0.000	6	20388	0.000	6	20388	0.000
12:30 - 13:00	6	20388	0.001	6	20388	0.001	6	20388	0.002
13:00 - 13:30	6	20388	0.001	6	20388	0.001	6	20388	0.002
13:30 - 14:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
14:00 - 14:30	6	20388	0.002	6	20388	0.016	6	20388	0.018
14:30 - 15:00	6	20388	0.001	6	20388	0.002	6	20388	0.003
15:00 - 15:30	6	20388	0.001	6	20388	0.020	6	20388	0.021
15:30 - 16:00	6	20388	0.000	6	20388	0.003	6	20388	0.003
16:00 - 16:30	6	20388	0.000	6	20388	0.010	6	20388	0.010
16:30 - 17:00	6	20388	0.000	6	20388	0.005	6	20388	0.005
17:00 - 17:30	6	20388	0.002	6	20388	0.002	6	20388	0.004
17:30 - 18:00	6	20388	0.000	6	20388	0.003	6	20388	0.003
18:00 - 18:30	6	20388	0.000	6	20388	0.001	6	20388	0.001
18:30 - 19:00	6	20388	0.000	6	20388	0.000	6	20388	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.037			0.067			0.104

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL TOTAL PEOPLE

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	20388	0.103	6	20388	0.068	6	20388	0.171
07:30 - 08:00	6	20388	0.262	6	20388	0.035	6	20388	0.297
08:00 - 08:30	6	20388	0.337	6	20388	0.048	6	20388	0.385
08:30 - 09:00	6	20388	0.207	6	20388	0.053	6	20388	0.260
09:00 - 09:30	6	20388	0.099	6	20388	0.042	6	20388	0.141
09:30 - 10:00	6	20388	0.062	6	20388	0.049	6	20388	0.111
10:00 - 10:30	6	20388	0.061	6	20388	0.067	6	20388	0.128
10:30 - 11:00	6	20388	0.071	6	20388	0.056	6	20388	0.127
11:00 - 11:30	6	20388	0.058	6	20388	0.055	6	20388	0.113
11:30 - 12:00	6	20388	0.059	6	20388	0.060	6	20388	0.119
12:00 - 12:30	6	20388	0.065	6	20388	0.096	6	20388	0.161
12:30 - 13:00	6	20388	0.105	6	20388	0.110	6	20388	0.215
13:00 - 13:30	6	20388	0.181	6	20388	0.105	6	20388	0.286
13:30 - 14:00	6	20388	0.193	6	20388	0.094	6	20388	0.287
14:00 - 14:30	6	20388	0.126	6	20388	0.305	6	20388	0.431
14:30 - 15:00	6	20388	0.091	6	20388	0.092	6	20388	0.183
15:00 - 15:30	6	20388	0.104	6	20388	0.140	6	20388	0.244
15:30 - 16:00	6	20388	0.066	6	20388	0.167	6	20388	0.233
16:00 - 16:30	6	20388	0.044	6	20388	0.126	6	20388	0.170
16:30 - 17:00	6	20388	0.052	6	20388	0.293	6	20388	0.345
17:00 - 17:30	6	20388	0.029	6	20388	0.168	6	20388	0.197
17:30 - 18:00	6	20388	0.018	6	20388	0.235	6	20388	0.253
18:00 - 18:30	6	20388	0.034	6	20388	0.122	6	20388	0.156
18:30 - 19:00	6	20388	0.045	6	20388	0.081	6	20388	0.126
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.472			2.667			5.139

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.

Calculation Reference: AUDIT-152301-200827-0841

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
09	NORTH	
	CB CUMBRIA	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: 1976 to 30685 (units: sqm)
Range Selected by User: 1976 to 80066 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 06/09/02 to 03/04/19

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

Selected survey days:

Monday	1 days
Tuesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	4 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
--------------	---

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	3
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:

B8	4 days
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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®.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	3 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

1.1 to 1.5	4 days
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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:

Not Known	1 days
No	3 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
-----------------	--------

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

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

- | | | | |
|---|-------------------------|--------------------|---------------------|
| 1 | CB-02-F-01 | DOMINO'S PIZZA | CUMBRIA |
| | COWPER ROAD | | |
| | PENRITH | | |
| | GILWILLY IND. ESTATE | | |
| | Edge of Town | | |
| | Industrial Zone | | |
| | Total Gross floor area: | 2950 sqm | |
| | Survey date: TUESDAY | 10/06/14 | 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 | LN-02-F-01 | BOOK SERVICE | LINCOLNSHIRE |
| | TRENT ROAD | | |
| | GRANTHAM | | |
| | Edge of Town | | |
| | No Sub Category | | |
| | Total Gross floor area: | 32300 sqm | |
| | Survey date: MONDAY | 29/11/10 | Survey Type: MANUAL |
| 4 | WO-02-F-02 | DISTRIB. CENTRE | WORCESTERSHIRE |
| | COTSWOLD WAY | | |
| | WORCESTER | | |
| | Edge of Town | | |
| | Industrial Zone | | |
| | Total Gross floor area: | 3824 sqm | |
| | Survey date: TUESDAY | 10/09/02 | 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
TV-02-F-02	Not comparable

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.152	1	1976	0.000	1	1976	0.152
06:00 - 06:30	1	1976	0.051	1	1976	0.000	1	1976	0.051
06:30 - 07:00	1	1976	0.152	1	1976	0.051	1	1976	0.203
07:00 - 07:30	4	10761	0.016	4	10761	0.009	4	10761	0.025
07:30 - 08:00	4	10761	0.072	4	10761	0.037	4	10761	0.109
08:00 - 08:30	4	10761	0.102	4	10761	0.033	4	10761	0.135
08:30 - 09:00	4	10761	0.081	4	10761	0.016	4	10761	0.097
09:00 - 09:30	4	10761	0.084	4	10761	0.023	4	10761	0.107
09:30 - 10:00	4	10761	0.053	4	10761	0.042	4	10761	0.095
10:00 - 10:30	4	10761	0.042	4	10761	0.028	4	10761	0.070
10:30 - 11:00	4	10761	0.014	4	10761	0.019	4	10761	0.033
11:00 - 11:30	4	10761	0.030	4	10761	0.049	4	10761	0.079
11:30 - 12:00	4	10761	0.026	4	10761	0.026	4	10761	0.052
12:00 - 12:30	4	10761	0.042	4	10761	0.044	4	10761	0.086
12:30 - 13:00	4	10761	0.030	4	10761	0.026	4	10761	0.056
13:00 - 13:30	4	10761	0.079	4	10761	0.077	4	10761	0.156
13:30 - 14:00	4	10761	0.086	4	10761	0.023	4	10761	0.109
14:00 - 14:30	4	10761	0.026	4	10761	0.086	4	10761	0.112
14:30 - 15:00	4	10761	0.030	4	10761	0.033	4	10761	0.063
15:00 - 15:30	4	10761	0.030	4	10761	0.037	4	10761	0.067
15:30 - 16:00	4	10761	0.005	4	10761	0.030	4	10761	0.035
16:00 - 16:30	4	10761	0.026	4	10761	0.037	4	10761	0.063
16:30 - 17:00	4	10761	0.009	4	10761	0.051	4	10761	0.060
17:00 - 17:30	4	10761	0.016	4	10761	0.100	4	10761	0.116
17:30 - 18:00	4	10761	0.009	4	10761	0.067	4	10761	0.076
18:00 - 18:30	4	10761	0.019	4	10761	0.077	4	10761	0.096
18:30 - 19:00	4	10761	0.009	4	10761	0.033	4	10761	0.042
19:00 - 19:30	1	1976	0.253	1	1976	0.152	1	1976	0.405
19:30 - 20:00	1	1976	0.051	1	1976	0.152	1	1976	0.203
20:00 - 20:30	1	1976	0.051	1	1976	0.051	1	1976	0.102
20:30 - 21:00	1	1976	0.101	1	1976	0.152	1	1976	0.253
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.747			1.561			3.308

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:	1976 - 30685 (units: sqm)
Survey date date range:	06/09/02 - 03/04/19
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:00 - 06:30	1	1976	0.051	1	1976	0.000	1	1976	0.051
06:30 - 07:00	1	1976	0.051	1	1976	0.000	1	1976	0.051
07:00 - 07:30	4	10761	0.005	4	10761	0.002	4	10761	0.007
07:30 - 08:00	4	10761	0.009	4	10761	0.014	4	10761	0.023
08:00 - 08:30	4	10761	0.014	4	10761	0.012	4	10761	0.026
08:30 - 09:00	4	10761	0.014	4	10761	0.002	4	10761	0.016
09:00 - 09:30	4	10761	0.007	4	10761	0.002	4	10761	0.009
09:30 - 10:00	4	10761	0.014	4	10761	0.014	4	10761	0.028
10:00 - 10:30	4	10761	0.026	4	10761	0.009	4	10761	0.035
10:30 - 11:00	4	10761	0.009	4	10761	0.009	4	10761	0.018
11:00 - 11:30	4	10761	0.014	4	10761	0.023	4	10761	0.037
11:30 - 12:00	4	10761	0.007	4	10761	0.005	4	10761	0.012
12:00 - 12:30	4	10761	0.014	4	10761	0.009	4	10761	0.023
12:30 - 13:00	4	10761	0.005	4	10761	0.005	4	10761	0.010
13:00 - 13:30	4	10761	0.012	4	10761	0.007	4	10761	0.019
13:30 - 14:00	4	10761	0.014	4	10761	0.007	4	10761	0.021
14:00 - 14:30	4	10761	0.002	4	10761	0.007	4	10761	0.009
14:30 - 15:00	4	10761	0.002	4	10761	0.002	4	10761	0.004
15:00 - 15:30	4	10761	0.021	4	10761	0.007	4	10761	0.028
15:30 - 16:00	4	10761	0.002	4	10761	0.002	4	10761	0.004
16:00 - 16:30	4	10761	0.007	4	10761	0.005	4	10761	0.012
16:30 - 17:00	4	10761	0.005	4	10761	0.002	4	10761	0.007
17:00 - 17:30	4	10761	0.009	4	10761	0.007	4	10761	0.016
17:30 - 18:00	4	10761	0.000	4	10761	0.009	4	10761	0.009
18:00 - 18:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
18:30 - 19:00	4	10761	0.000	4	10761	0.002	4	10761	0.002
19:00 - 19:30	1	1976	0.000	1	1976	0.152	1	1976	0.152
19:30 - 20:00	1	1976	0.000	1	1976	0.152	1	1976	0.152
20:00 - 20:30	1	1976	0.000	1	1976	0.051	1	1976	0.051
20:30 - 21:00	1	1976	0.000	1	1976	0.101	1	1976	0.101
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.314			0.619			0.933

