

# St Clare Business Park

## Transport Assessment

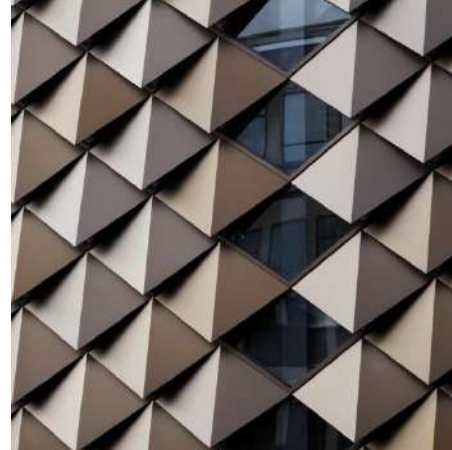
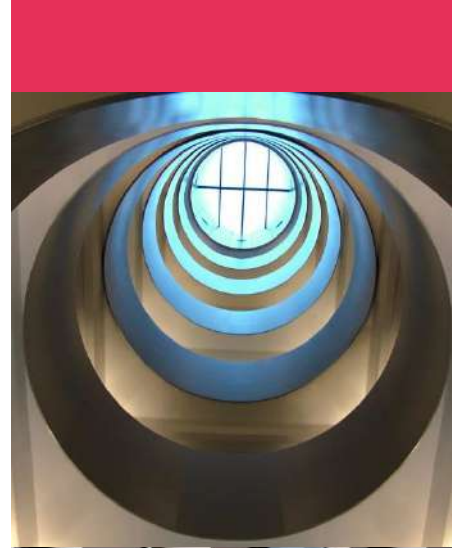
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Site Address: St Clare Business Park and 7 – 11 Windmill Road, Hampton Hill,  
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## 1.0 Introduction

### 1.1 Introduction

1.1.1 Curtins has been appointed on behalf of Notting Hill Home Ownership Ltd (NHHO) to provide traffic and transportation advice in relation to the redevelopment of the St Clare Business Park and the adjoining commercial premises located in Hampton Hill, within the London Borough of Richmond Upon Thames (LBRuT).

The development proposals comprise the *'Demolition of existing buildings and erection of 1 no. mixed use building between three and five storeys plus basement in height, comprising 86 no. residential flats (Class C3) and 1,290 sqm of commercial floorspace (Class E); 1 no. two storey building comprising 595sq.m of commercial floorspace (Class E); 14no. residential houses (Class C3); and, associated access, external landscaping and car parking.'*

1.1.2 This Transport Assessment (TA) has been prepared to assess the transport and highway implications of the development proposals. Alongside this TA, a Framework Travel Plan (FTP), Delivery and Servicing Plan (DSP) and a Construction Management Statement (CMS) have been prepared to accompany the planning submission. This document should be read in conjunction with all relevant submitted documentation including the Design and Access Statement.

### 1.2 Planning History

1.2.1 A previous planning application was submitted for the redevelopment of the site in October 2019 by NHHO. The development description was as follows:

1.2.2 "Demolition of existing buildings to provide a mixed-use building between three and five storeys plus basement in height comprising 98 residential flats (class C3) and 600m<sup>2</sup> of commercial floorspace (class B1), a three-storey building comprising 894m<sup>2</sup> of commercial floorspace (class B1) and 14 residential houses (class C3), access, external landscaping and car parking".

1.2.3 The application was referred to LBRuT's Planning Committee on the 9th December 2020. Despite the Planning Officer's recommendation for approval, the Planning Committee resolved to refuse planning permission for the development. A Decision Notice was issued on the 7th January 2021 which cites two reasons for refusal. These were:

- The absence of a legally binding S106 agreement for the scheme; and
- The loss of employment floor space.

Following this decision NNHO have explored the potential to increase the amount of employment floor space on-site.

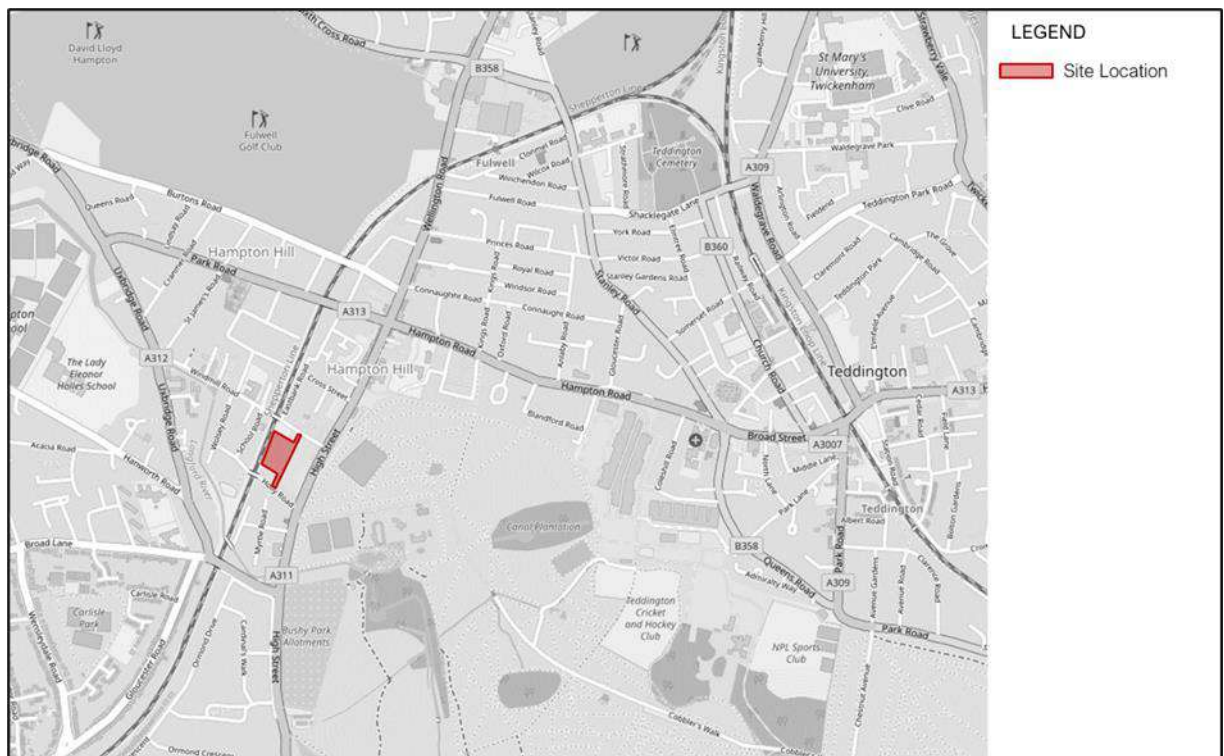
### 1.3 Scoping

- 1.3.1 Previous discussions have been undertaken with the Highways officers at LBRuT. During these discussions, the site wide access, circulation and parking strategy has been agreed. The level of assessment and documentation required for planning was also agreed.

### 1.4 Site Context

- 1.4.1 The site is bound to the northeast by Windmill Road and residential properties, to the southeast by an Electric Wholesaler and residential properties, to the southwest by Holly Road and residential properties and to the northwest by the Shepperton branch railway line.
- 1.4.2 The southern section of the main site is currently occupied by St Clare Business Park, which is made up of office and industrial warehouse units, whilst the northern section is formed of a car wash / vehicle showroom. Given the nature of the existing site, the movements generated are predominantly vehicular.
- 1.4.3 **Figure 1.1** illustrates the site location in the context of the surrounding area.

**Figure 1.1 - Site Location**



### 1.5 Summary of Development Proposals

- 1.5.1 The development proposals include the demolition of the existing buildings located on site and the construction of 100 new residential units including 14 houses and 86 apartments of varying tenure and 1,885 m<sup>2</sup> of commercial space.



- 1.5.2 The site will be accessed via two points; the first from Windmill Road and the second via the existing Holly Road access. Windmill Road will provide access to the northern section of the site, seven houses, the commercial space and associated parking. The access on Holly Road will be used as a secondary access and will be used to access the under-croft car park, seven houses and associated parking.
- 1.5.3 A total of 96 car parking bays will be provided across the site. 83 (69 for flats and 14 for houses) of the spaces will be allocated to the residential units including five disabled bays. 12 spaces are allocated for the commercial units, including two disabled bays. One parking bay is allocated as a car club bay. Car parking is provided in line with the London Plan standards which have been adopted by LBRuT. 20% of car parking will feature electric charging points, with the remaining 80% provided with passive provision.
- 1.5.4 In addition, 152 long stay cycle spaces will be provided within the footprint of the building for the apartments, and a further six short stay in the public realm. 12 long stay spaces will be provided for the commercial units and 45 short stay spaces. Over 5% of these will be provided as accessible cycle stands.
- 1.5.5 Cycle parking for the 14 houses will be provided within the curtilage of the dwellings (two cycles per home).
- 1.5.6 Three delivery and servicing bays will be provided to serve the development.

## 1.6 Purpose of Report

- 1.6.1 This TA will describe the future effect of the proposed development on the local transport network and will demonstrate that the planning application proposal can be successfully accommodated in terms of transport related matters.

## 1.7 Structure of the Report

- 1.7.1 Following this Introduction, the report is set out to the following structure:
- **Section 2** of the report reviews the existing transport conditions surrounding the site, including access to the existing site, cycle and pedestrian infrastructure, the local highway network, public transport provision and accident data.
  - **Section 3** will describe the development proposals that are the subject of this assessment. The focus will be on transportation elements such as access, servicing and car parking.
  - **Section 4** will review the policy context within which the proposals should be assessed, including a discussion of national, regional and local transport policies.
  - **Section 5** will consider issues of access and accessibility which will assess the individual transport modes at both the macro and the micro level.
  - **Section 6** set outs out the anticipated trip generation associated with the existing and proposed land uses;

- **Section 7** assesses the impact of the site on the surrounding highway network, pedestrian and cycle infrastructure and public transport network; and
- **Section 9** will focus on cycle and car parking and vehicle servicing.
- **Section 10** touches on the issue of travel planning, proposing a means of addressing requirements relating to this important element of the transport strategy for the development.
- **Section 11** summarises the findings of the report and puts forward conclusions.

## 2.0 Existing Conditions

### 2.1 Introduction

2.1.1 This section of the report provides a description of the existing highway conditions surrounding the development site, including pedestrian and cycling infrastructure, the public transport network, the surrounding highway network and a review of accident data in the vicinity of the site.

### 2.2 Existing Site

2.2.1 The site is located in Hampton Hill, approximately 100m to the east of A311 High Street and approximately 1.2km from Fulwell Railway Station located to the north-east.

2.2.2 The site comprises of St Clare Business Park, the floorspace of which measures approximately 2,730m<sup>2</sup> (GIA), located in the southern section and 7 - 11 Windmill Road, a former car wash and car showroom, measuring approximately 412m<sup>2</sup> is located in the northern section of the site.

### 2.3 Existing Access Arrangements

2.3.1 St Clare Business Park is accessed via Holly Road. Access is restricted by manual gates which are set back approximately 10m from the carriageway. A sign next to the access point states 'Large Lorries Turning Mon – Fri 7:00am – 6:00pm, please do not park opposite the entrance'.

2.3.2 The entrance point is directly adjacent to the footprint of residential dwellings on Holly Road, therefore barriers and two wooden blocks have been introduced on each side of the access to reduce conflict with large vehicles entering and exiting. **Figure 2.1** provides a photo of the existing St Clare Business Park access onto Holly Road.

**Figure 2.1 - St Clare Business Park site access on Holly Road**



- 2.3.3 The car wash / car showroom directly fronts Windmill Road, with an access route provided along the south-eastern edge of the site for vehicles to park.

**Figure 2.2 - Car wash / showroom access onto Windmill Road**



## 2.4 Existing Car Parking Arrangements

- 2.4.1 The existing St Clare Business Park comprises a large area of hard standing adjacent to the main buildings which provides unmarked car parking within the site curtilage, accessible off Holly Road.
- 2.4.2 In terms of the car wash / showroom, the area which fronts the site is hard standing and designated for parking in the far north corner of the site which is directly accessible off Windmill Rd.

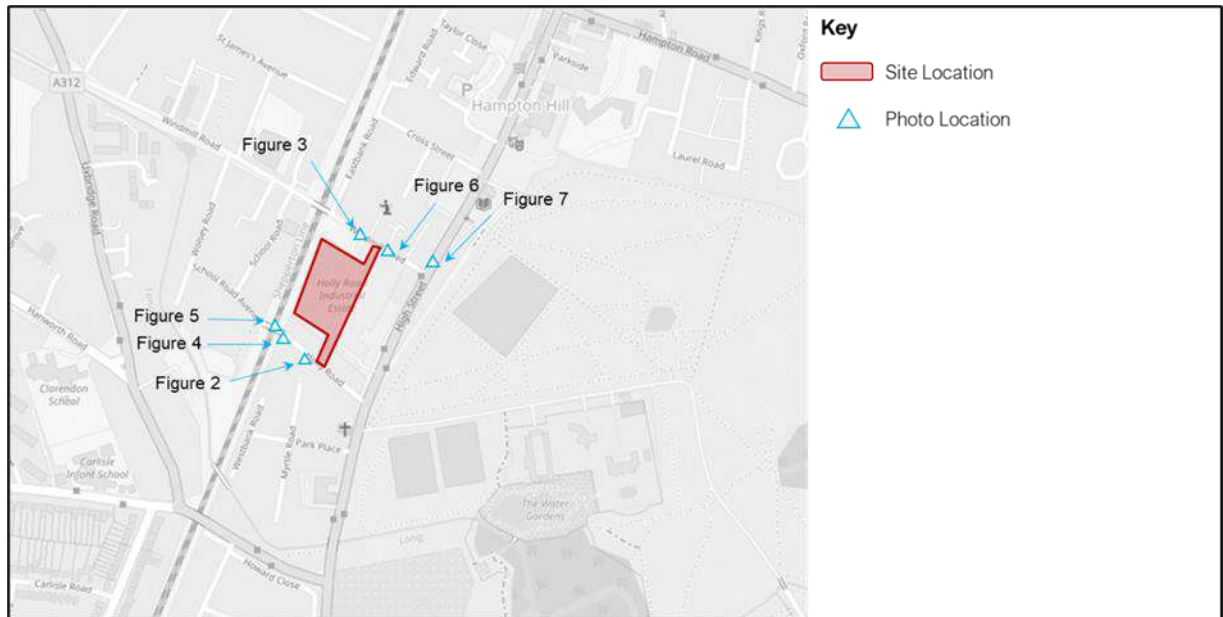
## 2.5 Existing Servicing Arrangements

- 2.5.1 Currently all servicing associated with the development site is undertaken from within the site curtilage.

## 2.6 Local Highway Network

- 2.6.1 The location of site photos included in this section of the report are illustrated in **Figure 2.3**.

**Figure 2.3 – Site Photo Locations**



*Holly Road*

- 2.6.2 Holly Road is residential in nature, formed of a two-way single carriageway and subject to a 30mph speed restriction. Holly Road follows a southeast-northwest alignment between the High Street in the southeast, forming School Road Avenue in the northwest. A railway bridge is located on Holly Road to the southwest of the site.
- 2.6.3 No parking restrictions are present along Holly Road, which allows vehicles to park along both sides of the carriageway at all times. Holly Road measures approximately 7.0m in width, however parking reduces the effective width to approximately 3.0m. The carriageway width reduces further over the railway bridge and is restricted to vehicles below 40 feet (12.2m) in length due to the spatial constraints.