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:00 - 06:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:30 - 07:00	1	1976	0.051	1	1976	0.000	1	1976	0.051
07:00 - 07:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
07:30 - 08:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
08:00 - 08:30	4	10761	0.005	4	10761	0.000	4	10761	0.005
08:30 - 09:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
09:00 - 09:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
09:30 - 10:00	4	10761	0.005	4	10761	0.000	4	10761	0.005
10:00 - 10:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
10:30 - 11:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:00 - 11:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:30 - 12:00	4	10761	0.000	4	10761	0.002	4	10761	0.002
12:00 - 12:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
12:30 - 13:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
13:00 - 13:30	4	10761	0.002	4	10761	0.002	4	10761	0.004
13:30 - 14:00	4	10761	0.002	4	10761	0.002	4	10761	0.004
14:00 - 14:30	4	10761	0.002	4	10761	0.005	4	10761	0.007
14:30 - 15:00	4	10761	0.000	4	10761	0.002	4	10761	0.002
15:00 - 15:30	4	10761	0.000	4	10761	0.002	4	10761	0.002
15:30 - 16:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
16:00 - 16:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
16:30 - 17:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
17:00 - 17:30	4	10761	0.000	4	10761	0.007	4	10761	0.007
17:30 - 18:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
18:00 - 18:30	4	10761	0.000	4	10761	0.005	4	10761	0.005
18:30 - 19:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
19:00 - 19:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
19:30 - 20:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:00 - 20:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:30 - 21:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.067			0.027			0.094

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL VEHICLE OCCUPANTS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.202	1	1976	0.000	1	1976	0.202
06:00 - 06:30	1	1976	0.051	1	1976	0.000	1	1976	0.051
06:30 - 07:00	1	1976	0.253	1	1976	0.051	1	1976	0.304
07:00 - 07:30	4	10761	0.016	4	10761	0.014	4	10761	0.030
07:30 - 08:00	4	10761	0.093	4	10761	0.042	4	10761	0.135
08:00 - 08:30	4	10761	0.118	4	10761	0.033	4	10761	0.151
08:30 - 09:00	4	10761	0.095	4	10761	0.016	4	10761	0.111
09:00 - 09:30	4	10761	0.102	4	10761	0.026	4	10761	0.128
09:30 - 10:00	4	10761	0.063	4	10761	0.046	4	10761	0.109
10:00 - 10:30	4	10761	0.046	4	10761	0.030	4	10761	0.076
10:30 - 11:00	4	10761	0.014	4	10761	0.019	4	10761	0.033
11:00 - 11:30	4	10761	0.035	4	10761	0.056	4	10761	0.091
11:30 - 12:00	4	10761	0.028	4	10761	0.026	4	10761	0.054
12:00 - 12:30	4	10761	0.051	4	10761	0.051	4	10761	0.102
12:30 - 13:00	4	10761	0.033	4	10761	0.026	4	10761	0.059
13:00 - 13:30	4	10761	0.084	4	10761	0.086	4	10761	0.170
13:30 - 14:00	4	10761	0.107	4	10761	0.033	4	10761	0.140
14:00 - 14:30	4	10761	0.028	4	10761	0.100	4	10761	0.128
14:30 - 15:00	4	10761	0.035	4	10761	0.039	4	10761	0.074
15:00 - 15:30	4	10761	0.035	4	10761	0.039	4	10761	0.074
15:30 - 16:00	4	10761	0.005	4	10761	0.039	4	10761	0.044
16:00 - 16:30	4	10761	0.033	4	10761	0.042	4	10761	0.075
16:30 - 17:00	4	10761	0.009	4	10761	0.058	4	10761	0.067
17:00 - 17:30	4	10761	0.016	4	10761	0.114	4	10761	0.130
17:30 - 18:00	4	10761	0.014	4	10761	0.084	4	10761	0.098
18:00 - 18:30	4	10761	0.021	4	10761	0.105	4	10761	0.126
18:30 - 19:00	4	10761	0.012	4	10761	0.033	4	10761	0.045
19:00 - 19:30	1	1976	0.304	1	1976	0.152	1	1976	0.456
19:30 - 20:00	1	1976	0.051	1	1976	0.152	1	1976	0.203
20:00 - 20:30	1	1976	0.051	1	1976	0.051	1	1976	0.102
20:30 - 21:00	1	1976	0.101	1	1976	0.152	1	1976	0.253
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.106			1.715			3.821

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL PEDESTRIANS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.101	1	1976	0.000	1	1976	0.101
06:00 - 06:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:30 - 07:00	1	1976	0.101	1	1976	0.000	1	1976	0.101
07:00 - 07:30	4	10761	0.002	4	10761	0.000	4	10761	0.002
07:30 - 08:00	4	10761	0.009	4	10761	0.000	4	10761	0.009
08:00 - 08:30	4	10761	0.012	4	10761	0.000	4	10761	0.012
08:30 - 09:00	4	10761	0.009	4	10761	0.000	4	10761	0.009
09:00 - 09:30	4	10761	0.002	4	10761	0.000	4	10761	0.002
09:30 - 10:00	4	10761	0.028	4	10761	0.000	4	10761	0.028
10:00 - 10:30	4	10761	0.000	4	10761	0.005	4	10761	0.005
10:30 - 11:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:00 - 11:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:30 - 12:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
12:00 - 12:30	4	10761	0.002	4	10761	0.005	4	10761	0.007
12:30 - 13:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
13:00 - 13:30	4	10761	0.002	4	10761	0.002	4	10761	0.004
13:30 - 14:00	4	10761	0.023	4	10761	0.005	4	10761	0.028
14:00 - 14:30	4	10761	0.000	4	10761	0.016	4	10761	0.016
14:30 - 15:00	4	10761	0.002	4	10761	0.005	4	10761	0.007
15:00 - 15:30	4	10761	0.002	4	10761	0.002	4	10761	0.004
15:30 - 16:00	4	10761	0.000	4	10761	0.005	4	10761	0.005
16:00 - 16:30	4	10761	0.000	4	10761	0.007	4	10761	0.007
16:30 - 17:00	4	10761	0.005	4	10761	0.023	4	10761	0.028
17:00 - 17:30	4	10761	0.000	4	10761	0.016	4	10761	0.016
17:30 - 18:00	4	10761	0.000	4	10761	0.005	4	10761	0.005
18:00 - 18:30	4	10761	0.002	4	10761	0.019	4	10761	0.021
18:30 - 19:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
19:00 - 19:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
19:30 - 20:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:00 - 20:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:30 - 21:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.302			0.115			0.417

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL BUS/TRAM PASSENGERS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:00 - 06:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:30 - 07:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
07:00 - 07:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
07:30 - 08:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
08:00 - 08:30	4	10761	0.005	4	10761	0.000	4	10761	0.005
08:30 - 09:00	4	10761	0.005	4	10761	0.000	4	10761	0.005
09:00 - 09:30	4	10761	0.002	4	10761	0.000	4	10761	0.002
09:30 - 10:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
10:00 - 10:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
10:30 - 11:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:00 - 11:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:30 - 12:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
12:00 - 12:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
12:30 - 13:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
13:00 - 13:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
13:30 - 14:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
14:00 - 14:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
14:30 - 15:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
15:00 - 15:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
15:30 - 16:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
16:00 - 16:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
16:30 - 17:00	4	10761	0.000	4	10761	0.002	4	10761	0.002
17:00 - 17:30	4	10761	0.000	4	10761	0.007	4	10761	0.007
17:30 - 18:00	4	10761	0.000	4	10761	0.005	4	10761	0.005
18:00 - 18:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
18:30 - 19:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
19:00 - 19:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
19:30 - 20:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:00 - 20:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:30 - 21:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.012			0.014			0.026

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL PUBLIC TRANSPORT USERS

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:00 - 06:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:30 - 07:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
07:00 - 07:30	4	10761	0.002	4	10761	0.000	4	10761	0.002
07:30 - 08:00	4	10761	0.005	4	10761	0.000	4	10761	0.005
08:00 - 08:30	4	10761	0.007	4	10761	0.000	4	10761	0.007
08:30 - 09:00	4	10761	0.005	4	10761	0.000	4	10761	0.005
09:00 - 09:30	4	10761	0.002	4	10761	0.002	4	10761	0.004
09:30 - 10:00	4	10761	0.005	4	10761	0.000	4	10761	0.005
10:00 - 10:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
10:30 - 11:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:00 - 11:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
11:30 - 12:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
12:00 - 12:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
12:30 - 13:00	4	10761	0.007	4	10761	0.000	4	10761	0.007
13:00 - 13:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
13:30 - 14:00	4	10761	0.002	4	10761	0.002	4	10761	0.004
14:00 - 14:30	4	10761	0.000	4	10761	0.005	4	10761	0.005
14:30 - 15:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
15:00 - 15:30	4	10761	0.000	4	10761	0.000	4	10761	0.000
15:30 - 16:00	4	10761	0.000	4	10761	0.002	4	10761	0.002
16:00 - 16:30	4	10761	0.000	4	10761	0.005	4	10761	0.005
16:30 - 17:00	4	10761	0.000	4	10761	0.007	4	10761	0.007
17:00 - 17:30	4	10761	0.000	4	10761	0.007	4	10761	0.007
17:30 - 18:00	4	10761	0.000	4	10761	0.005	4	10761	0.005
18:00 - 18:30	4	10761	0.000	4	10761	0.007	4	10761	0.007
18:30 - 19:00	4	10761	0.000	4	10761	0.000	4	10761	0.000
19:00 - 19:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
19:30 - 20:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:00 - 20:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
20:30 - 21:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.035			0.042			0.077

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.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

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

MULTI-MODAL TOTAL PEOPLE

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.304	1	1976	0.000	1	1976	0.304
06:00 - 06:30	1	1976	0.051	1	1976	0.000	1	1976	0.051
06:30 - 07:00	1	1976	0.405	1	1976	0.051	1	1976	0.456
07:00 - 07:30	4	10761	0.021	4	10761	0.014	4	10761	0.035
07:30 - 08:00	4	10761	0.107	4	10761	0.042	4	10761	0.149
08:00 - 08:30	4	10761	0.142	4	10761	0.033	4	10761	0.175
08:30 - 09:00	4	10761	0.109	4	10761	0.016	4	10761	0.125
09:00 - 09:30	4	10761	0.107	4	10761	0.028	4	10761	0.135
09:30 - 10:00	4	10761	0.100	4	10761	0.046	4	10761	0.146
10:00 - 10:30	4	10761	0.046	4	10761	0.035	4	10761	0.081
10:30 - 11:00	4	10761	0.014	4	10761	0.019	4	10761	0.033
11:00 - 11:30	4	10761	0.035	4	10761	0.056	4	10761	0.091
11:30 - 12:00	4	10761	0.028	4	10761	0.028	4	10761	0.056
12:00 - 12:30	4	10761	0.053	4	10761	0.056	4	10761	0.109
12:30 - 13:00	4	10761	0.039	4	10761	0.026	4	10761	0.065
13:00 - 13:30	4	10761	0.088	4	10761	0.091	4	10761	0.179
13:30 - 14:00	4	10761	0.135	4	10761	0.042	4	10761	0.177
14:00 - 14:30	4	10761	0.030	4	10761	0.125	4	10761	0.155
14:30 - 15:00	4	10761	0.037	4	10761	0.046	4	10761	0.083
15:00 - 15:30	4	10761	0.037	4	10761	0.044	4	10761	0.081
15:30 - 16:00	4	10761	0.005	4	10761	0.046	4	10761	0.051
16:00 - 16:30	4	10761	0.033	4	10761	0.053	4	10761	0.086
16:30 - 17:00	4	10761	0.014	4	10761	0.088	4	10761	0.102
17:00 - 17:30	4	10761	0.016	4	10761	0.144	4	10761	0.160
17:30 - 18:00	4	10761	0.014	4	10761	0.093	4	10761	0.107
18:00 - 18:30	4	10761	0.023	4	10761	0.135	4	10761	0.158
18:30 - 19:00	4	10761	0.012	4	10761	0.033	4	10761	0.045
19:00 - 19:30	1	1976	0.304	1	1976	0.152	1	1976	0.456
19:30 - 20:00	1	1976	0.051	1	1976	0.152	1	1976	0.203
20:00 - 20:30	1	1976	0.051	1	1976	0.051	1	1976	0.102
20:30 - 21:00	1	1976	0.101	1	1976	0.152	1	1976	0.253
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.512			1.897			4.409

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.

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From:

Sent: 06 October 2020 11:27

To:

Cc:

Subject: RE: Harts Farm Way, Havant

Dear

Thank you for your pre-application enquiry with regards to the proposed flexible B1(c)/B2/B8 use to the north of Harts Farm Way. A Transport Scoping Note (TSN) has been submitted and this document has now been reviewed. The Highway Authority previously attended a planning meeting with Havant Borough Council and the applicant to understand the context of the pre-app. It is also understood that a meeting will be held with Highways England following the issue of this response to discuss the off-site requirements on the strategic road network.

Following a review of the TSN, the Highway Authority have the following comments to make based off our understanding of the information submitted to date.

Existing Conditions

The development site is known as Land West of Brockhampton in Havant. The site benefits from an existing access which feeds onto Harts Farm Way to the south, an unclassified adopted road. Harts Farm Way connects to the A2030 / A27 teardrop roundabout and junction to the west and the Brockhampton Road / Brookside Road / Southampton Lane roundabout circa. 600 metres to the east from the development site.

Ped/Cycle Links

Footway/Cycleway

Along the eastern flank of the development site sits a Public Right of Way Footpath (Route 30). The future TA needs to consider how the development will tie into the right of way. The Hampshire Countryside Service are responsible for management and maintenance of the right of way network and should be consulted on the proposals. The footpath is generally wide in nature and could act as a good sustainable travel connection to the site from the Bedhampton area. The applicant should consider how the route can be improved in consultation with the Development Planning team and Countryside Services.

A shared footway-cycleway is provided along the full length of Harts Farm Way on its southern side. A footway on the northern side of Harts Farm Way starts east of the development site where the bridge is located. Harts Farm Way also benefits from being part of National Cycle Network (NCN) Route 22 which is a route between London and Portsmouth. The TA should consider how the development proposals will tie into the existing pedestrian and cycle network. Currently the only available crossing point to the southern side of Harts Farm Way is to the west close to the teardrop roundabout. An additional pedestrian/cycle crossing point will therefore need to be considered as part of the development proposal which negates the need for pedestrians and cyclists to cross at the junction with the strategic road network. Footway/cycleway provision has not been provided on the northern side due to land constraints and the applicant should consider how this can be accommodated within the site proposals.

Generally it is considered that the proposed sustainable provision is lacking and not aimed at providing a high standard of pedestrian and cycle accessibility. Staff arriving from the east would have to travel a significant length of Harts Farm Way to cross at the teardrop to access the site.

Public Transport

The TSN outlines the public transport services available from the development. The nearest bus stops are located on Langstone Road and Havant Road to the east and north respectively are the closest stops that are circa. 1.15km and 1.8km walking distance from the development. The Langstone Road stops provide services to Havant Bus Station and Sandy Point, the Havant Road stops provide services to Havant Bus Station and Portsmouth as well as Leigh Park and Southsea.

The nearest train stations are Bedhampton and Havant which are 1km and 1.85km away from the site access respectively. These stations provide services to major locations of interest such as London, Portsmouth, Southampton and Brighton etc.

Facilities of this type are not within a comfortable walking distance from the development site. Manual for Streets quotes 800 metres as a comfortable walking distance, whereas this is close to the upper threshold of 2km as quoted in PPS13 (Planning Policy Statement). It is requested that a forthcoming TA identifies measures in which promote and encourage the use of existing sustainable transport facilities in the local area.

Furthermore, a walking and cycling audit should be undertaken to gauge whether there are any deficits in local infrastructure which could prevent sustainable travel to and from the site from being achieved.

Scope of the TA

It is noted that the following information has not been included within the scoping note:

- Scope of the relevant policies and their context;
- Scope of the area to be reviewed relating to Personal Injury Accident Data – PIA data should be gathered from Hampshire Constabulary for the most recent 5-year period and analysed as part of the planning application;
- Confirmation on the future years to be modelled; and
- NMU audit to identify any deficits or potential improvements on the local highway network.

Full consideration will need to be given to the above in the full transport assessment to ensure a comprehensive review of the transport implications of the development is undertaken.

Policy Context (OJ)

Any forthcoming Transport Assessment should include a framework of writing referencing relevant planning policies that show the planning application accords with National Planning Policies as set out in the National Planning Policy Framework (NPPF 2018) and Hampshire County Council transport planning policies.

Any future planning application should also accord with local planning policies set by Havant Borough Council as the Local Planning Authority. The site itself is listed as Brockhampton West in Havant's adopted local plan, site ref. BD11. There are specific development requirements set out in the adopted local plan that relate to the site which should be met and referenced in a forthcoming TA. They include access from Harts Farm Way to be provided to the satisfaction of the highway authority and potential mitigation measures to ensure the safe and efficient operation of the Strategic Road Network to satisfaction of Highways Agency.

Development Proposals

The development proposals consist of the construction of 23,227sqm of flexible B1c/B2/B8 use with ancillary office space. It will offer car parking, cycle parking and service yards which will be accessed via two priority T junctions. The existing access to site will be removed as part of the development.

Car Parking

The TSN which has been submitted outlines both the car and cycle parking requirements for all B1c/B2/B8 uses as per Havant's local parking standards. Site plan no. 31383/FE/10C shows 251 car parking spaces and 72 cycle parking spaces, which is in line with LPA standards for B8 use. It is requested that an assessment of parking is completed for both B1(c) B2 use because if these class uses come forward; they will require a greater quantum of parking on site which would then alter current site layout proposals.