Figure 2.4 - Holly Road looking northeast



Figure 2.5 - Railway bridge between Holly Road and School Road Avenue



*Windmill Road*

- 2.6.4 Windmill Road is residential in nature, formed of a two-way single carriageway and subject to a 30mph speed restriction. Windmill Road follows a southeast / northwest alignment, connecting to the High Street to the southeast and the A312 Uxbridge Road in the northwest.
- 2.6.5 Single yellow lines are present along the southern side of the carriageway to restrict parking, whilst unrestricted parking is permitted along the northern side of the carriageway. Double yellow lines are present in the vicinity of the junction with the High Street.
- 2.6.6 Windmill Road measures approximately 7.0m in width, which reduces to 5.0m where vehicles are parked on the northern side of the carriageway.

**Figure 2.6 - Windmill Road looking northwest**

*A311 High Street*

- 2.6.7 The A311 High Street is a two-way single carriageway road, subject to a 20mph speed restriction. The A311 provides a connection between the A308 Upper Sunbury Road in the south and Twickenham in the north.

2.6.8 Inset car parking bays and on street loading bays are located intermittently along both sides of the carriageway, with single and double yellow lines restricting parking in areas, whilst sections of the road have no restrictions present. There is a no Controlled Parking Zone (CPZ) along the High Street, however, the majority of car parking bays are restricted to a maximum of one hour.

**Figure 2.7 - High Street**



## 2.7 Local Controlled Parking Zones (CPZ)

2.7.1 The closest CPZ is located along Teddington High Street and the roads surrounding Teddington railway station, approximately 1.6km from the site. Various restricted parking bays are located along the High Street, permitting one hour maximum parking and loading. One disabled parking bay is located on Holly Road to the southeast of the proposed access point, permitting blue badge holders only.

## 2.8 Existing Car Parking Stress

2.8.1 In order to ascertain the existing parking capacity on the highway network surrounding the site, car parking beat surveys were undertaken in 2017, followed by repeated surveys in 2020 and 2022 in line with the methodology adopted by LBRuT. Following discussions with LBRuT, it was confirmed that the following surveys were deemed suitable for a development of this type and size:

- Tuesday 10th May 2022: one beat survey between 0:30 and 05:30 and hourly beat survey between 07:00 and 19:00.



- Wednesday 11th May 2022: one beat survey between 0:30 – 05:30
- Sunday 8th May 2022: one beat survey between 0:30 and 05:30

2.8.2 The following provides a summary of the survey results, whilst a detailed review is provided in **Appendix A**.

2.8.3 The highest level of utilisation was observed on Park Place, Holy Road, Chelsea Close, Mrytle Road, Vincent Row and Mosley Road. Little spare capacity is available on Holly Road throughout the survey period. Spare capacity is available on Windmill Road throughout the study, ranging to a utilisation between 26%-93%.

## 2.9 Pedestrian and Cycle Infrastructure

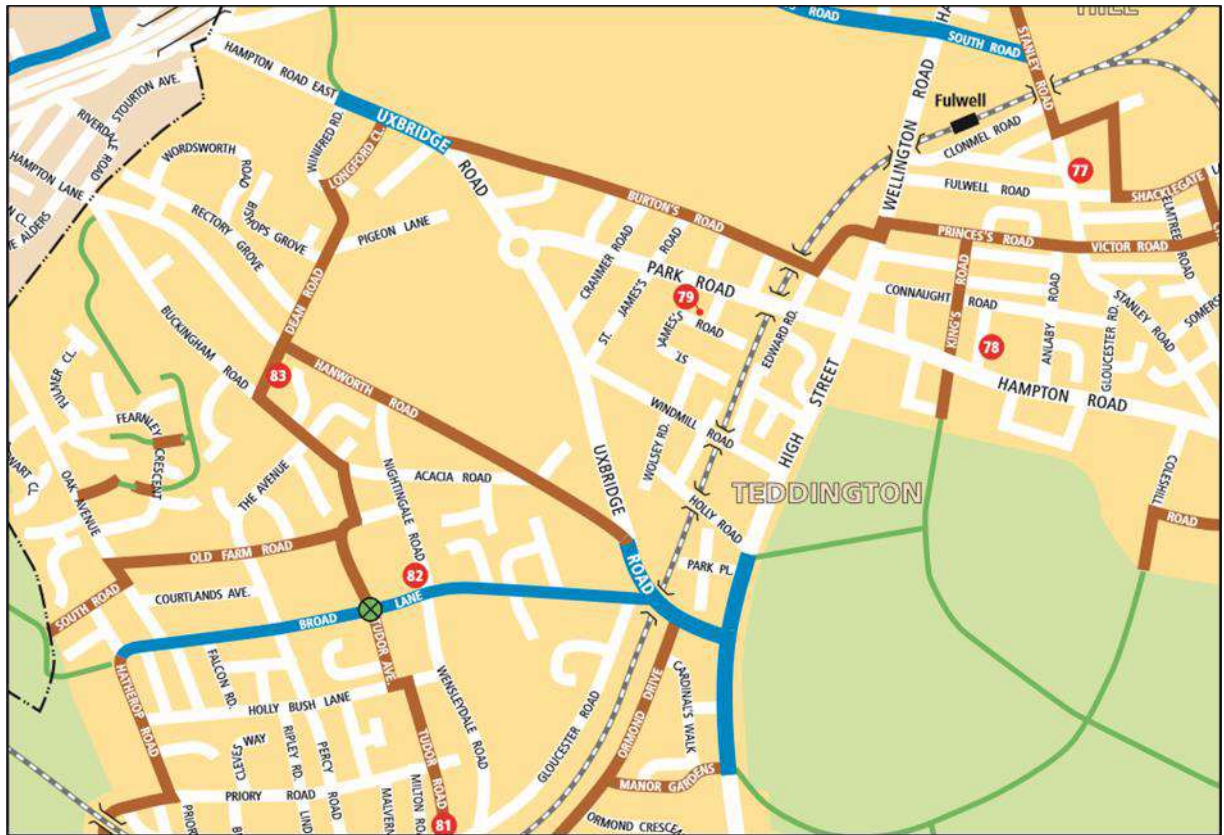
2.9.1 Pedestrian access to the site is via Holly Road and Windmill Road, however there is no existing pedestrian infrastructure along either access routes into the main site.

2.9.2 Street lit footways are located on both sides of Windmill Road and Holly Road, measuring approximately 2m in width. The junctions between the High Street and Windmill Road and Holly Road have recently been upgraded to provide raised tables at the junction to allow easy movement of pedestrians.

2.9.3 The High Street benefits from being recently upgraded to provide street lit wide footways measuring approximately 4m in width. Sections of the footway narrow to allow for Sheffield stand cycling parking and inset shared surface parking / loading bays. A zebra crossing is located directly to the north of the junction, providing pedestrian links into Bushy Park

2.9.4 **Figure 2.9** illustrates the off-road and quiet cycle routes (brown) and the main road cycle routes (blue) identified by LBRuT in proximity to the site.

**Figure 2.8 - Cycle routes in the vicinity of the site**



2.9.5 **Figure 2.9** illustrates that the site is located in proximity to route 82 and leisure routes within Bushy Park.

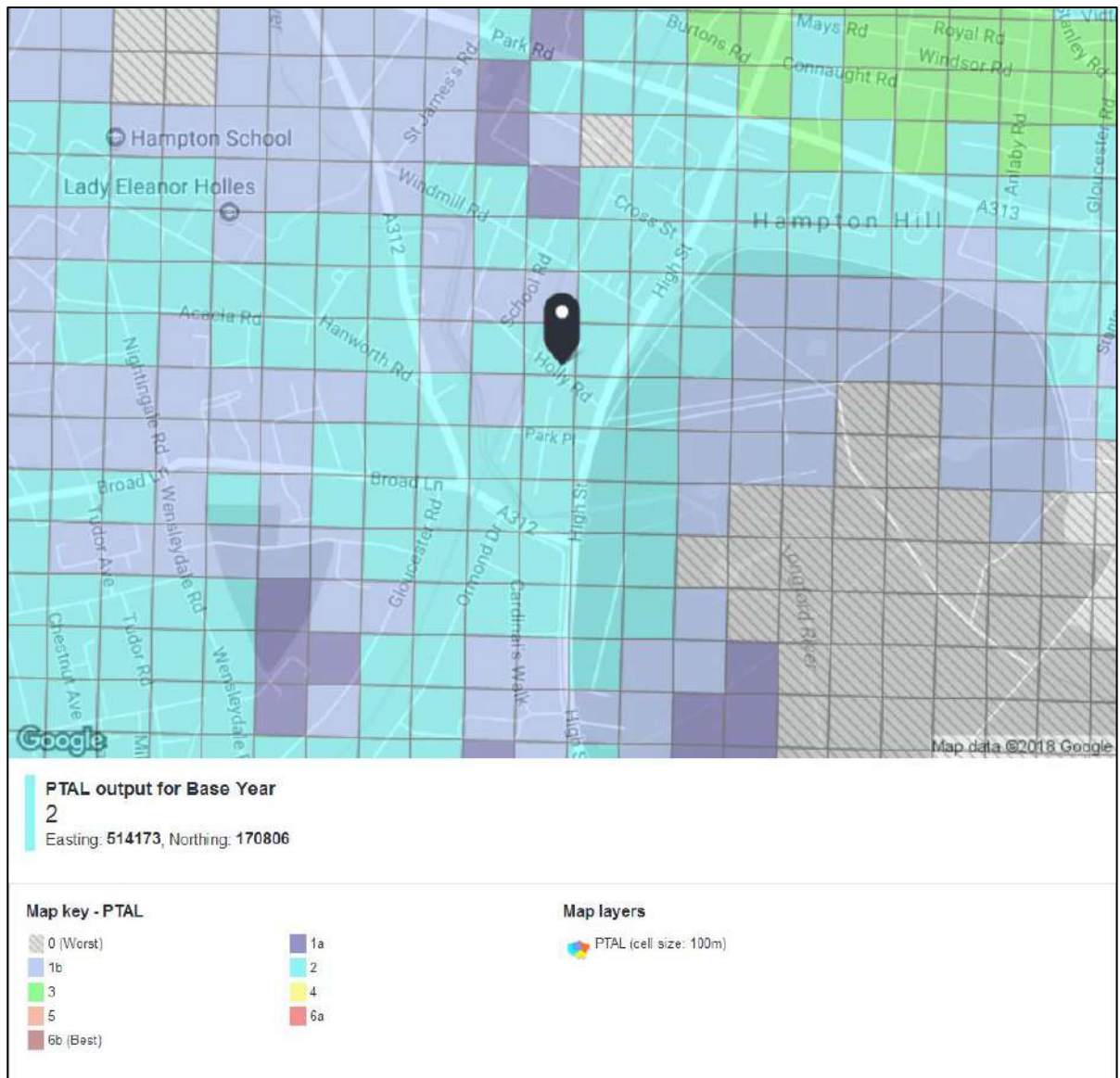
## 2.10 Public Transport

### *Public Transport Accessibility Level*

2.10.1 Public Transport Accessibility Level (PTAL) is a TfL tool used to measure the accessibility of a point to the public transport network, taking into account walk access time and service availability. This method is essentially a way of measuring the density of the public transport network at any location within Greater London. The rating of accessibility is a grade from 1–6 (including sub-divisions 1a, 1b, 6a and 6b), where a PTAL of 1a indicates extremely poor access (low) to the location by public transport, and a PTAL of 6b indicates excellent access by public transport.

2.10.2 **Figure 2.9** illustrates the PTAL rating for the site.

**Figure 2.9 - Site PTAL**



2.10.3 **Figure 2.10** demonstrates that the PTAL for the site ranges between 1a and 2. The PTAL assessment does not consider the new connection through the site, therefore it is likely that in reality the whole site would achieve a PTAL of 2. It should also be noted that the PTAL tool is very prescriptive in terms of the distances included within the assessment, therefore any services available outside of the boundary (640m for bus and 960m for rail) are discounted.

*Bus Services*

2.10.4 The nearest bus stop to the site is located on High Street, approximately 220m walking distance from the site on the eastern side of the carriageway providing access to southbound services 285, R68 and R70, whilst the northbound stop is located approximately 30m further north.

2.10.5 The southbound bus stop features a bus shelter, flagpole and timetable information whilst the northbound bus stop comprises on a flagpole with timetable information only. Additional bus stops are accessible further north along the High Street within 640m walking distance of the site (the walking distance deemed as an accessible distance by PTAL), providing access to the same services.

2.10.6 **Table 2.1** sets out the destinations served and associated frequency of these services.

**Table 2.1 – Bus routes and associated bus frequency within 640m of the site**

Bus Service	Routes	AM Frequency (08:00 – 09:00)	PM Frequency (17:00 – 18:00)	Hourly Saturday Frequency
285	Heathrow Central to Cromwell Road Bus Station	Every 9-12 mins	Every 9-12 mins	Every 11-12 minutes
R68	Kew Retail Park to Hampton Court	Every 15 mins	Every 15 mins	Every 15 mins
R70	Nuserylands Shopping Centre to Richmond	Every 10 mins	Eery 10 mins	Every 8 mins

2.10.7 **Table 2.3** demonstrates that there are 32 bus services available during the AM and PM peak hours in both directions. These services provide access to key local areas such as Richmond and Kingston.

#### *Rail Services*

2.10.8 The closest railway station to the site is Fulwell Station, located approximately 1.2km (15-minute walk) northeast of the site. Whilst 1.2km is outside the acceptable 960m including TfL PTAL calculations, it is considered a potential distance for commuters to access rail services. In addition, bus route R70 provides an alternative route to the station, allowing for multi-modal public transport travel.

2.10.9 Two direct eastbound services are available to London Waterloo in the AM peak hour (08:00 – 09:00) and two in the PM peak hour (17:00 – 18:00), whilst two westbound services are available to Shepperton in the AM peak and PM peak respectively. This equates to a total of five services during the AM peak hour and four during the PM peak hour.