In their capacity as parking authority, Havant Borough Council will comment on the suitability of the proposed quantum of parking in line with adopted parking standards. While the level of parking is a matter for Havant Borough Council to confirm, the Highway Authority may require a TRO on Harts Farm Way to prevent any overspill parking taking place on the highway.

Internal Layout

It is understood that the submission will be for outline planning permission only. On this basis, and the lack of detail provided within the TSN, detailed comments on the internal layout have not been made at this stage. However, as noted above, the site has been designed to accommodate the parking standards for B8 land use. Should alternative land uses come forwards the internal layout will need to be redesigned to accommodate the additional car parking spaces. Given that flexible permission is sought for a range of land uses, it should be demonstrated that the land uses requiring higher levels of parking can be accommodated on the site.

Site Access

Vehicular access to the site is proposed in the form of two new bellmouths onto Harts Farm Way, with the existing access junction removed. The eastern access will serve the service area, while the western access will provide access to the car park. Visibility splays have been shown to 43m on drawing number 205465/PD01 Rev A based on the 30mph speed limit.

To fully assess the proposed accesses the following information will be required:

- Dimensions;
- Radii;
- Stage 1 Road Safety Audit and designers response;
- Tracking for two pantechincons passing in the eastern access;
- Tracking for the most onerous vehicles assumed to utilise the western access (including two estate cars passing); and
- Speed surveys undertaken in compliance with HCC TG3 to inform the visibility requirements at the accesses.

Until this information has been provided, the Highway Authority is unable to confirm the acceptability of the accesses. However, the principle of separating the HGV movements via a separate access is considered acceptable.

Trip Generation

To understand the traffic generation of the proposed site, the TRICS database has been interrogated for all of the proposed land uses. It is noted that there is a lack of surveys available between 2012 – 2019 for B1c and B2 uses, meaning surveys dating back to 2000 have been utilised to provide a greater pool of samples. The Highway Authority has checked this methodology and re-run the trip

rates and can confirm that it is acceptable, meaning the two-way B1(c) trip rates will be 117 in the AM and 82 in the PM peak hours, while the B2 rates will be 124 in the AM and 82 in the PM.

The Highway Authority has also re-run the B8 trip rates to compare against those presented in the scoping note. The re-run rates are greater than those assessed within the report and will therefore need to be revisited to agree on a more representative trip rate for this land use.

The TSN notes that ancillary offices will be present on site, but these have not been accounted for in the trip generation assessment. A TRICS assessment should also be undertaken for the offices to understand the additional traffic generated by this land use.

We are therefore unable to agree the total trip generation assumptions at this time.

Traffic Distribution

To distribute traffic from the site, it is proposed that census data is utilised from Havant 018 MSOA. To ensure that the data is specific to the area encompassing the site, Havant 018F MSOA should be utilised. Adopting this approach to distribute traffic is considered acceptable.

Whilst the distribution may need to be amended based on the revised MSOA, comments have been provided on the distribution assessment presented. A high-level breakdown of the distribution has been provided in the TSN, assigning trips from Harts Farm Way to roads in the area. To fully assess the impact of the new trips on the network, distribution diagrams and a detailed breakdown should be provided to understand the impact on local junctions when taking the Routes 1 – 5 noted in the TSN.

The proposed distribution will assign 97% of trips to the west on Harts Farm Way via the teardrop junction and the Rusty Cutter Roundabout. The remaining 3% of trips will head eastbound on Harts Farm Way. The Highway Authority require further evidence to understand the east/west split of traffic from the site given that the vast majority of trips are proposed to head west. This evidence should be provided once Havant 018F MSOA has been assessed to correctly identify the traffic distribution for the area.

The Highway Authority reserves the right to request modelling for other junctions in the area once the distribution assessment has been agreed and east/west percentage fixed.

Traffic Assessment

Given the flexibility that is sought in the proposed end use for the site, the Highway Authority require a worst-case assessment to be undertaken for the junction modelling by utilising the B2 rates proposed in the TSN.

As noted above, until the vehicular distribution has been fixed, the Highway Authority cannot confirm the full extent of junction modelling which will be required by the site. However, it is apparent that the current distribution proposal will require modelling of the A3/A27 teardrop junction and Rusty Cutter roundabout.

Owing to the COVID-19 pandemic, traffic surveys are being approached on a site by site basis. While traffic flows have been steadily increasing, it is uncertain whether recent government announcements will reduce traffic flows again. It is therefore considered that traffic surveys should be undertaken at Harts Farm Way, the A3/A27 teardrop junction and Rusty Cutter roundabout to understand the current flow levels. Sensitivity testing can then be applied to each of these junctions by considering data from the Forty Acre Farm application (planning reference APP/18/00450) and

uplifting these flows with TEMPRO data. Should the traffic survey flows be similar to the TEMPRO uplifted data then they can be considered robust, otherwise the flows may need to be uplifted to match the TEMPRO data.

Once the traffic surveys have been undertaken and the flow levels agreed, modelling should be undertaken for the aforementioned junctions. The Highway Authority would expect to see the following scenarios modelled:

- 2020 with and without development traffic;
- 2025 with and without development traffic; and
- 2030 with and without development traffic.

With both the 'with and without development' scenarios provided it will be possible to ascertain the development and both of the junctions. This approach may need to be taken to further junctions if the revised distribution assessment requires it.

Summary

The Highway Authority would welcome further discussions around the information requested above following the meeting with Highways England should this be of use.

Kind Regards,

Highways Development Planning

Hampshire County Council
2nd Floor Elizabeth II Court West
The Castle Winchester SO23 8UD



Hampshire County Council operates a pre-application highway advice service for developers.

Hampshire County Council welcomes and encourages discussions before a developer submits a planning application. Please follow this link for further information

[Pre-Application guidance for developers](#)

From:

Sent: 01 September 2020 11:47

To: Highways Development Planning <highways.development.planning@hants.gov.uk>

Cc:

Subject: Harts Farm Way, Havant

Hello Highways Development Planning,

Please find attached a scoping note for the a proposed development at Harts Farm Way, Havant.

The site is located immediately to the south-east of the A27/Harts Farm Way junction and is allocated for employment use to under Policy HB2 (BD11) of the adopted Havant Borough Local Plan (Allocations) Development Plan Document. The applicant is seeking planning permission for 23,227 sqm of flexible B1c/B2/B8 land uses. Associated service yards, car parking, cycle parking and landscaping will be provided.

The attached note sets out the development proposals in terms of transport and seeks agreement on the scope of assessment required for the transport assessment to be undertaken and submitted as part of the planning submission.

Please do not hesitate to contact me if you have any questions on the attached note. I look forward to hearing your comments on the attached document and development proposals.

Many thanks,



Network Building, 97 Tottenham Court Road, London, W1T 4TP



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From:

Sent: 18 September 2020 11:50

To:

Cc:

Subject: #6577: Harts Farm Way, Pre-application Advice

Site: Harts Farm Way, Havant

Proposal: 23,227 sqm of flexible B1c/B2/B8 land uses. Associated service yards, car parking, cycle parking and landscaping will be provided. Access to the proposed site will be achieved via Harts Farm Way.

Our Reference: 6577

Dear

Thank you for your email dated 1 September 2020 regarding the above pre-application enquiry. We understand that the proposed development is comprised of:

- 23,227 sqm of flexible B1c/B2/B8 land uses.
- Associated service yards, car parking, cycle parking and landscaping will be provided.
- Access to the proposed site will be achieved via Harts Farm Way.

Highways England has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the strategic road network (SRN). The SRN is a critical national asset and as such Highways England works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

In the case of this development proposal, our interest is in the A27 and A3(M) and in particular the A27/Harts Farm Way and A27/A3(M) junctions.

In terms of the SRN junctions identified for assessment A27/Harts Farm Way junction and A27/A3(M) are agreeable.

We understand that the site is allocated for employment use under Policy HB2 (BD11) of the adopted Havant Borough Local Plan (Allocations) Development Plan Document.

In terms of the proposed parking for the site, we understand that the quantum of parking meets the requirements for B8 parking as set out in Havant Borough Council Parking Supplementary Planning Document July 2016 (Partially updated September 2019). However you note that this is less than if a potential occupier would require B1c and B2 use. Therefore given the site location and the proximity of the access in relation to the A27 Harts Farm Way off-slip we request that further consideration is

given to parking in the TA. We would be concerned if parking is heavily constrained without alternative modes of travel being supported appropriately due to the risk of queuing into the site potentially impacting the safety and operation of the SRN.

In terms of the trip rates, both the TRICS parameters for B1c and B2 are inappropriate for use in the TA as they contain both B1 and B2 for each use. In terms of the B8 trip rates, these appear to be low. We note that one site was deselected for being unrepresentative, please provide further details. Please provide clarification as to the type of B8 being considered at this site, i.e. commercial distribution and/or parcel distribution as this would have a significant impact on the appropriate trip rates. These trip rates should be revised and appropriate rates proposed within the TA or further TA scoping work to avoid abortive works.

We have reviewed the distribution methodology and agree that MSOA Havant 018 is appropriate for use in the TA given the proposed development location. We request that confirmation from Havant Borough Council and HCC Highways is provided regarding their acceptance of trip generation, distribution and assignment prior to the development of the Transport Assessment.

We agree with paragraph 49 that junction modelling will be required at the A27/A3 junction to demonstrate that the junction has the capacity to accommodate the forecasted development flows generated.