### Car Club

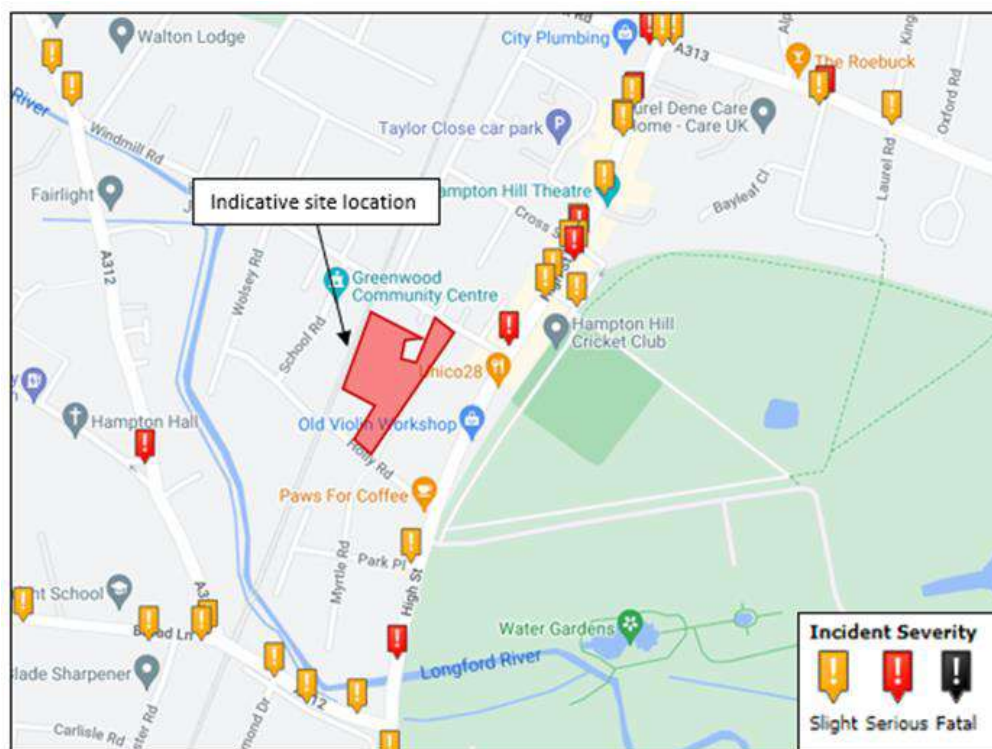
2.10.10 The closest car club bay is located on Oxford Road, approximately 900m northeast of the site (11 minute walk). The bay is operated by Zip Car and accommodates one vehicle. Zip car have identified that this bay is utilised at an average of 33%, which is above the average of other bays in Hampton Hill (30%).

## 2.11 Highway Safety

2.11.1 Personal Injury Accident (PIA) records for the area surrounding the site has been obtained from Crashmap.co.uk for the most recent 36 months' period between 2017 to 2021. Details of PIAs are discussed below.

2.11.2 A search of PIAs on the surrounding highway network is illustrated in **Figure 2.11** which includes the key junctions and links surrounding the site.

**Figure 2.10 - Location of accidents recorded in the vicinity of the site**



2.11.3 **Figure 2.11** illustrates that 21 accidents were recorded in the study area, eight of which were classified as serious in severity and no fatal accidents, nine accidents occurred on the High Street/Park Road, four of which was classified as serious. A further two occurred at the High Street / Hampton Road junction, which also included two serious. Hanworth Street recorded a serious accident with no fatal accidents occurring.

2.11.4 Two slight accidents were observed on the A312 and three on or near the A312 / Broad Lane roundabout.

2.11.5 These accidents are not atypical for the location that they occurred whereby high levels of vehicle traffic are experienced. There are also no incidents recorded within close proximity to the site accesses. As such, the review of accident data does not indicate there are any existing design deficiencies on the local highway network that would give rise to any highway safety concerns.

2.11.6 **Table 2.4** provides a summary of these accidents, listed from north to south:

Table 2.2 - PIA Summary

Date	Location	Severity	No Vehicles	No Casualties
09/10/17	High Street / Park Road	Serious	2	1
16/05/16		Slight	2	2
29/12/19		Serious	2	1
09/03/2019		Serious	1	1
01/12/20		Slight	2	1
18/07/19		Slight	1	2
21/07/19		Slight	2	1
18/05/21		Slight	2	1
03/06/20		Serious	2	1
14/04/16	Hampton Road	Serious	2	1
16/11/17	Hampton Road	Serious	1	1
25/04/16	High Street	Slight	2	1
06/05/17	High Street	Serious	1	1
17/01/17	A312	Slight	3	1
27/04/16	A312	Slight	2	1
19/01/17	A312 / Broad Lane	Slight	2	1
29/11/16		Slight	2	1
30/01/17	Broad Lane	Slight	2	1
28/07/16	Uxbridge Road	Slight	2	1
31/01/17	Hanworth Road	Serious	1	1

## 3.0 Development Proposals

### 3.1 The Proposed Development

3.1.1 The development proposals consist of a residential led mixed-use development, formed of flexible commercial space, and residential flats. **Table 3.1** sets out the tenure and quantum of development proposed.

**Table 3.1 – Development Quantum**

Land Use	GIA (m <sup>2</sup> ) / Number of units
<b>Residential:</b>	
1 bed flat	43
2 bed flat	37
3 bed flat	6
Houses	14
Total Dwellings	100
<b>Flexible commercial space</b>	
Block 1	1,289m <sup>2</sup>
Block 2	595m <sup>2</sup>
Total	1,885m <sup>2</sup>

3.1.2 The commercial space will be split across two blocks, the first located along the eastern side of the Windmill Road access road, the second located in the main residential block at ground floor.

3.1.3 The 86 apartments will be located within a central block accessed via three cores. Seven of the 14 houses will be located to the north of the main block separated by the internal road, whilst the remaining seven will be located to the south of the block. **Figure 3.1** provides a plan of the development proposals, whilst a more detailed plan is provided in **Appendix B**.



**Figure 3.1 - Development Proposals**

## 3.2 Vehicular Access

3.2.1 Access to the main site will be taken via two points, one on Windmill Road and a second on Holly Road.

### *Windmill Road*

3.2.2 A new access will be created on Windmill Road, measuring approximately 5.0m in width. The access will comprise a raised table to facilitate pedestrian movement along Windmill Road. This access will provide access to seven of the houses, two main servicing bays, the at grade car park and external car parking areas. All vehicles 7.5 tonne and above will be required to utilise this access for the whole of the site. This is discussed further below.

### *Holly Road*

3.2.3 The access on Holly Road will utilise the existing access for the St Clare Business Park. Due to the restricted width of the access, no large vehicles will be permitted to utilise the access.

3.2.4 This access will provide access to the remaining seven houses and associated car parking, the entrance to the under-croft car park, external residential car parking and eight of the commercial car parking spaces.

3.2.5 The width of the access road will be varied to encourage low vehicle speeds whilst within the site.

### 3.3 Vehicular Circulation

3.3.1 There will be no through route for cars between Holly Road and Windmill Road. The southern and northern sections of the site will be separated by a landscaped area and access restricted by retractable bollards. Larger vehicles, such as refuse and recycling collection vehicles will be required to utilise the Windmill Road access. Larger vehicles will gain access using a fob system or similar.

### 3.4 Access for Active Modes

3.4.1 Footways will be provided along the north-eastern side of the Windmill Road access road and the south-western side of the Holly Road access. The main section of the site will be formed of shared surface which will provide permeability throughout the site. The development proposals will improve pedestrian and cycling permeability between Holly Road and Windmill Road through the proposed landscaping.

### 3.5 Car Parking

3.5.1 As set out within the LBRuT Transport Supplementary Planning Document (June 2020), the adopted London Plan (March 2021), maximum standards for car parking have been adopted by the Borough.

#### *Residential Car Parking*

3.5.2 The 2021 London Plan residential car parking standards for sites in outer London, with a PTAL of 2 to 3 are as follows:

- Dwellings with 1 to 2 bedrooms: 0.75 spaces per unit.
- Dwellings with 3+ bedrooms: 1 space per unit.

3.5.3 While the PTAL score for the site is between 1a and 2, the assessment does not consider the increased permeability at the site and the proposed new pedestrian/cycle connection through the site. Therefore, it is likely that the whole site would achieve a PTAL of 2.

3.5.4 Based on a PTAL of 2, the maximum number of car parking spaces permissible to support the residential element of the new planning application is 78.

3.5.5 83 spaces will be allocated to the residential units. This includes the provision of five disabled spaces, totally 5% of the total provision.

#### *Commercial Car Parking*

3.5.6 Car parking standards for office land uses as set out within the 2021 London Plan are 1 space per 100m<sup>2</sup> (GIA) for Outer London. If this is applied to the total commercial floor space to be provided as

part of the revised scheme (1,885m<sup>2</sup>) this would equate to a maximum of 18 spaces that could be provided to serve the commercial units.

- 3.5.7 12 spaces for the commercial units, including two disabled bays. These car parking standards represent a maximum provision; however, 12 car parking spaces is deemed sufficient to serve the development.

*Total Car Parking Provision*

- 3.5.8 A total of 96 car parking bays will be provided across the site, including seven disabled bays and one car club bay. 83 car parking spaces are proposed for the residential element of the scheme and 12 spaces are allocated for the commercial units.

- 3.5.9 It is acknowledged that the residential car parking provision is in excess of the London Plan standards however this is deemed appropriate given the location of the site. In addition to this, in response to comments received on the 2019 planning application, the amount of car parking has been slightly weighted towards the residential part of the scheme (by five additional spaces), slightly exceeding the London Plan (2021) maximum standards.

- 3.5.10 Based on the 2021 London Plan, the maximum number of car parking spaces that would be expected to be permitted as part of the development (residential and commercial combined) would be 110 (inclusive of disabled spaces).

- 3.5.11 Travel planning measures will be used to encourage staff to travel by active travel, public transport and car sharing. The level of car parking available at the development will be clearly communicated to employees and tenant companies prior to occupation.

- 3.5.12 The residential car parking will be provided within an at grade car park accessed via the northern section of the site, an under-croft car park accessed via the southern section of the site and external bays within the landscaped areas.

- 3.5.13 20% of all car parking will feature electric charging points and the remaining 80% will be provided with a passive electric charging provision to be readily converted in the future.

### **3.6 Cycle Parking**

- 3.6.1 The residential cycle parking includes 152 long stay cycle spaces which will be provided in the basement of Block 1. Five short-stay spaces will be provided in the public realms. Eight of the cycle parking spaces will be accessible, in line with the London Plan standards. All cycle stores are proposed in accordance with the London Cycling Design Guide.

- 3.6.2 Cycle parking for the 14 houses will be provided within the curtilage of the dwelling (two cycles per home).

- 3.6.3 For the commercial element of the scheme a total of 56 cycle parking spaces will be provided. This includes 12 long-stay spaces and 45 short-stay spaces.

### 3.7 Delivery and Servicing

- 3.7.1 All delivery and servicing activity including refuse and recycling collection will be accommodated within the site. Three inset servicing bays will be provided within the site, the first will be located on the main access road from Windmill Road opposite the commercial units, the second located opposite the undercroft car park entrance and a third in the southern section of the site, adjacent to the entrance to core 3.
- 3.7.2 All refuse and recycling storage areas will be situated within 20m of the access roads for collection operatives, in line with LBRuT guidance.
- 3.7.3 The internal layout of the site has been designed to allow a large refuse vehicle to manoeuvre around the site. Swept path analysis, included in **Appendix C** illustrates a large refuse vehicle and a 7.5t box van driving around the site.
- 3.7.4 To facilitate the refuse vehicle movement, LBRuT have requested that one car parking bay be removed and relocated on Windmill Road.

## 4.0 Transport Planning Policy

### 4.1 Introduction

4.1.1 This section reviews current and emerging land use and transport planning policies at national, regional and local government levels specific to transport and highways.

### 4.2 National Planning Policy

#### *National Planning Policy Framework (NPPF)*

4.2.1 The National Planning Policy Framework (NPPF) was adopted in July 2021 and outlines the potential benefits and outlines transport issues which should be considered from the earliest stages of plan-making and development proposals.

4.2.2 Section 9 of the NPPF (Promoting Sustainable Transport) outlines the important role that considering development applications should ensure that:

- *‘Appropriate opportunities to promote sustainable transport can be – or have been – taken up, given the type of development and its location;*
- *Safe and suitable access to the site can be achieved for all users;*
- *The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and National Model Design Code; and*
- *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

4.2.3 Paragraph 112 of the NPPF states applications for development should:

- a) *“Give priority 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 and design standards;*
- d) *Allow for the efficient delivery of goods and access by service and emergency vehicles; and*

e) *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*

4.2.4 Paragraph 111 of the NPPF goes onto state that ‘development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe’.

### 4.3 Regional Planning Policy

#### *The London Plan (2021)*

4.3.1 The London Plan 2021 was formally published by the Mayor on the 2nd March 2021 and comes into force from that date.

4.3.2 The London Plan is the overall strategic plan for London, which sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years. It also contains specific planning and development standards within which local authority standards should ‘nest’.

4.3.3 The new London Plan is different to those that have gone before it. It is more ambitious and focused than any previous Plans. The concept of Good Growth – growth that is socially and economically inclusive and environmentally sustainable – underpins the Plan and ensures that it is focused on sustainable development.

4.3.4 On transport in planning, the London Plan states:

*“Making the best use of land means directing growth towards the most accessible and well-connected places, making the most efficient use of the existing and future public transport, walking and cycling networks. Integrating land use and transport in this way is essential not only to achieving the Mayor’s target for 80 per cent of all journeys to be made by walking, cycling and public transport, but also to creating vibrant and active places and ensuring a compact and well-functioning city.”*

4.3.5 It goes on to emphasise that:

*“Convenient transport connections and street, rail and waterway networks that allow the efficient movement of goods and people are also vital, alongside the schools, healthcare facilities and other amenities that employees need to be healthy and productive.”*

4.3.6 Policy T4 sets out the strategy for assessing and mitigating transport impacts of developments, this is done so through six overarching principles;

*‘A - Development Plans and development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity.*

*B - When required in accordance with national or local guidance, transport assessments/statements should be submitted with development proposals to ensure that any impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel Plans, Parking Design and Management Plans, Construction Logistics Plans and Delivery and Servicing Plans will be required in accordance with relevant Transport for London guidance.*

*C - Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities and highways improvements or through financial contributions, will be required to address any adverse transport impacts that are identified.*

*D - Where the ability to absorb increased travel demand through active travel modes has been exhausted, existing public transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans and funding exist for an increase in capacity to cater for the increased demand, planning permission will be contingent on the provision of necessary public transport and active travel infrastructure.*

*E - The cumulative impacts of development on public transport and the road network capacity including walking and cycling, as well as associated effects on public health, should be taken into account and mitigated; and*

*F - Development proposals should not increase road danger.'*

4.3.7 In Chapter 10, Transport, the London Plan's Policy T1B sets the tone for the chapter by stating:

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

4.3.8 On cycling, the London Plan's Policy T5 sets out cycle-related expectations for development proposals in London and are therefore relevant for this TS. It is quoted below:

*"A Development Plans and development proposals should help remove barriers to cycling and create a healthy environment in which people choose to cycle. This will be achieved through:*

- Supporting the delivery of a London-wide network of cycle routes, with new routes and improved infrastructure.*
- Securing the provision of appropriate levels of cycle parking which should be fit for purpose, secure and well-located. Developments should provide cycle parking at least in accordance with the minimum standards set out in Table 10.2 and Figure 10.2, ensuring that a minimum of two short-stay and two long-stay cycle parking spaces are provided where the application of the minimum standards would result in a lower provision.*

*B Cycle parking should be designed and laid out in accordance with the guidance contained in the London Cycling Design Standards. Development proposals should demonstrate how cycle parking facilities will cater for larger cycles, including adapted cycles for disabled people.*

4.3.9 *C Development Plans requiring more generous provision of cycle parking based on local evidence will be supported.”*

#### **4.4 Local Planning Policy**

*LBRuT Local Plan (2018)*

4.4.1 *The Local Plan was adopted in July 2018 and sets out the strategic planning framework for the borough over the next 15 years. The following transport policies are deemed pertinent to the development proposals:*

4.4.2 **Policy LP 44 – Sustainable Transport Policies:** The council will:

- Encourage high trip generating developments in areas served by good public transport with sufficient capacity or which are capable of supporting improvements to provide good public transport accessibility and capacity, taking account of local character and context
- Ensure new developments are designed to maximise permeability within and to the immediate vicinity of the site through the provision of safe and convenient walking and cycling routes, and to provide opportunities for walking and cycling, including through the provision of links and enhancements to existing networks.
- Ensure that major new developments maximise opportunities to provide safe and convenient access to public transport services. Proposals will be expected to support improvements to existing services and infrastructure where no capacity currently exists or is planned to be provided.
- Ensure that new development does not have a severe impact on the operation, safety or accessibility to the local or strategic highway networks. Any impacts on the local or strategic highway networks, arising from the development itself or the cumulative effects of development, including in relation to on-street parking, should be mitigated through the provision of, or contributions towards, necessary and relevant transport improvements.

4.4.3 **Policy LP 45 – Parking standards and servicing:** The Council will require new development to make provision for the accommodation of vehicles in order to provide for the needs of the development while minimising the impact of car-based travel including on the operation of the road network and local environment, and ensuring making the best use of land. It will achieve this by:

- Requiring new development to provide for car, cycle, 2 wheel and, where applicable, lorry parking and electric vehicle charging points, in accordance with the standards set out in Appendix 3. Opportunities to minimise car parking through its shared use will be encouraged.



- Resisting the provision of front garden car parking unless it can be demonstrated that:
  - there would be no material impact on road or pedestrian safety;
  - there would be no harmful impact on the character of the area, including the streetscape or setting of the property, in line with the policies on Local Character and Design; and
  - the existing on-street demand is less than available capacity.
- New major development which involves freight movements and has servicing needs will be required to demonstrate through the submission of a Delivery and Servicing Plan and Construction and Logistics Plan that it creates no severe impacts on the efficient and safe operation of the road network and no material harm to the living conditions of nearby residents.

*Refuse and Recycling Storage and Access Requirements for New Developments Supplementary Planning Document (RRSR) (December 2022)*

- 4.4.4 The RBuT RRSR sets out the necessity for sites to have adequate refuse and recycling waste storage on site as it must not be stored on the public highway. The St Clare Business Park is a mixed-use site, and thus, residential, and commercial storage should be separated.
- 4.4.5 Residential refuse, dry recycling, food waste and bulky waste storage capacity is detailed according to each dwelling with a number of bedrooms. All developments producing commercial or industrial waste must provide adequate space to store the total weekly volume of solid waste likely to arise between collections, including suitable space to enable occupants to recycle.

## 5.0 Accessibility

### 5.1 Introduction

5.1.1 A key element of national, regional and local policy is to ensure that developments are located in areas where alternative methods of travel are available. Developments should be located close to complementary land uses. This supports the aims of integrating planning and transport, providing more sustainable transport choices reducing overall travel and car use.

5.1.2 The results for each mode are discussed independently within the subsequent sections of this report and are based on the following criteria.

- Accessibility by foot - assumes a typical walk threshold of 2km, as advocated within IHT Guidance entitled 'Planning for Journeys on Foot'.
- Accessibility by bike - assumes the industry accepted threshold of 5km.
- Accessibility by public transport - is calculated on the basis of those public transport services that are available from the site

### 5.2 Pedestrian Accessibility

5.2.1 The Chartered Institution of Highways and Transportation (CIHT) document entitled 'Providing for Journeys on Foot' suggests walking distances which are relevant to this planning application. These are reproduced in Table 5.1.

**Table 5.1 – CIHT Recommended Walking Distances**

CIHT Classification	Town Centres (m)	Commuting/School/Sightseeing (m)	Elsewhere/Local Services (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

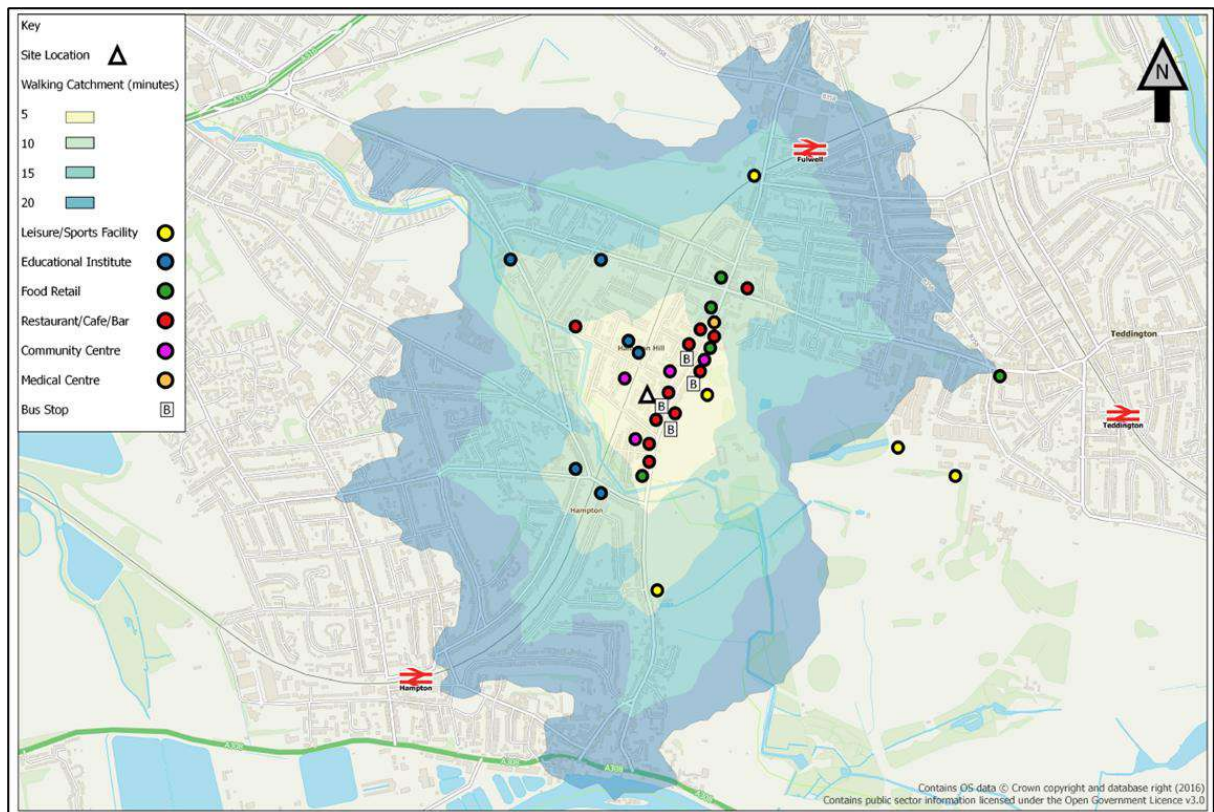
5.2.2 To assist in summarising the accessibility of the site by foot, Table 5.1 presents a selection of key destinations in the context of these recommended walking distances. Figure 14 shows the catchment areas in the context of walking times, between 5 - 20 minutes from the site. The full drawing is provided in Appendix D.

**Table 5.2 – Destinations and Distance from the Site Local Attractions**

Destination	Distance	Classification
Hampton Hill High Street	100m	Desirable
Greenwood Community Centre	130m	Desirable

Hampton Pool	940m	Acceptable
Teddington Health and Social Care Centre Hospital	1.5m	Preferred Maximum
Hampton Hill Medical Centre	370m	Desirable
Hampton Hill Junior School	120m	Desirable
Waldegrave Secondary School	1.7km	Preferred Maximum

Figure 5.1 – Walking Catchment from site in minutes with key facilities



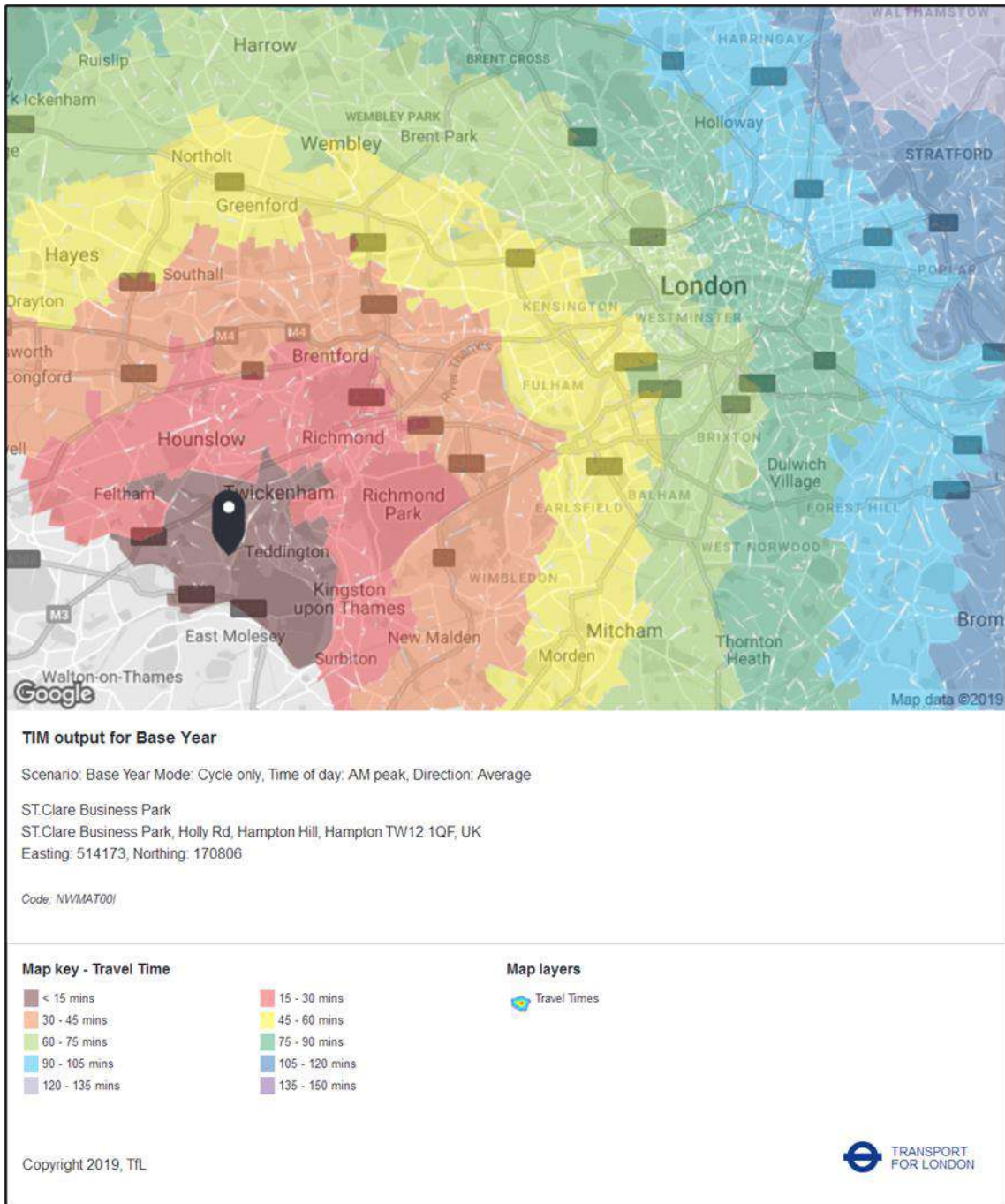
5.2.3 **Figure 5.1** demonstrates that Teddington and Hampton are all accessible within a 20 minute walk from the site. There are also numerous retail, leisure, education and healthcare facilities located in close proximity to the site.

### 5.3 Existing Cycle Accessibility

5.3.1 Section 2 demonstrated that the site is located near to a number of local cycle routes.

5.3.2 TfL Time Mapping (TIMs) tool has been used to illustrate the cycling accessibility to and from the site, which is presented in **Figure 5.2**. This tool only considers areas within Greater London.

Figure 5.2 - Cycle Isochrones



5.3.3 **Figure 5.2** illustrates that Twickenham, Teddington and Feltham are all accessible within a 15 minute cycle ride, whilst Hounslow, Brentford, Kingston Upon Thames and Surbiton are between a 15 and 30 minute cycle.

## 5.4 Access to Local Amenities

**Table 5.3 - Amenities within 500m of Destination**

Amenity	Number within 500m of Site
Grocery Stores / Food Retail	2
Community Centre	1
Healthcare	2
Schools	2
Pharmacy	1
Cash Point	1
Post Office / Post Box	1

### *Accessibility to Food Outlets*

- 5.4.1 Hampton Hill Local is located 100m north of the site. The site is located approximately 430m south of Sainsbury's Local. These food outlets are easily accessible from the site within 10 mins walk from the proposed development.

### *Accessibility to Recreation Facilities*

- 5.4.2 The closest recreational service to the site is Yoga TW12 approximately 320m north of the site. Hampton Hill Cricket Club is located approximately 455m north of the site.
- 5.4.3 Bushy Park is located very close to the site at the end of Holly Road. Norman Jackson Children's Centre is located to the north, along Windmill Road. The facility also borders Greenwood Community Centre. A United Reformed Church lies south of the site along High St. Allotments are located a 5-minute walk to the south along High Street.
- 5.4.4 The site is also located in close proximity to Hampton Hill High St, which offers several retail and restaurant services very close to the site.

### *Accessibility to Health Services*

- 5.4.5 Health on the Hill pharmacy is located approximately 200m north-east of site which is within the desirable recommended walking distance. Bupa Dental Care is located approximately 300m north-east of the site. These services are located in reasonable walking distance of the site for use by future residents.
- 5.4.6 Hampton Hill High Street offers a Medical Centre, a Dental Clinic and a Chiropodist within a 5-minute walk. Teddington Health and Social Care Centre Hospital Unit is located 1.5km to the east.

#### *Accessibility to Schools*

- 5.4.7 Hampton Hill Junior School is located 120m to the north of the site, whilst a nursery is located on the High Street. Clarendon School (10 minutes westward) offers teaching for those with learning difficulties.
- 5.4.8 There are two secondary schools within a 25-minute walk from the site: Waldegrave and Turing House.

#### *Accessibility to Community Facilities*

- 5.4.9 Greenwood Community Centre is located approximately 215m north-west of the site. This is accessible within a 5-minute walk of the site.

#### *Accessibility to Green Space*

- 5.4.10 Bushy Park is located approximately 110m east of the site. It is the second largest of the London's Royal Parks. The green space is approximately a 2-minute walk from the site.