In terms of the site plan, we note a number of bunds are indicated, we request further details on this point where they are in close proximity to the SRN in terms of proposed gradients and height as well as distance from the highway boundary.

In terms of the proposed car access, whilst we note that it is on HCC Highways network as opposed to the SRN, the close proximity of the access to our network has the potential to impact the SRN. Therefore at this stage we think it would be very useful to have a joint meeting with HCC Highways.

I hope that this response has been helpful.

Kind regards,

Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ

Web: www.highwaysengland.co.uk

From:

Sent: 01 September 2020 12:54

To:

Cc:

Subject: Harts Farm Way, Pre-application Advice

Hi

We are working with Exton Estates on a new development in Havant adjacent to the A27/Harts Farm Way junction. The site is located immediately to the south-east of the A27/Harts Farm Way junction and is allocated for employment use to under Policy HB2 (BD11) of the adopted Havant Borough Local Plan (Allocations) Development Plan Document. The applicant is seeking planning permission for 23,227 sqm of flexible B1c/B2/B8 land uses. Associated service yards, car parking, cycle parking and landscaping will be provided. Access to the proposed site will be achieved via Harts Farm Way.

Ahead of submission of the planning application, we are keen to engage with yourselves and Hampshire County Council, who we have contacted separately, to discuss and agree the scope of our Transport Assessment. The attached note sets out the development proposals in terms of transport and seeks agreement on the scope of assessment required for the transport assessment to be undertaken and submitted as part of the planning submission.

I look forward to hearing back from you.

Thanks



Network Building, 97 Tottenham Court Road, London, W1T 4TP



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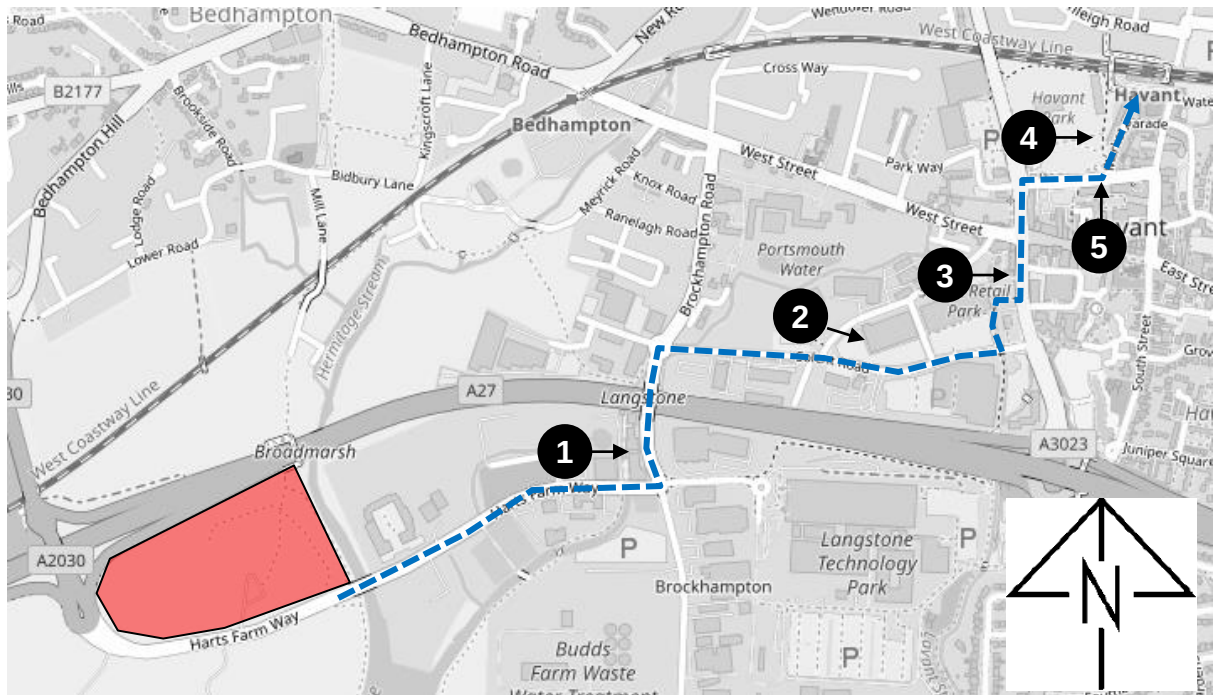
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Appendix C



Walking Route Notes:

- The furthest destination, Havant Railway Station, is located approximately 2.3km to the north east of the site. Pedestrians can use the shared footway / cycleway along Harts Farm Way with dropped kerbs and tactile paving provided at crossovers and junctions (Photo 1).

- Pedestrians then continue on well-maintained footways north on Brockhampton Road and east on Solent Road (Photo 2) before turning onto a footway through Solent Retail Park.
- Pedestrians can then continue north on Park Road South using the wide footways, following signs towards the town centre (Photo 3) before crossing the road using the wide pedestrian / cycle crossing.
- Pedestrians subsequently continue east on Elm Lane where Havant Bus Station is reached which provides a number of services throughout the day. Although this can make the area busy, it provides key sustainable transport connections to the area (Photo 4).
- Using the pedestrian / cycle crossing, users will continue north on Market Parade and through a pedestrianised precinct before arriving at the railway station.

Key:

Site Boundary

Walking Route

Photo Location / Direction

Harts Farm Way, Brockhampton West

Clowes Developments (UK) Ltd.

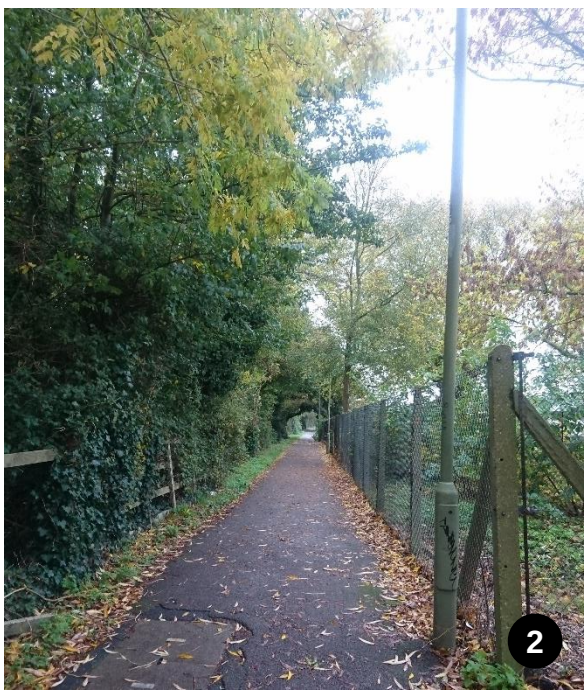
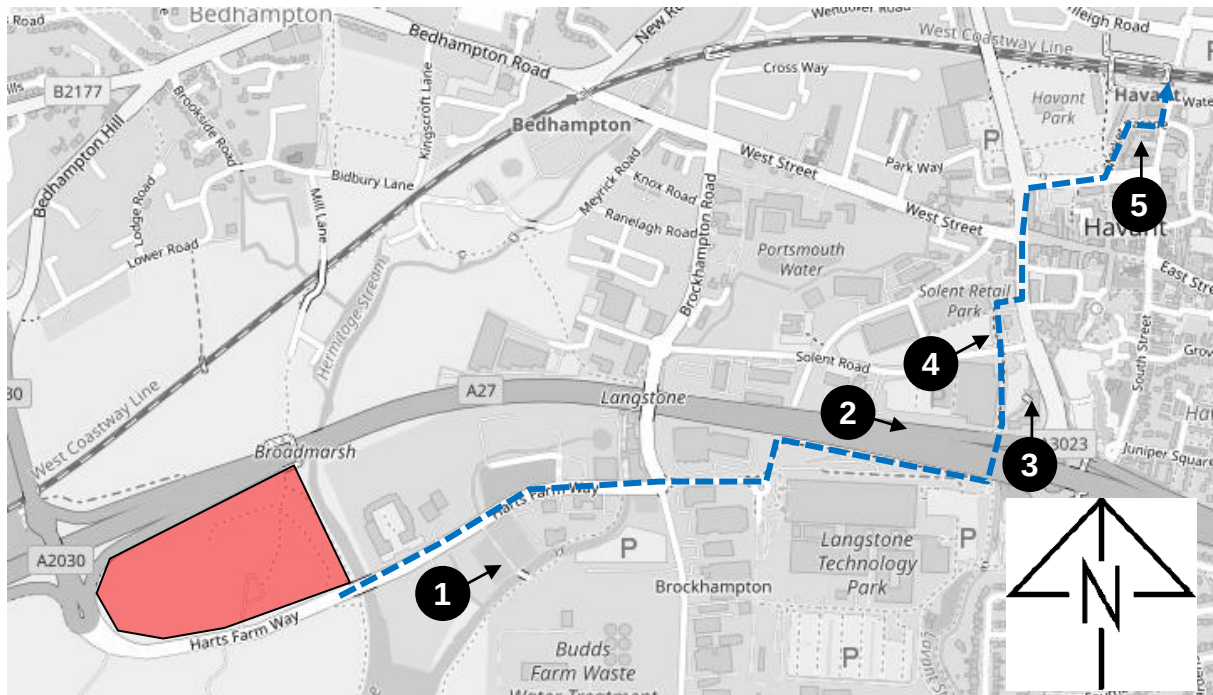
Audit Route 1 (Walking):
Tesco Extra, Solent Retail Park, Havant
Town Centre, Havant Park, Havant Bus
Station, Havant Railway Station

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Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.uk

DRAWN:	CHECKED:	DATE:	SCALES:
SB	HA	07/01/2021	NTS

DRAWING REFERENCE: **Figure 1**



Cycling Route Notes:

- The majority of this route follows NCN Route 22. This begins by cyclists using the shared footway / cycleway Harts Farm Way (Photo 1).
- Cyclists can then continue east on the shared footway / cycleway on the northern side of Brookside Road before continuing on an off-road cycle route (Photo 2).