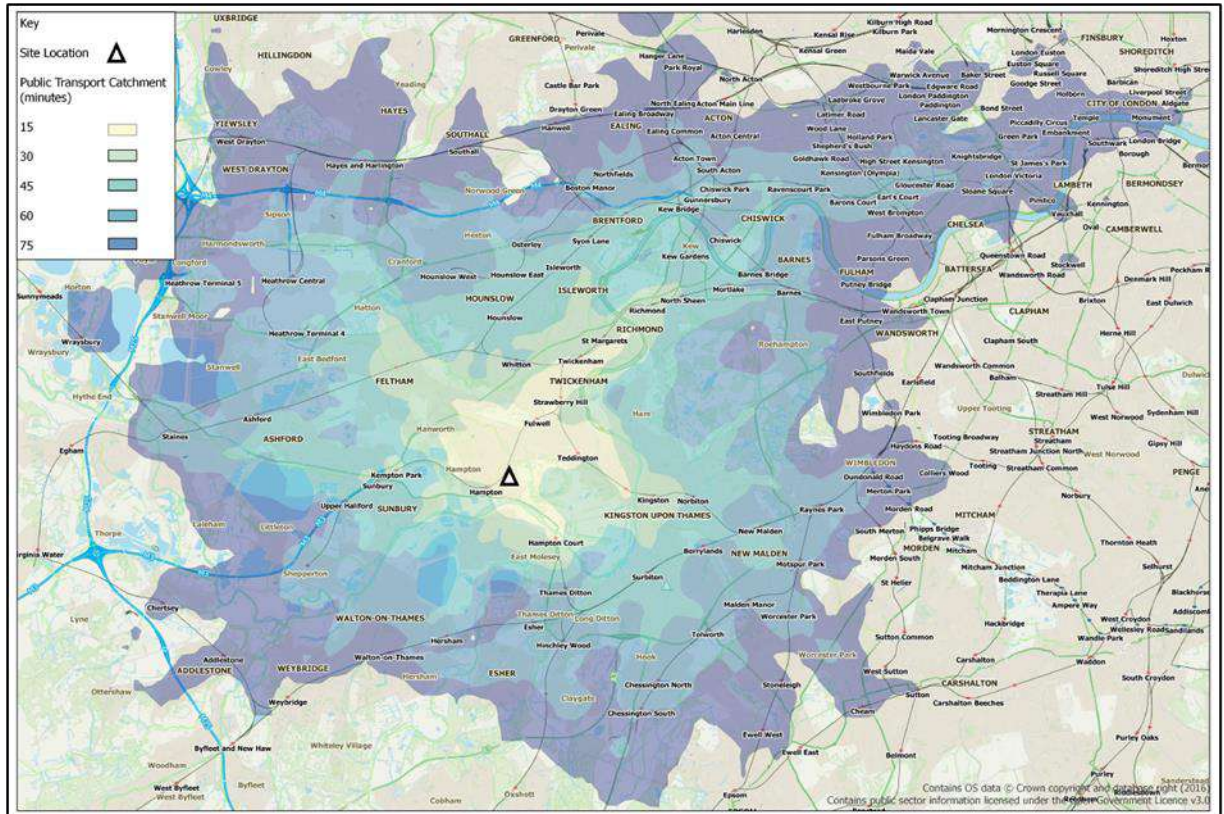
#### *Accessibility to Employment Opportunities*

- 5.4.11 The site has good accessibility to employment areas. Central Twickenham can be accessed within an 11-minute cycle ride; while Kingston can be accessed in 20 minutes through Bushy Park. South Western Railway provide a service to London Waterloo from the nearby Fulwell Railway Station which takes approximately 40 minutes.

## **5.5 Public Transport Accessibility**

- 5.5.1 The TfL TIMs tool only considers destinations within Greater London; however the site is located near the border of Surrey. Therefore, a separate time catchment map has been developed (from **Appendix D**) for public transport and is shown below in **Figure 5.3**.

Figure 5.3 – Public Transport Catchment from site



5.5.2 **Figure 5.3** illustrates that Wimbledon, Barnes and Chiswick are all located within an hour commute of the site, with sections of Central London including parts of City of London are accessible within 75 minutes.

## 5.6 Accessibility Summary

5.6.1 The site is easily accessible by sustainable modes of transport as the surrounding area exhibits good levels of pedestrian and cycling infrastructure. The site has good accessibility to local amenities due to its proximity to High Street and central Hampton Hill and acceptable accessibility to Central London through a direct rail service.

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## 6.0 Trip Generation

### 6.1 Introduction

6.1.1 This section of the report outlines the anticipated level of trip generation associated with the proposed development, compared to existing consented operations at the site.

### 6.2 Existing Site

6.2.1 The site is currently occupied by St Clare Business Park (made up of office and industrial warehouse units measuring circa 2,730m<sup>2</sup> GIA) and a car wash / vehicle showroom measuring approximately 412m<sup>2</sup> GIA.

6.2.2 Whilst only part occupied, the site has permission to operate at capacity. Therefore, a trip generation exercise has been undertaken to calculate the trip generating characteristics of the existing site if operating at full capacity and the likely trip generation that is likely to be legally permissible in its current form.

6.2.3 It is likely, that due to the industrial nature of the site, the trips generated are predominantly vehicular. Therefore, only vehicular trip rates have been considered for the existing uses.

6.2.4 The TRICS database has been interrogated to obtain vehicular trip rates from relevant, similar size business parks and car showrooms, sites with PTAL above 3 have been discounted. For robustness, it has been assumed that all trips to the car showroom occur outside of the peak network hours.

6.2.5 These trip rates have been applied to the existing land use quantum outlined above. **Table 6.1** illustrates the trip rates used and resultant trip generation, whilst a copy of the TRICs output is included in **Appendix E**.



**Table 6.1 - Existing vehicular trip rates and trip generation**

	AM (08:00 – 09:00)		PM (17:00 – 18:00)	
	arr	dep	arr	dep
Business Park (per 100m <sup>2</sup> GFA)	0.562	0.259	0.173	0.719
Car Showroom (per 100m <sup>2</sup> GFA)	0	0	0	0
Business Park (2,730m <sup>2</sup> )	15	7	5	20
Car Showroom (412m <sup>2</sup> )	0	0	0	0
<b>Total Existing Vehicular Trip Generation</b>	<b>20</b>	<b>8</b>	<b>8</b>	<b>25</b>

### 6.3 Proposed Development

#### *Residential*

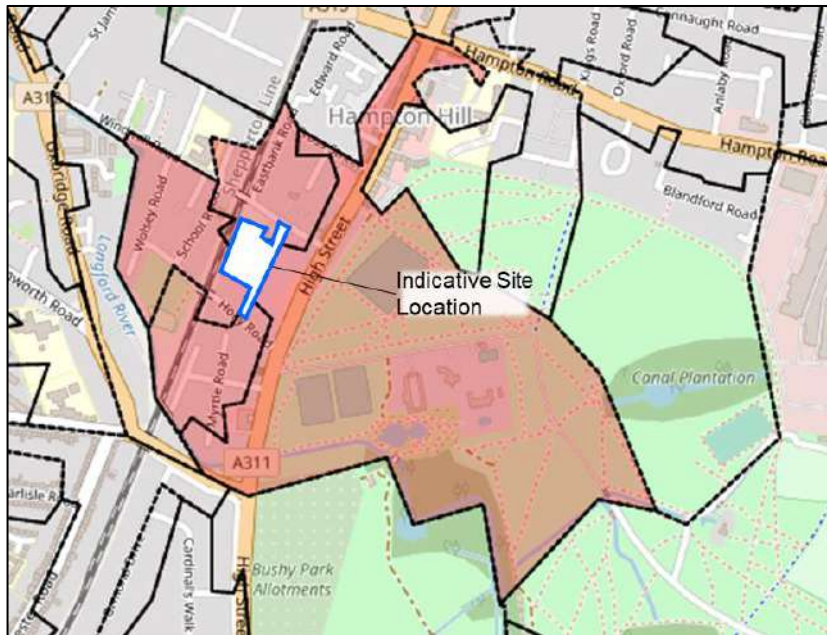
6.3.1 The TRICS database has been interrogated to obtain an all person trip rates from relevant, similar residential developments. Sites with a PTAL above 3 have been discounted. These trip rates have been applied to the number of dwellings proposed. **Table 6.2** illustrates the trip rates used and resultant trip generation.

**Table 6.2 – Residential -All person trip rates and trip generation – (100 units)**

	AM (08:00 – 09:00)		PM (17:00 – 18:00)	
	arrival	departure	arrival	departure
Person Trip rates per unit	0.116	0.473	0.291	0.19
Person Trips (100 units)	12	47	29	19

6.3.2 In order to establish a multi modal trip generation for the residential element of the site, ‘Method of Travel to Work’ (QS701EW) has been extracted from 2011 census data for residents living in the Output areas surrounding the site (E00019159, 160, 162, 163). **Figure 6.1** illustrates the area which the dataset covers. **Table 6.3** presents the mode share used for the longest leg of the journey.

**Figure 6.1 - Output Area (E00019159, 160, 162, 163)**



**Table 6.3 – Mode share split**

Residential	% Mode Share
Underground, metro, light rail, tram	7%
Train	17%
Bus, minibus or coach	9%
Taxi	0%
Motorcycle, scooter or moped	2%
Driving a car or van	41%
Passenger in a car or van	3%
Bicycle	9%
On foot	13%
Other	0%
<b>Total</b>	<b>100%</b>

6.3.3 **Table 6.3** illustrates that the highest proportion of residents will travel by car or van (41%), whilst 33% will utilise a form of public transport and 22% will travel by active modes. The percentage mode share set out in **Table 6.3** have been applied to the all-person trip generation set out in **Table 6.2**, the results are presented in **Table 6.4**.

**Table 6.4 - Multi modal trip generation (100 units)**

Mode of Transport	AM		PM	
	arrival	departure	arrival	departure
Underground, metro, light rail, tram	1	3	2	1
Train	2	8	5	3
Bus, minibus or coach	1	4	3	2
Taxi	0	0	0	0
Motorcycle, scooter or moped	0	1	1	0
Driving a car or van	5	19	12	8
Passenger in a car or van	0	1	1	1
Bicycle	1	4	3	2
On foot	1	6	4	2
Other	0	0	0	0
<b>Total</b>	<b>12</b>	<b>47</b>	<b>29</b>	<b>19</b>

### Employment

6.3.4 The proposed commercial space is flexible at this stage, therefore, to ensure a robust assessment, trip generation for B1 office use has been used. The TRICS database has been interrogated to obtain all person trip rates from relevant, similar B1 office units with PTAL above 3. Due to the limited selection of sites in the TRICS database, sites located in Surrey have been included in this assessment (Leatherhead and Guildford), along with those in Greater London, as it is seen that these still represent a realistic comparative being easily accessible within similar journey time from Central London.

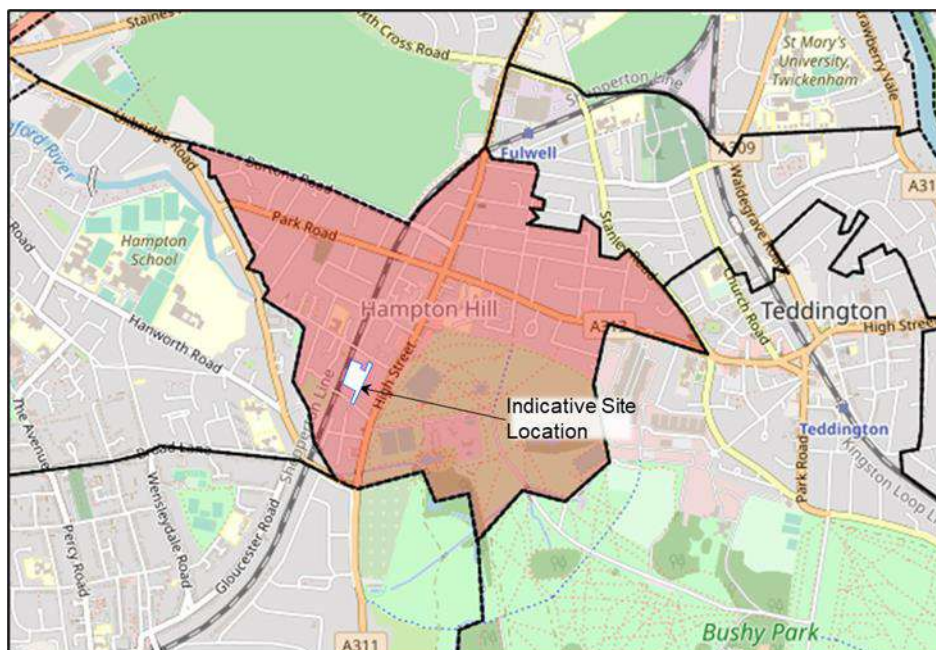
6.3.5 The trip rates and resultant trip generation are present in **Table 6.5**.

**Table 6.5 - Commercial -All person trip rates and trip generation – (1,885m<sup>2</sup>)**

	AM		PM	
	arrival	departure	arrival	departure
All person trip rates per unit	2.248	0.076	0.094	1.891
Person trips (2,065m <sup>2</sup> )	46	2	2	39

6.3.6 In order to establish a multi modal trip generation for the employment element of the site, 'Workday - Method of Travel to Work' (WD703EW) has been extracted from census data for people working in Super Output Area in which the site is located (E02000802: Richmond upon Thames 019), which is illustrated in **Figure 6.2**.

**Figure 6.2 – Super Output Area (E02000802: Richmond upon Thames 019)**



6.3.7 Due to the employment car parking provision (12 parking bays), the percentage of vehicles has been adjusted (from 56% to 44%) to account for this. The original and adjusted mode share used for the longest leg of the journey is presented in **Table 6.6**. The adjusted car mode share has been evenly distributed across the other modes of travel.

**Table 6.6 - Multi-modal trip generation - Employment**

Employment	% Mode Share	Adjusted % Mode Share
Underground, metro, light rail, tram	4%	5%
Train	8%	10%
Bus, minibus or coach	13%	17%
Taxi	0%	0%
Motorcycle, scooter or moped	2%	2%
Driving a car or van	56%	44%
Passenger in a car or van	3%	4%
Bicycle	4%	5%
On foot	9%	11%
Other	0%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>

6.3.1 **Table 6.6** illustrates that the majority of employees are expected to travel to work by car or van (44%), whilst 32% will travel by a form of public transport and 16% will travel by active modes.

6.3.2 The adjusted mode share set out in **Table 6.6** has been applied to the all-person trip generation set out in **Table 6.5**, the results are presented in **Table 6.7**.

**Table 6.7 - Multi modal trip generation (commercial)**

Mode of Travel	AM		PM	
	arrival	departure	arrival	departure
Underground, metro, light rail, tram	2	0	0	2
Train	4	0	0	4
Bus, minibus or coach	7	0	0	6
Taxi	0	0	0	0
Motorcycle, scooter or moped	1	0	0	1
Driving a car or van	19	1	1	16
Passenger in a car or van	2	0	0	2
Bicycle	2	0	0	2
On foot	5	0	0	4
Other	0	0	0	0
<b>Total</b>	<b>42</b>	<b>1</b>	<b>2</b>	<b>36</b>

*Total Trip Generation*

6.3.3 **Table 6.8** sets out the total multi modal trip generation for the site.

**Table 6.8 – Total multi modal trip generation (residential and commercial)**

TOTAL	AM		PM	
	arrival	departure	arrival	departure
Underground, metro, light rail, tram	3	3	2	3
Train	6	8	5	7
Bus, minibus or coach	8	4	3	8
Taxi	0	0	0	0
Motorcycle, scooter or moped	1	1	1	1
Driving a car or van	23	20	13	23
Passenger in a car or van	2	1	1	2
Bicycle	3	4	3	4
On foot	6	6	4	6
Other	0	0	0	0
<b>Total</b>	<b>54</b>	<b>49</b>	<b>31</b>	<b>55</b>

## 6.4 Net Trip Generation

6.4.1 The existing vehicular trip generation set out in **Table 6.5** has been subtracted from the total proposed multi modal trip generation set out in **Table 6.8**, to establish the net change in all person trips. The resultant net trip generation is set out in **Table 6.9**.

**Table 6.9 – Net Trip Generation**

Net Trip Generation	AM (08:00 – 09:00)		PM (17:00 – 18:00)	
	arrival	departure	arrival	departure
Underground, metro, light rail, tram	3	3	2	3
Train	6	8	5	7
Bus, minibus or coach	8	4	3	8
Taxi	0	0	0	0
Motorcycle, scooter or moped	1	1	1	1
Driving a car or van	3	11	5	-2
Passenger in a car or van	2	1	1	2
Bicycle	3	4	3	4
On foot	6	6	4	6
Other	0	0	0	0
<b>Total</b>	<b>34</b>	<b>40</b>	<b>23</b>	<b>29</b>

## 6.5 Delivery and Servicing

6.5.1 The number of servicing and delivery trips likely to be generated by each land use has been established by investigating a servicing database developed by Curtins. This database contains information on existing developments in Greater London and has been supplemented with data collected in the TRICS and TRAVL databases.

6.5.2 The predicted daily servicing/delivery trip rates are as follows:

- Residential dwellings: 0.22 vehicles per 100m<sup>2</sup> (10% Heavy Goods Vehicles (HGVs))
- Commercial units: 0.2 vehicles per 100m<sup>2</sup> (10% HGV)

6.5.3 Based on 1,885m<sup>2</sup> GIA of commercial space and circa 7,009m<sup>2</sup> GIA of residential dwellings, this will equate to 19 servicing vehicles per day (38 two-way movements). Of these 19 vehicles, four are expected to be HGVs.

6.5.4 All HGV vehicles will be required to utilise the Windmill Road access.

## 6.6 Summary

6.6.1 This section of the report demonstrates that the proposed development is predicted to result in an overall increase of 74 all person trips in the AM and 52 during the PM peak, based on the methodology above.

6.6.2 The development proposals are expected to result in a net increase of 16 vehicular trips during the AM peak and 5 during the PM peak.

- 
- 6.6.3 The development proposals are expected to generate 19 delivery and servicing vehicles across the day (38 trips). Of the 19 vehicles, four are expected to use HGVs.

## 7.0 Impact Assessment

### 7.1 Introduction

7.1.1 The section of the TA considers the effects of the trips resulting from the Proposed Development by all modes of transport.

### 7.2 Highway Impact

7.2.1 To understand the net change in vehicles using each access, the vehicular trip generation associated with the proposed development have been distributed across the two access points based on the proportion of car parking located in each section of the site.

7.2.2 At present all vehicular trips associated with the car wash / car showroom utilise Windmill Road, whilst those associated with the business park utilise the access on Holly Road.

7.2.3 In terms of the parking, 51 of the 96 are located in the southern section of the site and accessed via the Holly Road access, whilst the remaining 45 are located in the northern section of the site and accessed via the Windmill Road access.

7.2.4 Based on these proportions, the vehicular trip generation associated with the proposed development has been split across the two access points. **Table 7.1** presents the resultant existing and proposed trip generation by access. Please note that some figures may contain rounding errors.

**Table 7.1 - Private Vehicular Trip Distribution**

Private Vehicle Distribution	Holly Road Access				Windmill Road Access			
	AM		PM		AM		PM	
	arr	dep	arr	dep	arr	dep	arr	dep
Existing Business Park	16.0	8.0	5.0	20.0	0.0	0.0	0.0	0.0
Existing Car Showroom	0.0	0.0	0.0	0.0	5.0	2.0	3.0	6.0
Proposed Residential Dwellings	3.0	10.0	7.0	4.0	3.0	10.0	6.0	4.0
Proposed Commercial Units	14.0	1.0	1.0	11.0	6.0	1.0	1.0	5.0
<b>Net Change</b>	1.0	4.0	2.0	-5.0	4.0	9.0	4.0	3.0
<b>Net two change (two way)</b>	<b>4.0</b>		<b>-3.0</b>		<b>12.0</b>		<b>6.0</b>	

7.2.5 **Table 7.1** illustrates that the development proposals are expected to result in a net increase of 4 vehicles during the AM peak and an increase in -3.0 during PM peak via Holly Lane. The Windmill Road access is expected to experience an increase of 12 two-way movements during the AM peak and 6 during the PM peak.



7.2.6 This is not anticipated to result in a material effect on the surrounding highway network.

### 7.3 Parking Beat Survey

7.3.1 The removal of one car parking bay on Windmill Road is not expected to present any car parking pressures or highways issues on Windmill Road.

7.3.2 The results of the car parking beat survey indicate that there is spare capacity for car parking along the carriageway, in particular at peak hours of on-street car parking usage. The utilisation of car parking spaces along Windmill Road ranges between 30%-93%. Details are provided in **Appendix A**.

### 7.4 Public Transport Accessibility

7.4.1 Given the location of the nearest Railway Station, it is anticipated that the majority of those using London Underground and rail services will travel by bus or cycle for the first leg of the journey.

7.4.2 The net impact of the development on the public transport network is set out in **Table 7.2**.

**Table 7.2 - Public Transport Trip Impact**

Public Transport Impact	AM (08:00 – 09:00)		PM (17:00 – 18:00)	
	arr	dep	arr	dep
Bus, minibus or coach	8	4	3	8
Underground, metro, light rail, tram	3	3	2	3
Train	6	8	5	7
<b>Total</b>	<b>17</b>	<b>16</b>	<b>10</b>	<b>18</b>

7.4.3 For robustness, it is assumed that all rail and underground trips utilise the bus as the first leg of their journey. Therefore, it is anticipated that the development proposals will result in an increase of 32 additional passengers in the AM peak and 28 during the PM peak.

7.4.4 Approximately 32 services are provided in the AM and PM peak. This equates to less than one additional passenger per service, a negligible change.

7.4.5 Given the low number of additional passengers expected the impact on the surrounding public transport capacity is expected to be minimal.

### 7.5 Walking Impact

7.5.1 In addition to solely pedestrian, it is anticipated that those using bus services (including those travelling onwards to rail and London Underground services) will walk to bus stops / stations first. Based on this assumption, the development is expected to generate 46 additional pedestrian movements during the

AM peak and 34 during the PM peak. This is the equivalent of one additional person every one to two minutes in the AM and PM peak respectively.

7.5.2 There is good pedestrian infrastructure in the vicinity of the site, in particular along the High Street, therefore this is expected to have a minimal impact.

## **7.6 Cycling Impact**

7.6.1 The development is expected to result in an increase of eight cyclists during the AM peak and six during the PM. It is also acknowledged that some people travelling to the rail station may also cycle as the first leg of their journey. However, across an hour, this is considered a nominal amount.

7.6.2 There are a number of cycle routes in the vicinity of the site, in particular the High Street features a wide carriageway to facilitate cycle movements, therefore this is expected to have a minimal impact.

## **7.7 Summary**

7.7.1 The development proposals are expected to result in a net decrease in vehicle using Holly Road, and a negligible increase in vehicles using Windmill Road when compared to the existing site.

7.7.2 In terms of sustainable modes of transport, it is assumed that those using rail or London Underground services will either take the bus or cycle to stations first. Those using the bus are presumed to walk to bus stops first. This will result in a net increase in people walking and cycling, however good cycle and pedestrian infrastructure is provided and therefore the impact is expected to be negligible.

## 8.0 Summary and Conclusion

### 8.1 Summary

- 8.1.1 Curtins has been appointed on behalf of Notting Hill Home Ownership Ltd (NHHO) to provide traffic and transportation advice in relation to the redevelopment of the St Clare Business Park and the adjoining commercial premises located in Hampton Hill, within the LBRuT. This TA has assessed the transport and highway implications of the development proposals.
- 8.1.2 A detailed review of existing transport conditions in the vicinity of the site is presented in Chapter Two. The review demonstrates that there is good pedestrian and cycle infrastructure in the surrounding area. Various sustainable modes of transport are accessible including bus, train and London Underground Stations.
- 8.1.3 The development proposals include the demolition of the existing buildings located on site and the construction of 100 new residential units including 14 houses and 86 apartments of varying tenure and 1,885m<sup>2</sup> of commercial space.
- 8.1.4 The site will be accessed via two points; the first from Windmill Road and the second via the existing Holly Road access. Windmill Road will provide access to the northern section of the site, seven houses, the commercial space and associated parking. The access on Holly Road will be used as a secondary access and will be used to access the undercroft car park, seven houses and associated parking.
- 8.1.5 A total of 96 car parking bays will be provided across the site, including seven disabled bays. 83 of the spaces will be allocated to the residential units, and 12 spaces for the commercial units. 1 car club bay is also proposed.
- 8.1.6 Travel planning measures will be used to encourage staff to travel by active travel, public transport and car sharing. The level of car parking available at the development will be clearly communicated to employees and tenant companies prior to occupation.
- 8.1.7 For the residential units 152 long stay cycle spaces will be provided, with eight catering for accessible cycles. Six short stay spaces will be provided for the residential units within the public realm. Cycle parking for the 14 houses will be provided within the curtilage of the dwelling (two cycles per home).
- 8.1.8 For the commercial element a total of 57 spaces will be provided including 12 long-stay spaces and 45 short-stay spaces.
- 8.1.9 All delivery and servicing activity will be undertaken within the site using designated loading bays. The development proposals are expected to generate 19 servicing vehicles across the day (38 two-way movements). Of the 19 vehicles, four are expected to be HGVs, all of which will be required to use the Windmill Road access.

- 8.1.10 The planning policy context relating to the development proposals is outlined in Section Two of this report. Having reviewed the relevant transport policy, it is considered that the development proposals conform with National, London and Local wide policy.
- 8.1.11 The site is accessible by sustainable modes of transport as the surrounding area exhibits good levels of pedestrian and cycling infrastructure. The site has good accessibility to local amenities due to its proximity to High Street and central Hampton Hill; and acceptable accessibility to Central London through a direct rail service.
- 8.1.12 The development proposals are expected to result in a negligible changes in total two-way vehicle flows during peak periods when compared to what the site could generate under its existing permission. This is not anticipated to result in a material effect on the surrounding road network.
- 8.1.13 In terms of sustainable modes of transport, those using the bus are expected to walk to surrounding bus stops whilst those using rail and London Underground services are expected to cycle. This will result in a net increase in people walking and cycling, however good cycle and pedestrian infrastructure is provided and therefore the impact is expected to be negligible.

## **8.2 Conclusion**

- 8.2.1 The Proposed Development is considered to be in accordance with the national, regional and local development policies.
- 8.2.2 This document has demonstrated that the Proposed Development will not have a significant adverse impact on the operation of the highway, public transport or pedestrian and cycle networks in the vicinity of the site.

## 9.0 Appendices

### Appendix A – Car parking beat survey results (2022)

9.1.1 In order to ascertain the existing parking capacity on the highway network surrounding the site, car parking beat surveys were undertaken in 2017, followed by repeated surveys in 2020 and 2022 in line with the methodology adopted by LBRuT. Following discussions with LBRuT, it was confirmed that the following surveys were deemed suitable for a development of this type and size:

- Tuesday 10th May: one beat survey between 0:30 and 05:30 and hourly beat survey between 07:00 and 19:00.
- Wednesday 11th May: one beat survey between 0:30 – 05:30
- Sunday 8th May: one beat survey between 0:30 and 05:30

9.1.2 The survey was undertaken for a number of local road. The extents of the survey undertaken which includes Windmill Road, School Road Avenue, Holly Road, Cross Street, Wolsey Road, St James Avenue and School Road.

9.1.3 The survey also included an inventory of car parking capacity on the surrounding highway network, which was then used to analyse the level of utilisation of parking. **Table 9.1** sets out the total level of parking capacity available on the surrounding highway network, broken down by road and parking type.

**Table 9.1 - Car Parking Inventory**

Street	Number of parking bays			
	Unrestricted Parking	Restricted	Disabled	Single yellow
A311 HIGH STREET	21	39	0	15
BROOKLANDS PLACE	0	0	2	0
CHELSEA CLOSE	4	16	1	0
CROSS STREET	0	28	0	0
EASTBANK ROAD	47	0	1	0
FITZ WYGRAM CLOSE	5	7	1	0
HOLLY ROAD	41	0	1	0
MYRTLE ROAD	65	0	2	0
PARK PLACE	33	0	0	0
SANDERS CLOSE	21	0	0	0
SCHOOL ROAD	13	6	1	0
SCHOOL ROAD AVE	17	0	0	0
ST JAMES'S AVE	73	0	0	0
VINCENT ROW	17	0	0	0
WESTBANK ROAD	27	0	0	0
WINDMILL ROAD	98	0	2	38
WOLSEY ROAD	77	0	0	0
<b>TOTAL</b>	<b>559</b>	<b>96</b>	<b>11</b>	<b>53</b>

*Tuesday 10<sup>th</sup> May 2022: 00:30 – 05:30*

9.1.4 A single beat survey was undertaken on Tuesday 10<sup>th</sup> May between 00:30 and 05:30, **Table 9.2** sets out the resultant percentage utilisation of the surrounding highway network.

**Table 9.2 – Tuesday 10<sup>th</sup> May single beat**

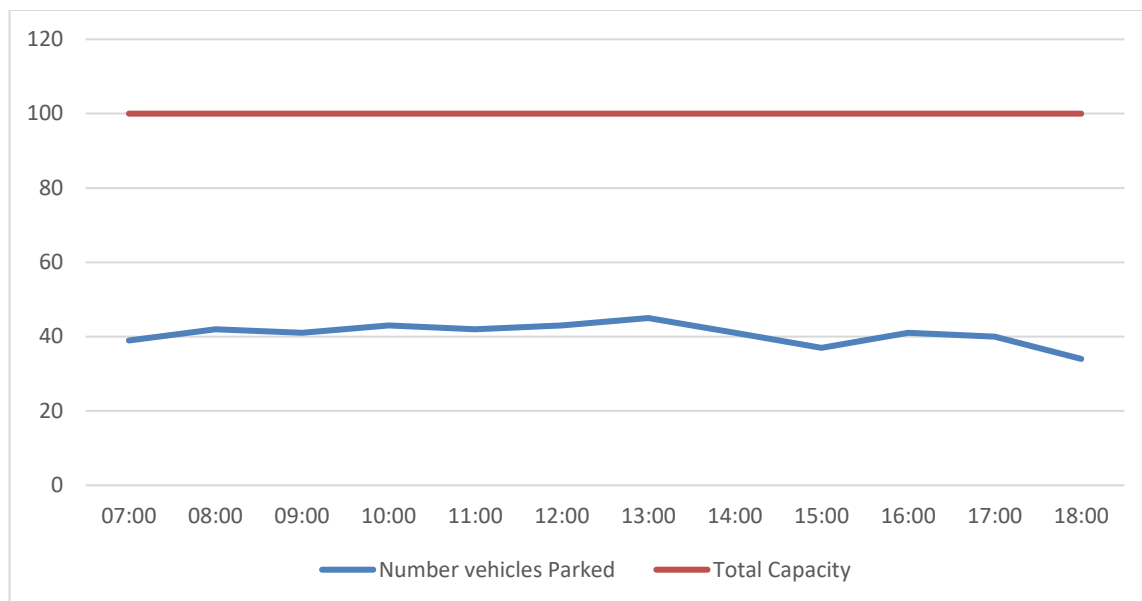
Street	Unrestricted Parking	Restricted	Disabled	Single yellow
A311 HIGH STREET	62%	79%		20%
BROOKLANDS PLACE				
CHELSEA CLOSE		114%		
CROSS STREET		93%		
EASTBANK ROAD	60%			
FITZ WYGRAM CLOSE	40%	29%	100%	
HOLY ROAD	88%			
MYRTLE ROAD	94%		50%	
PARK PLACE	106%			
SANDERS CLOSE	52%			
SCHOOL ROAD	85%	67%	100%	
SCHOOL ROAD AVE	94%			
ST JAMES'S AVE	53%			
VINCENT ROW	94%			
WESTBANK ROAD	67%			
WINDMILL ROAD	39%		50%	0%
WOLSEY ROAD	86%			
<b>TOTAL</b>	<b>70%</b>	<b>80%</b>	<b>45%</b>	<b>6%</b>

9.1.5 **Table 9.2** demonstrates that the parking available on the surrounding highway network exhibits high levels of utilisation (70%), with parking on Park Place and School Road Avenue reaching / exceeding capacity. Windmill Road and Holly Road, which bound the site show differing levels of utilisation. Windmill Road has a low level of utilisation (39%) and Holly Road has a high level of utilisation (88%). This shows that there is spare capacity for a number of cars on the two carriageways surrounding the site, notably Windmill Road.