- Cyclists continue north using the underpass beneath the A27 which is well lit (Photo 3) before following the path running to the east of the Tesco Extra supermarket.
- Users can follow the off-road shared footway / cycleway north through Solent Retail Park and onto Park Road South before using the wide shared pedestrian / cycle crossing (Photo 4).
- Cyclists will subsequently turn east on Elm Lane and north on Market Parade and North Street before arriving at the railway station.

Key:

Site Boundary

Walking Route

Photo Location / Direction

Harts Farm Way, Brockhampton West			
Audit Route 2 (Cycling): Tesco Extra, Solent Retail Park, Havant Town Centre, Havant Park, Havant Bus Station, Havant Railway Station			

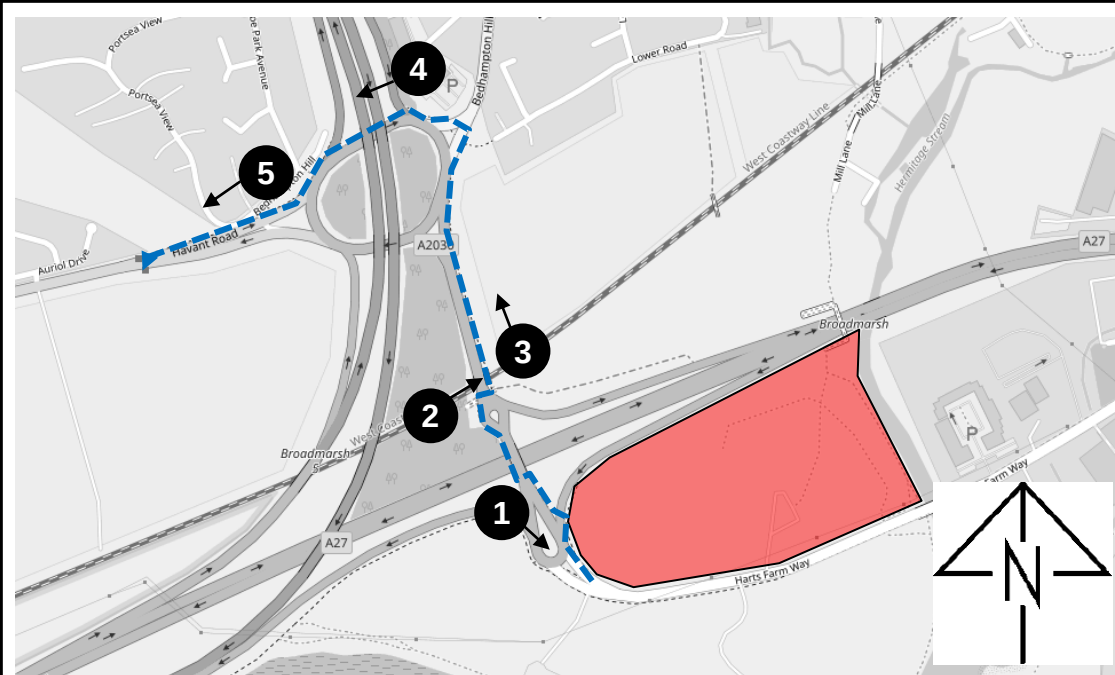
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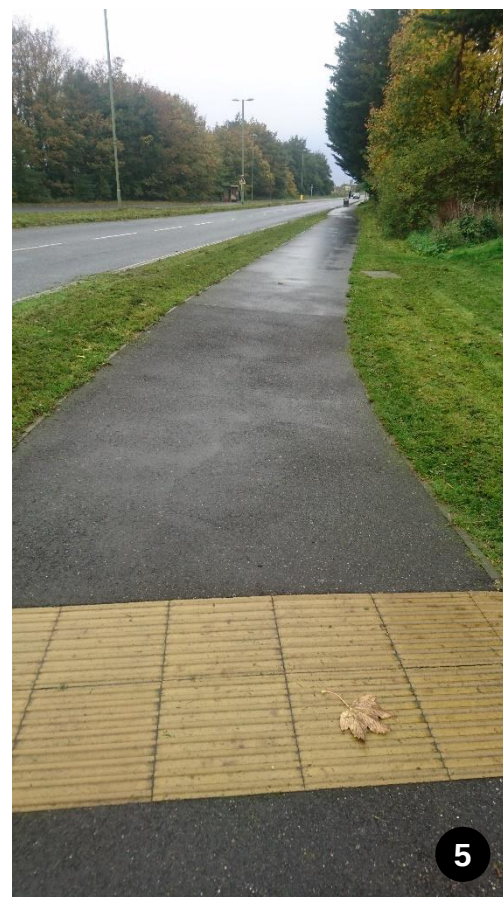
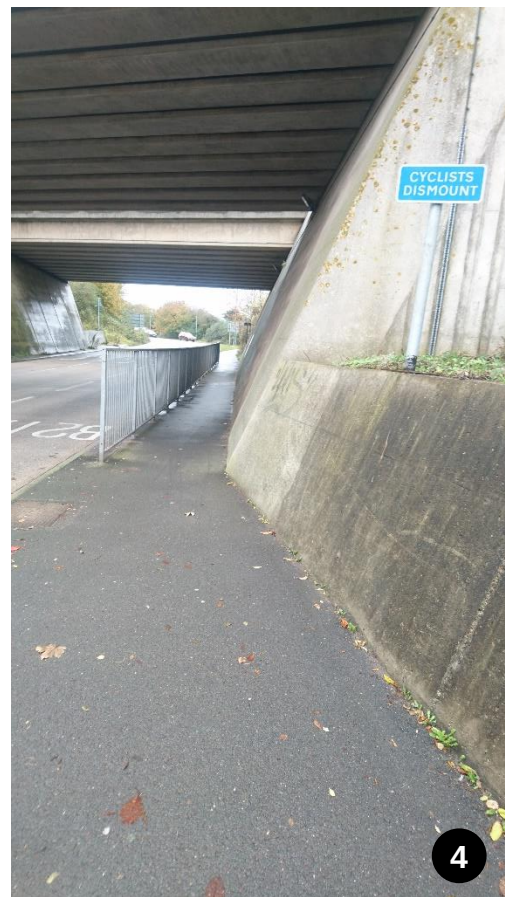
DRAWN:	CHECKED:	DATE:	SCALES:
SB	HA	07/01/2021	NTS

DRAWING REFERENCE: **Figure 2**



Walking / Cycling Route Notes:

- The Forty Acres Bus Stops are located approximately 1km north west of the site. A footway is located on the eastern side of Harts Farm Way which provides access to a wide pedestrian / cycle crossing (Photo 1).
- Users will continue on the eastern side of the A27 dumbbell roundabout before using the crossing with dropped kerbs and tactile paving to cross to the western side of the road.
- Following this shared footway / cycleway for a short distance, users will then cross back to the eastern side of the road using the crossing point provided (Photo 2), following the signs towards Drayton and Farlington.
- A crash barrier is provided here increasing safety for users (Photo 3). Pedestrians and cyclists can continue for approximately 300m using this wide shared surface. Although a road signpost is present in the centre of the path, this does not significantly restrict the effective width.
- Users will next cross Bedhampton Hill using the crossing with dropped kerbs and tactile paving before using the signalised crossing to cross the A3(M) off slip.
- Cyclists must then dismount for a short section where the effective width of the path is reduced as it passes beneath the A3(M) (Photo 4).
- Continuing to follow the signs, users must cross the A3(M) on slip before continuing west on Havant Road where a wide, flat shared surface provides access to the eastbound bus stop (Photo 5).
- A crossing point with dropped kerbs and tactile paving provides access to the westbound bus stop.



Key:

- Site Boundary
- Walking Route
- Photo Location / Direction

Harts Farm Way, Brockhampton West

Clowes Developments (UK) Ltd.