*Tuesday 10<sup>th</sup> May 2022 – between 07:00 and 19:00*

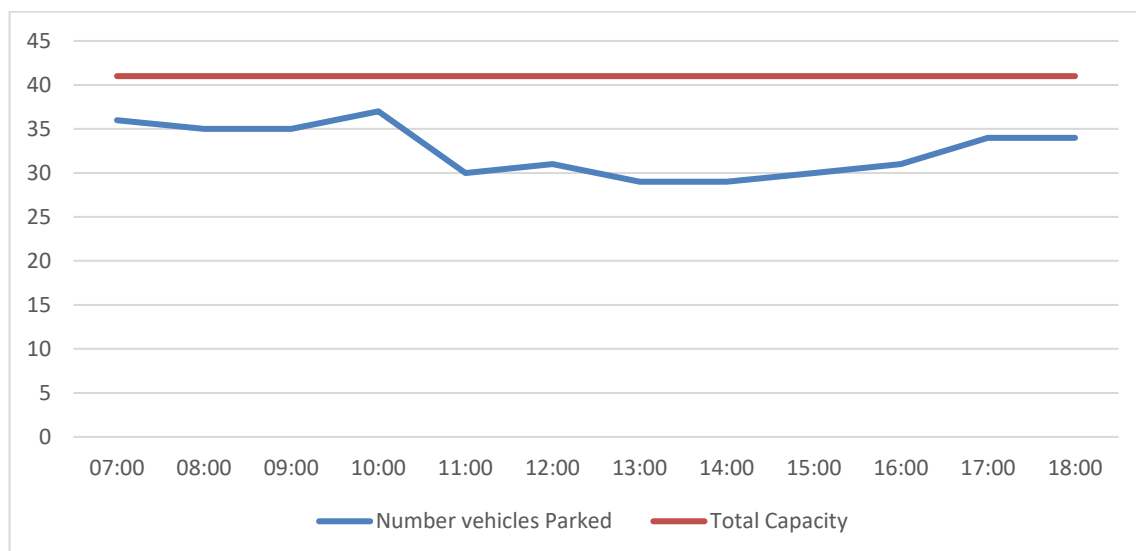
- 9.1.6 An hourly beat survey was undertaken on Tuesday 10<sup>th</sup> May between 07:00 and 19:00. The survey results show that the total level of utilisation varies between 63% (18:00) and 71% (10:00). Vincent Row, Park Place, Chelsea Close, and School Road reach or exceed total capacity at various points throughout the day. The capacity plans showing the location of vehicles parked during the peak hour (10:00) of this survey is included in Appendix F.
- 9.1.7 **Figure 9.2** and **9.3** illustrate the level of parking utilisation across the day exhibited on Windmill Road and Holly Road respectively.

**Figure 9.1 - Utilisation of parking on Windmill Road (10.05.22)**



9.1.8 **Figure 9.3** illustrates that parking on Windmill Road does not exceed capacity between 08:00 and 17:00.

**Figure 9.2 - Utilisation of parking on Holly Road (10.05.22)**



9.1.9 **Figure 9.3** illustrates that parking on Holly Road does not reach capacity, however parking is utilised between 71% and 90% throughout the day, with the highest level of parking observed at 10:00.

9.1.10 Higher levels of utilisation were observed on the High Street when compared to the night time surveys, with a high of 110% utilisation observed at 14:00.

*Wednesday 11<sup>th</sup> May 2022: 00:30 – 05:30*

9.1.11 A single beat survey was undertaken on Wednesday 11th May 2022: 00:30 – 05:30, **Table 9.3** sets out the resultant percentage utilisation of the surrounding highway network.

**Table 9.3 - Car parking utilisation: Wednesday 11th May 2022: 00:30 – 05:30**

Street	Unrestricted Parking	Restricted	Disabled	Single yellow
A311 HIGH STREET	67%			27%
BROOKLANDS PLACE				
CHELSEA CLOSE	0%	94%		
CROSS STREET		82%		
EASTBANK ROAD	45%			
FITZ WYGRAM CLOSE	20%	71%		
HOLY ROAD	93%			
MYRTLE ROAD	89%			
PARK PLACE	161%			
SANDERS CLOSE	105%			
SCHOOL ROAD	162%	100%	200%	
SCHOOL ROAD AVE	176%			
ST JAMES'S AVE	104%			
VINCENT ROW	129%			
WESTBANK ROAD	133%			
WINDMILL ROAD	80%		100%	0%
WOLSEY ROAD	170%			
<b>TOTAL</b>	<b>108%</b>	<b>91%</b>	<b>64%</b>	<b>8%</b>

9.1.12 **Table 9.3** demonstrates that the parking available on the surrounding highway network exhibits high levels of utilisation (108%), with parking on Park Place, School Road, School Road Avenue, St James Avenue, Vincent Row, Westbank Road and Wolsey Road exceeding capacity. Windmill Road and Holly Road, which bound the site also show high levels of utilisation (80% with 20 spare spaces and 93% with 3 spare spaces respectively), equating to capacity for two vehicles respectively.

*Sunday 8<sup>th</sup> May 2017: 00:30 – 05:30*

9.1.13 A single beat survey was undertaken on Sunday 3rd November between 00:30 and 05:30, Table 4 sets out the resultant percentage utilisation of the surrounding highway network.



**Table 9.4 - Car parking utilisation: Sunday 8<sup>th</sup> May single beat**

Street	Unrestricted Parking	Restricted	Disabled	Single yellow
A311 HIGH STREET	67%	59%		33%
BROOKLANDS PLACE			0%	
CHELSEA CLOSE	100%	56%	0%	
CROSS STREET		79%		
EASTBANK ROAD	57%		100%	
FITZ WYGRAM CLOSE	60%	43%	100%	
HOLY ROAD	95%		0%	
MYRTLE ROAD	89%		50%	
PARK PLACE	94%			
SANDERS CLOSE	43%			
SCHOOL ROAD	92%	50%	100%	
SCHOOL ROAD AVE	94%			
ST JAMES'S AVE	99%			
VINCENT ROW	235%			
WESTBANK ROAD	152%			
WINDMILL ROAD	93%		100%	0%
WOLSEY ROAD	219%			
<b>TOTAL</b>	<b>112%</b>	<b>75%</b>	<b>55%</b>	<b>9%</b>

9.1.14 Table 9.4 demonstrates that the parking available on the surrounding highway network exhibits high levels of utilisation (112%), with parking on School Road Avenue, Vincent Row and Wolsey Road exceeding capacity. Windmill Road and Holly Road, which bound the site also show high levels of utilisation however there is spare capacity available.

**Appendix B – Development Proposals**



**Notes**

1. Do not scale this drawing.
2. All dimensions must be checked on site and any discrepancies verified with the architect.
3. Unless shown otherwise, all dimensions are to structural surfaces.
4. Drawing to be read with all other issued information. Any discrepancies to be brought to the attention of the architect.
5. This drawing is the copyright of Levitt Bernstein and may not be copied, altered or reproduced in any form, or passed to a third party without license or written consent.

This is not a construction drawing, it is unsuitable for the purpose of construction and must on no account be used as such.

**Boundary of works**

**Existing railway fence**

**Railway line**

(+0.00) Existing levels  
+0.00 Proposed levels

**Hard surfaces:**

- H1: Asphalt with exposed natural aggregate, Eg Aggregate SuperColour Exposed
- H2: Pedestrian pavement, Flag paving with granite Diaggregate eg Charcon Andover washed 600x600, 300x300
- H3: Green-link parking court, E.g. Charcon Andover textured Inlita, Green 200x100x8mm Bands laid in different pattern.
- H4: Parking bays E.g. Woburn Rumbled Inlita, 200x100x80mm, colour: Rustic (permeable)
- H5: Garden terraces, concrete slab with aggregate eg Charcon Academy, 450x450x50mm
- H6: Podium, Resin bound gravel, permeable, for example Sunset
- H7: Play-safe surface, permeable
- H8: Set paving entrance mat - set paving 100x100x80mm eg Charcon Granite Sets
- H9: Tactile blister paving, 450x450x50mm, colour: grey

**FK** Flush Kerb, eg Charcon Granite kerb, 150mm wide, colour silver grey

**RK** Raised Kerb, eg Charcon Granite kerb, 150mm wide, colour silver grey

**PK** Pin Kerb, eg Charcon Granite kerb 50mm wide, colour silver grey

**DK** Drop Kerb, eg Charcon Granite kerb 150mm wide, colour silver grey

**BW-E** Existing wall retained

**BW-P** Brick wall, 2m tall (some variations in size refer to drawing)

**BF** Fencing 1.8m, FCS certified timber.

**BR** Railing 1.1m Hot-dip galvanised black flat bar railing

**G-E** Existing gates to be retained

**Site furniture**

- B Controlled bollard
- CS Cycle Stand
- B Benches and seats
- S House resident bicycle store, sliding door
- S House resident bin store
- Post lighting, indicative only
- Tree upright, indicative only

**Notes:**

- P4: Addition of bin and bicycle storage. Addition of stepped core access. Amended surface material examples, levels, parking arrangement, house frontages and garden arrangement.
- P5: Change in surface materials, asphalt and tracking revisions

P3	12-04-23	Issue for Planning	DL
P2	24-06-22	Issue for Planning	EM
P1	20-05-22	Design freeze issue	EM
Rev	Date	Description	Initials

Project name

## St Clare Business Park Landscape

Drawing number	Rev
3522 - LB - XX - 00 - DR - L - 200000	P3

### Landscape Masterplan

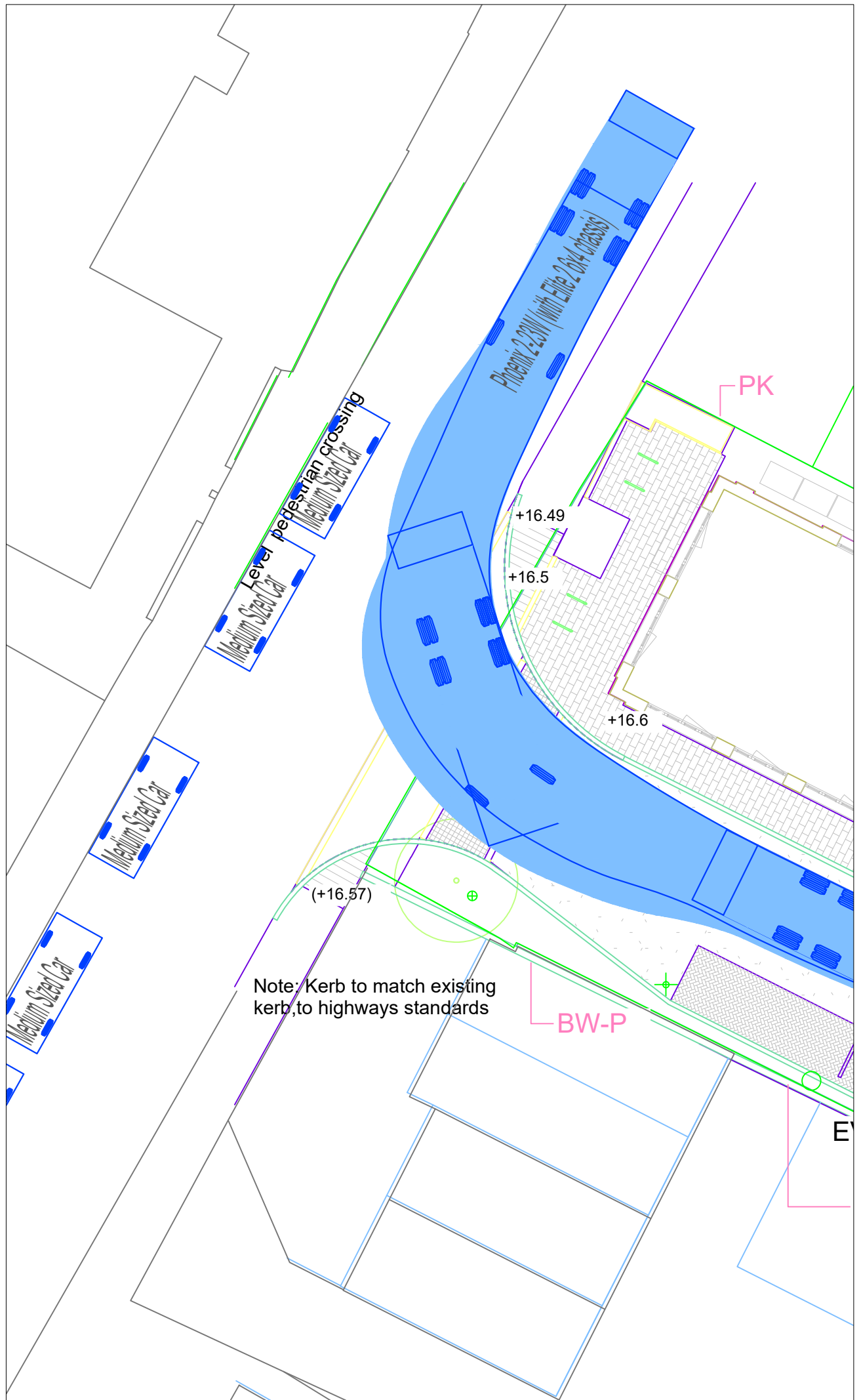
Purpose of issue	Date
For Planning	20/05/2022
Scale	Drawn
1 : 250 @ A1	SM
Client	Checked
Notting Hill Genesis	KD

**London**  
Thane Studios  
2-4 Thane Villas  
London N7 7PA  
+44 (0)20 7275 7676

**Manchester**  
Bonded Warehouse  
Grape Street  
Manchester M3 3JE  
+44 (0)16 1669 8740

**Levitt Bernstein**  
levittbernstein.co.uk

**Appendix C – Swept Path Analysis**



ENTRY



EXIT

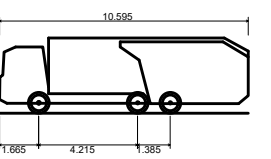
GENERAL NOTES

1. THE CONTENT OF THIS DRAWING IS FOR INDICATIVE INFORMATION ONLY AND NOT SUITABLE FOR CONSTRUCTION PURPOSES
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
3. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
4. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
5. FOR GENERAL NOTES REFER TO DRAWING.