Audit Route 3 (Walking / Cycling):
Forty Acres Bus Stops

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DATE:

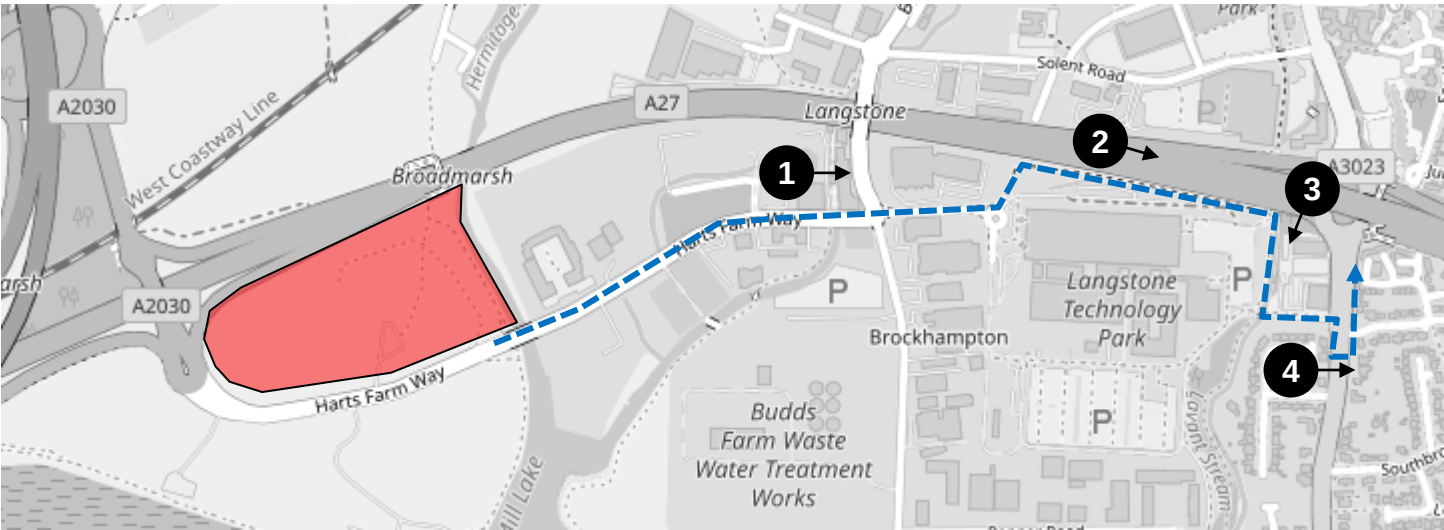
07/01/2021

SCALES:

NTS

DRAWING REFERENCE:

Figure 3



Walking / Cycling Route Notes:

- The Langstone Road Bus Stops are located approximately 1.5km east of the site. Following the shared footway / cycleway along Harts Farm Way, using the dropped kerbs and tactile paving to cross junctions where required (Photo 1), users will then cross the roundabout to continue east on Brookside Road.
- Continuing on the off-road section of NCN Route 22 (Photo 2), after approximately 400m, users will then turn south onto a public footpath which is gravelled, where cyclists must dismount (Photo 3).
- After approximately 150m, users will then turn east onto a wide, flat footway before turning south onto Langstone Road.
- After following the shared footway / cycleway for approximately 70m, the northbound bus stop is reached, as well as a crossing point. Here users can cross onto the eastern side of Langstone Road and continue north to the southbound bus stop (Photo 4). This section of road, though relatively busy, has well maintained footways and street lighting at regular intervals which provide good levels of natural surveillance.

Key:

Site Boundary

Walking Route

Photo Location / Direction

Harts Farm Way, Brockhampton West

Audit Route 4 (Walking / Cycling):
Langstone Road Bus Stops

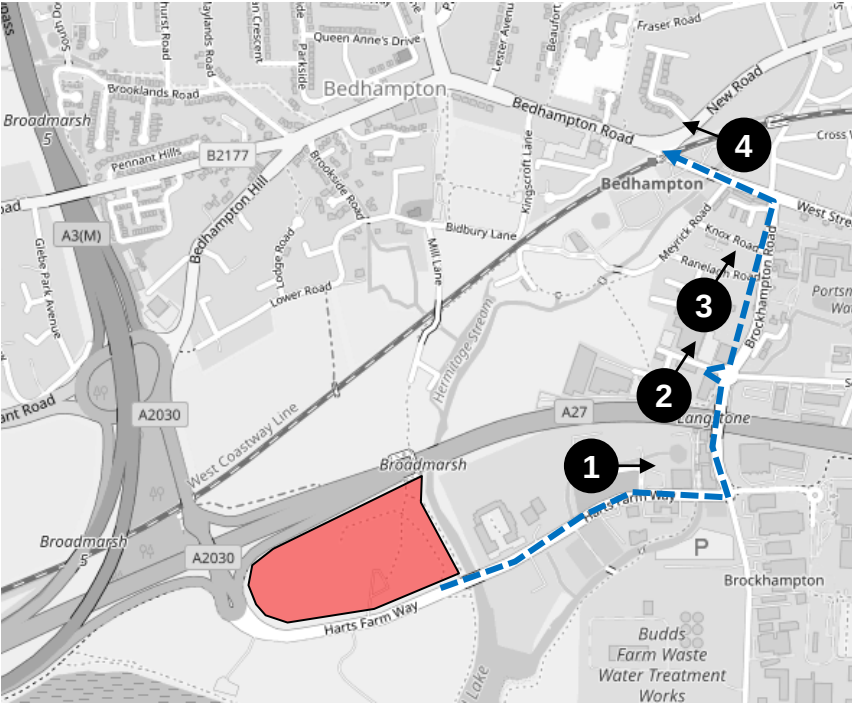
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SB	HA	07/01/2021	NTS

DRAWING REFERENCE: **Figure 4**



Walking / Cycling Route Notes:

- Bedhampton Railway Station is located approximately 1.7km north east of the site and is accessed by first travelling east along Harts Farm Way using the shared footway / cycleway and the crossing points where provided (Photo 1).
- Pedestrians and cyclists will then turn north onto Brockhampton Road crossing over the A27. At the Brockhampton Road / Solent Road / Marples Way roundabout, due to the presence of crash barriers which increase safety for pedestrians, users are required to travel approximately 25m west along Marples Way to cross the road using a crossing with dropped kerbs (Photo 2).
- Pedestrians and cyclists will travel north on Brockhampton Road for approximately 375m. Here, wide footways, crossings with dropped kerbs and tactile paving, and street lighting are present, creating a pleasant environment for users (Photo 3).
- Users will then turn west onto West Street where cyclists will be required to cycle on road to reach the railway station. The footway along the road is of sufficient width, with dropped kerbs provided to cross side roads (Photo 4).

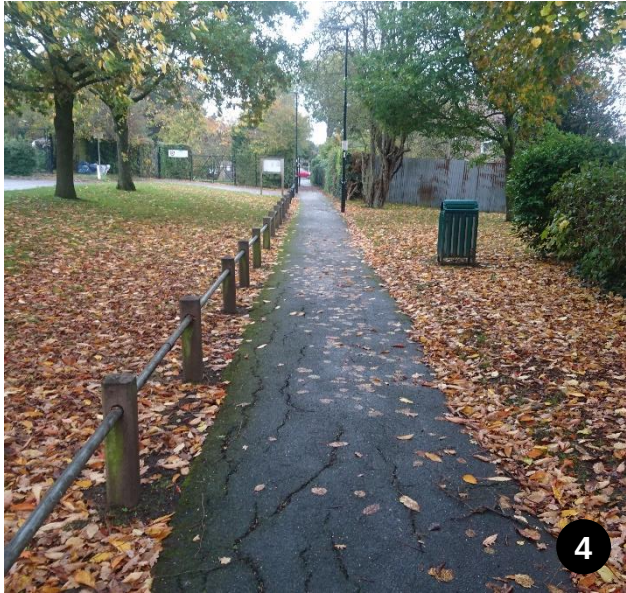
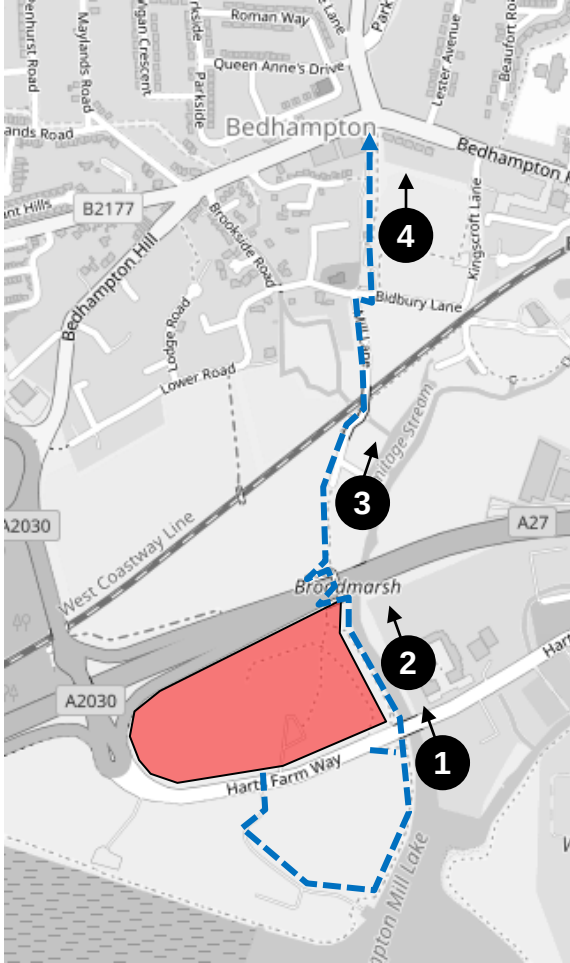
Key:

Site Boundary

Walking Route

Photo Location / Direction

Harts Farm Way, Brockhampton West				Clowes Developments (UK) Ltd.	
Audit Route 5 (Walking / Cycling): Bedhampton Railway Station				vectos. Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.uk	
DRAWN:	CHECKED:	DATE:	SCALES:	DRAWING REFERENCE:	
SB	HA	07/01/2021	NTS	Figure 5	



Walking Route Notes:

- Footpath 30 runs to the east of the site. To access the footpath, pedestrians can either walk south through the Broadmarsh Coastal Park before joining the tarmacked footway north, or use a gravel footpath directly from Harts Farm Way.
- Pedestrians then continue north on the footpath alongside the river, passing beneath Harts Farm Way (Photo 1). The footpath beyond this point until reaching the bridge to cross the A27 is largely a mud track (Photo 2).
- After crossing the bridge over the A27, users continue north to join Mill Lane. Again, this section is largely a mud track (Photo 3), becoming tarmacked upon crossing the railway line.
- Pedestrians must walk on road along Mill Lane, however, during the audit, low levels of traffic were observed, reducing the likelihood of conflict between pedestrians and vehicles.
- Upon reaching Bidbury Lane, pedestrians cross the road to use the footpath through the park (Photo 4). This off-road path is tarmacked with street lighting and leads to Bedhampton, a key residential area.

Key:

- Site Boundary
- Walking Route
- Photo Location / Direction

Harts Farm Way, Brockhampton West

Clowes Developments (UK) Ltd.

Audit Route 6 (Walking): Bedhampton / Footpath 30

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DATE:

07/01/2021

SCALES:

NTS

DRAWING REFERENCE:

Figure 6

Appendix D

Accidents between dates 01/05/2015 and 31/05/2020 (61) months

Selection: Notes:

Selected using Pre-defined Query : ; Refined using Accidents
within selected Polygons -HC - RPU Stats Requests - OLD ("HR
BEDHAMPTON")

Selected Polygon:HR BEDHAMPTON

150146335 01/05/2015 Time 1122 Vehicles 2 Casualties 1 Slight
E:469744 N: 107743 First Road: U Road Type 1
Speed limit: 30 Junction Detail: Roundabout Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

Factor:	Participant:	Confidence:
1st: Failed to look properly	Vehicle 2	Very Likely
2nd: Failed to judge other persons path or speed	Vehicle 2	Very Likely
3rd:		
4th:		
5th:		
6th:		

VEH 1 (CAR) TRAVELLING W ALONG PURBROOK WAY. VEH 1 ENTERS ROUNDABOUT IN LANE 1
INTENDING TO TRAVEL STRAIGHT ACROSS TO PURBROOK WAY. VEH 2 (TAXI) IN LANE 2 ENTERS
ROUNDABOUT AND COMES ACROSS VEH 1 CAUSING COLLISION.

Occurred on PURBROOK WAY AT THE JUNCTION WITH PURBROOK WAY, LEIGH PARK, HAMPSHIRE

Vehicle Reference 1 Car Turning left
Vehicle movement from E to W No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Offside Hit vehicle:
Hit object in road Kerb Off road: None
Did not leave carr Age of Driver 50 Male
Not hit and run Breath test Negative
Left hand drive: No

Vehicle Reference 2 Taxi/Private hire car Turning left
Vehicle movement from E to W No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Nearside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 36 Male
Not hit and run Breath test Not applicable
Left hand drive: No

Casualty Reference: 1 Vehicle: 2 Age: 36 Male Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not a cyclist

Accidents between dates 01/05/2015 and 31/05/2020 (61) months

Selection:

Notes:

Selected using Pre-defined Query : ; Refined using Accidents
within selected Polygons -HC - RPU Stats Requests - OLD ("HR
BEDHAMPTON")

150146444 01/05/2015 Time 1250 Vehicles 2 Casualties 1 Slight
E:469747 N: 106113 First Road: B 2177 Road Type Single carriageway
Speed limit: 40 Junction Detail: Roundabout Give way or controlled A 27
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation			
Factor:	Participant:	Confidence:	
1st: Failed to look properly	Vehicle 1	Very Likely	
2nd:			
3rd:			
4th:			
5th:			
6th:			

VEH 2 (CAR) TRAVELLING SW ALONG B2177 BEDHAMPTON HILL STOPPED AT ROUNDABOUT FOR TRAFFIC. VEH 1 (CAR) TRAVELLING BEHIND FAILED TO STOP IN TIME AND COLLIDED INTO THE REAR OF VEH 2.

Occurred on B2177 BEDHAMPTON HILL AT JUNCTION WITH A27, HAVANT, HAMPSHIRE

Vehicle Reference 1 Car Going ahead other
Vehicle movement from NE to SW No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 51 Male
Not hit and run Breath test Negative
Left hand drive: No

Vehicle Reference 2 Car Going ahead but held up
Vehicle movement from NE to SW No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 30 Female
Not hit and run Breath test Negative
Left hand drive: No

Casualty Reference: 1 Vehicle: 2 Age: 30 Female Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not a cyclist

Accidents between dates 01/05/2015 and 31/05/2020 (61) months

Selection:

Notes:

Selected using Pre-defined Query : ; Refined using Accidents
within selected Polygons -HC - RPU Stats Requests - OLD ("HR
BEDHAMPTON")

150152103 06/05/2015 Time 1132 Vehicles 2 Casualties 1 Slight
E:470993 N: 106299 First Road: U Road Type Single carriageway
Speed limit: 30 Junction Detail: Pri Drive Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 2	Very Likely
2nd:	Stationary or parked vehicle	Vehicle 2	Very Likely
3rd:	Road layout (eg bend, hill crest)	Vehicle 2	
4th:			
5th:			
6th:			

VEH 2 (CAR) TRAVELLING W OUT OF NUMBER 5 ONTO BROCKHAMPTON ROAD EDGED OUT SLOWLY DUE TO VEHs PARKED TO ITS OFFSIDE OBSCURING THE VIEW. VEH 2 PULLED INTO PATH OF VEH 1 (M/CYCLE) TRAVELLING S ALONG BROCKHAMPTON ROAD CAUSING COLLISION.

Occurred on BROCKHAMPTON ROAD AT JUNCTION WITH NUMBER 5, HAVANT, HAMPSHIRE

Vehicle Reference 1 Motorcycle - unknown cc Going ahead other
Vehicle movement from N to S No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 24 Female
Not hit and run Breath test Not requested
Left hand drive: No

Casualty Reference: 1 Vehicle: 1 Age: 24 Female Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not a cyclist

Vehicle Reference 2 Car Turning left
Vehicle movement from E to S No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 24 Male
Not hit and run Breath test Not requested
Left hand drive: No

Accidents between dates 01/05/2015 and 31/05/2020 (61) months

Selection:

Selected using Pre-defined Query : ; Refined using Accidents
within selected Polygons -HC - RPU Stats Requests - OLD ("HR
BEDHAMPTON")

Notes:

150158651 11/05/2015 Time 1548 Vehicles 2 Casualties 1 Slight
E:469745 N: 106115 First Road: A 27 Road Type Single carriageway
Speed limit: 40 Junction Detail: Roundabout Give way or controlled B 2177
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Possible
2nd:			
3rd:			
4th:			
5th:			
6th:			

VEH 1 (VAN) TRAVELLING SW ALONG B2177 BEDHAMPTON HILL, FAILS TO STOP IN TIME AND COLLIDES
WITH THE REAR OF VEH 2 (CAR) STATIONARY WAITING TO ENTER THE RBT.
Occurred on B2177 BEDHAMPTON HILL AT JUNCTION WITH A27, HAVANT, HAMPSHIRE

Vehicle Reference 1 Van or Goods 3.5 tonnes mgw and under Stopping
Vehicle movement from NE to SW No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 42 Male
Not hit and run Breath test Not requested
Left hand drive: No

Vehicle Reference 2 Car Going ahead but held up
Vehicle movement from NE to SW No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 58 Female
Not hit and run Breath test Not requested
Left hand drive: No

Casualty Reference: 1 Vehicle: 2 Age: 58 Female Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not a cyclist

Accidents between dates **01/05/2015 and 31/05/2020** (61) months

Selection: **Notes:**

Selected using Pre-defined Query : ; Refined using Accidents
 within selected Polygons -HC - RPU Stats Requests - OLD ("HR
 BEDHAMPTON")

150185618 02/06/2015 Time 1330 Vehicles 2 Casualties 1 Slight
 E:469558 N: 106070 First Road: A 2030 Road Type Single carriageway
 Speed limit: 30 Junction Detail: Roundabout Give way or controlled A(M) 3
 Crossing: Control None Facilities: None within 50m Road surface Dry
 Daylight Fine without high winds
 Special Conditions at Site None Carriageway Hazards: None
 Place accident reported: At scene DfT Special Projects:

Causation			
Factor:	Participant:	Confidence:	
1st: Failed to judge other persons path or speed	Vehicle 2	Possible	
2nd:			
3rd:			
4th:			
5th:			
6th:			

VEH 1 (CAR) TRAVELLING E ALONG A2030 HAVANT ROAD STOPPED AT THE A3(M) JUNCTION 5 RBT. VEH 2 (LORRY) FAILED TO STOP IN TIME AND COLLIDED WITH THE REAR OF VEH 1.

Occurred on A2030 HAVANT ROAD AT JUNCTION WITH A3(M) NORTHBOUND JUNCTION 5, HAVANT, HAMPSHIRE

Vehicle Reference 1 Car Going ahead but held up
 Vehicle movement from W to E No tow / articulation Leaving the main road
 On main carriageway No skidding, jack-knifing or overturning
 Location at impact Jct Approach First impact Back Hit vehicle:
 Hit object in road None Off road: None
 Did not leave carr Age of Driver 26 Female
 Not hit and run Breath test Negative
 Left hand drive: No

Casualty Reference: 1 Vehicle: 1 Age: 26 Female Driver/rider Severity: Slight
 Not a pupil
 Seatbelt Not Applicable Cycle helmet: Not a cyclist

Vehicle Reference 2 Goods over 3.5 tonnes and under 7.5 to Stopping
 Vehicle movement from W to E No tow / articulation Leaving the main road
 On main carriageway No skidding, jack-knifing or overturning
 Location at impact Jct Approach First impact Front Hit vehicle:
 Hit object in road None Off road: None
 Did not leave carr Age of Driver 52 Male
 Not hit and run Breath test Negative
 Left hand drive: No