KEY

FORWARD GEAR  
 REVERSE GEAR

VEHICLE PROFILE



Phoenix 2-23W (with Elite 2 6x4 chassis)	10.595m
Overall Length	2.530m
Overall Width	3.205m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.250m

P4	UPDATED LAYOUT	24/04/23	LM	BD
P3	UPDATED LAYOUT	17/03/23	LM	BD
P2	UPDATED LAYOUT	24/06/22	LM	BD
P1	INITIAL DRAFT ISSUE	10/05/22	EF	BD

Rev:	Description:	Date:	By:	Chkd:
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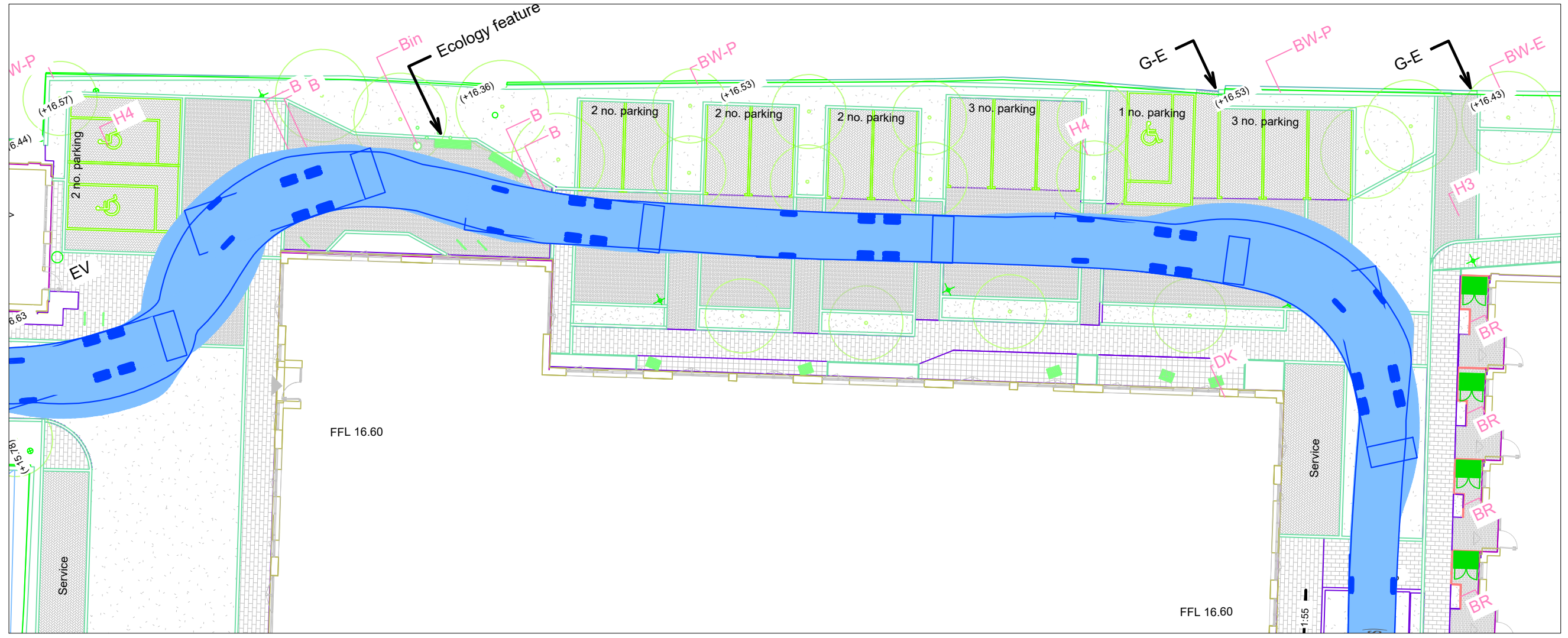
**Curtins**  
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Structures • Civils • Environmental Infrastructure • Transport Planning • Health & Safety • Dispute Resolution  
 Birmingham • Bristol • Cardiff • Douglas • Edinburgh • Kendal • Leeds • Liverpool • London • Manchester • Nottingham

INFORMATION

Project: **ST CLARE BUSINESS PARK**  
 Drg Title: **SWEPT PATH ANALYSIS  
 LARGE REFUSE VEHICLE  
 WINDMILL ROAD ACCESS**

Scale:	Size:	First Issue:	Drawn:	Checked:
NTS	A3	10/05/22	LM	BD

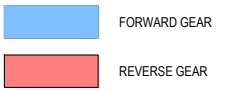
Drg No: **80212-CUR-00-XX-DR-TP-05001** Rev: **P4**



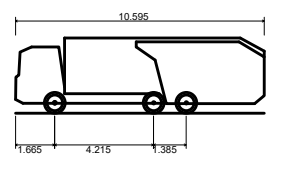
GENERAL NOTES

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- SOURCE: ???

KEY



VEHICLE PROFILE



Phoenix 2-23W (with Elite 2 6x4 chassis)	10.595m
Overall Length	2.530m
Overall Width	3.205m
Overall Body Height	0.410m
Min Body Ground Clearance	2.500m
Track Width	4.00s
Lock to lock time	9.250m
Kerb to Kerb Turning Radius	

P3	UPDATED LAYOUT.	24/04/23	LM	BD
P2	UPDATED LAYOUT.	17/03/23	LM	BD
P1	INITIAL DRAFT ISSUE.	24/06/22	LM	BD

Rev:	Description:	Date:	By:	Chkd:
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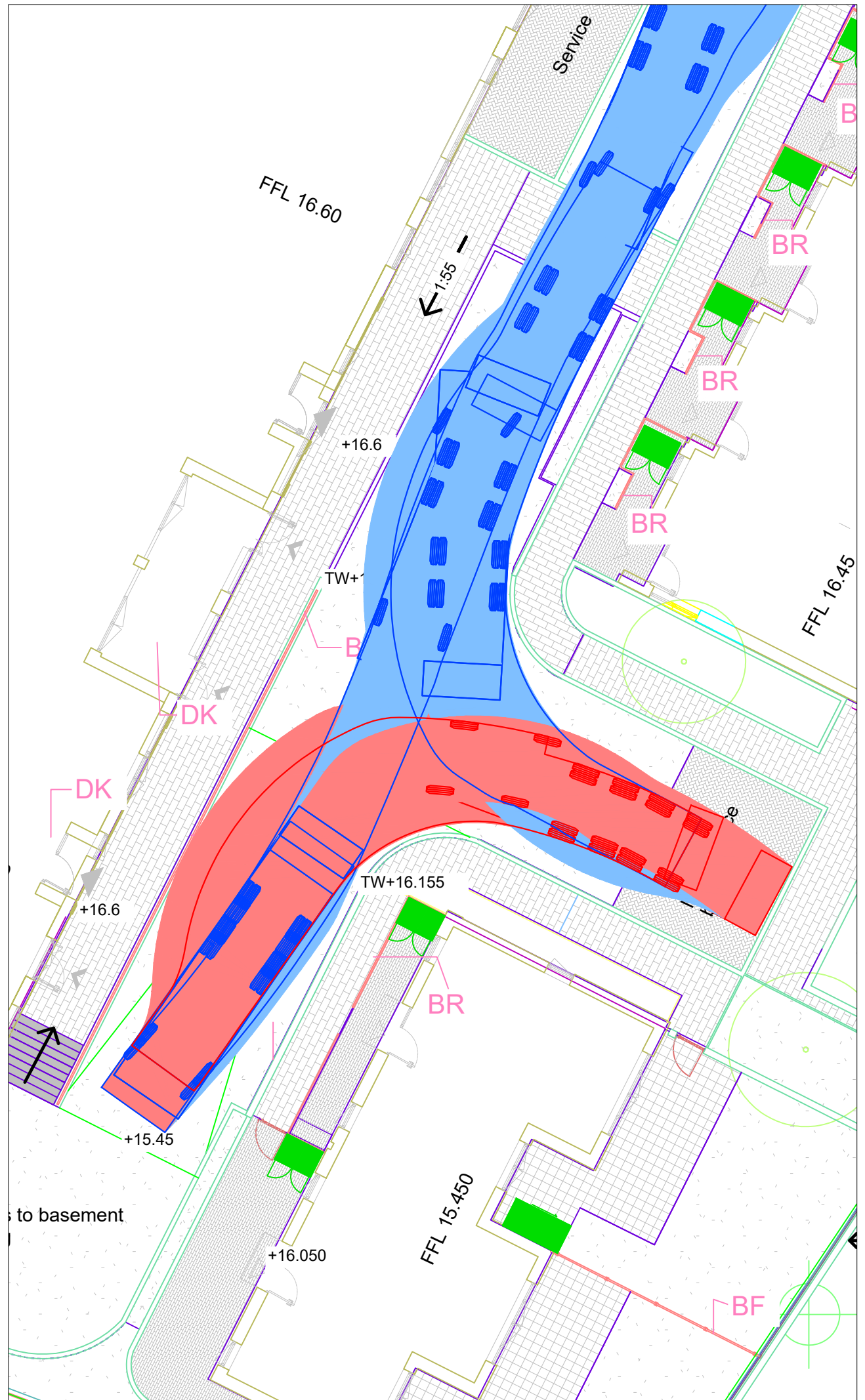
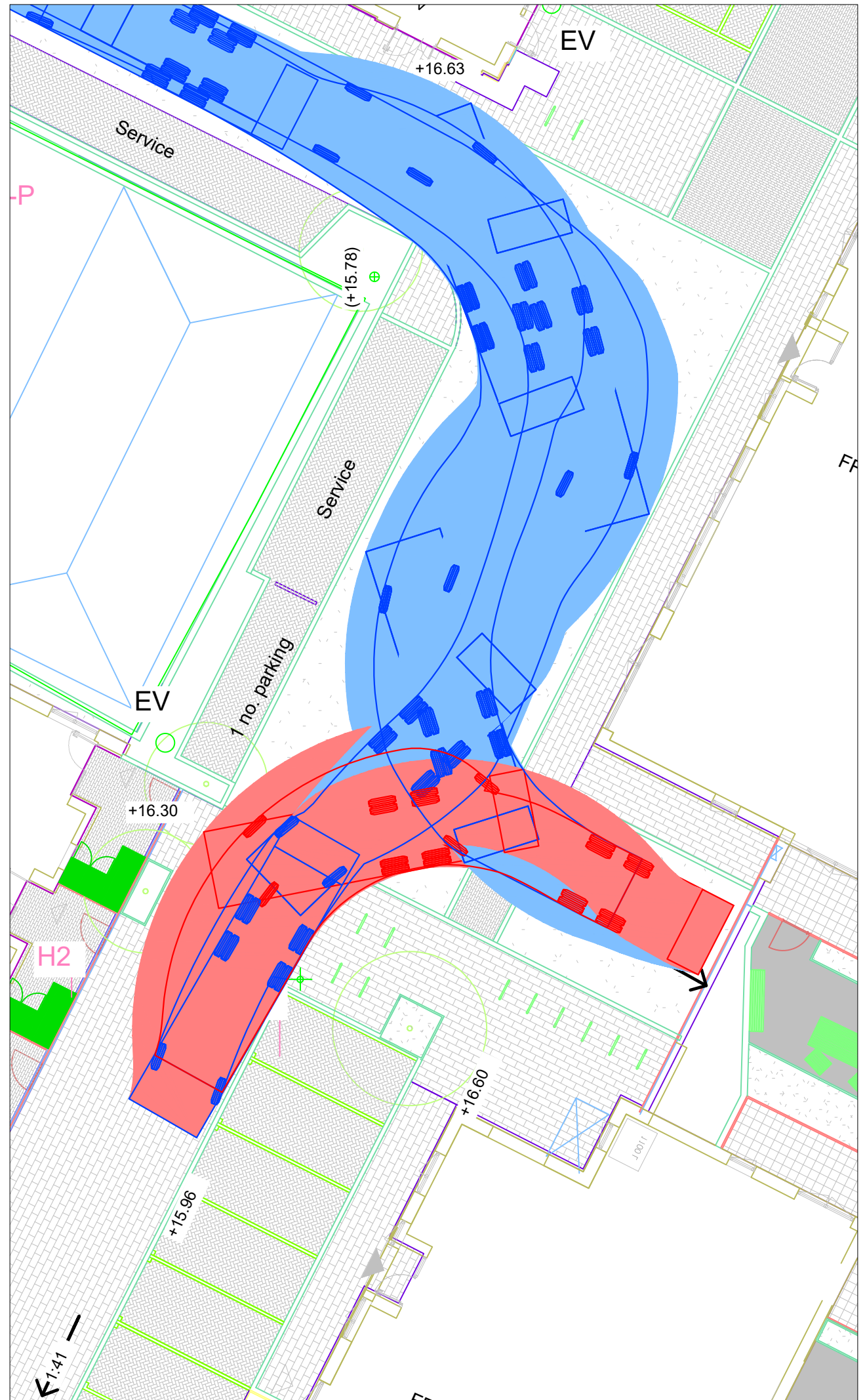
INFORMATION

Project: ST CLARE BUSINESS PARK

Org Title: SWEPT PATH ANALYSIS  
 LARGE REFUSE VEHICLE  
 SITE WIDE

Scale:	Size:	First Issue:	Drawn:	Checked:
NTS	A3	24/06/2022	LM	BD

Org No: 66642-CUR-00-XX-DR-TP-05003  
 Rev: P2



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  4. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
  5. FOR GENERAL NOTES REFER TO DRAWING.
- SOURCE: ???

### KEY

	FORWARD GEAR
	REVERSE GEAR

### VEHICLE PROFILE

Phoenix 2-23W (with Elite 2 6x4 chassis)	10.595m
Overall Length	2.530m
Overall Width	3.205m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.250m

P3	UPDATED LAYOUT	24/04/23	LM	BD
P2	UPDATED LAYOUT.	17/03/23	LM	BD
P1	INITIAL DRAFT ISSUE.	24/06/22	LM	BD
Rev:	Description:	Date:	By:	Chkd:

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### INFORMATION

Status: **ST CLARE BUSINESS PARK**

Project: **SWEPT PATH ANALYSIS  
LARGE REFUSE VEHICLE  
TURNING HEADS**


Scale:	Size:	First Issue:	Drawn:	Checked:
NTS	A3	24/06/22	LM	BD

Orig No: 80212-CUR-00-XX-DR-TP-05002 Rev: P3


**Appendix D – Accessibility Plans**





**Key**


Site Location 


Walking Catchment (minutes)


5 


10 


15 


20 


Leisure/Sports Facility 


Educational Institute 

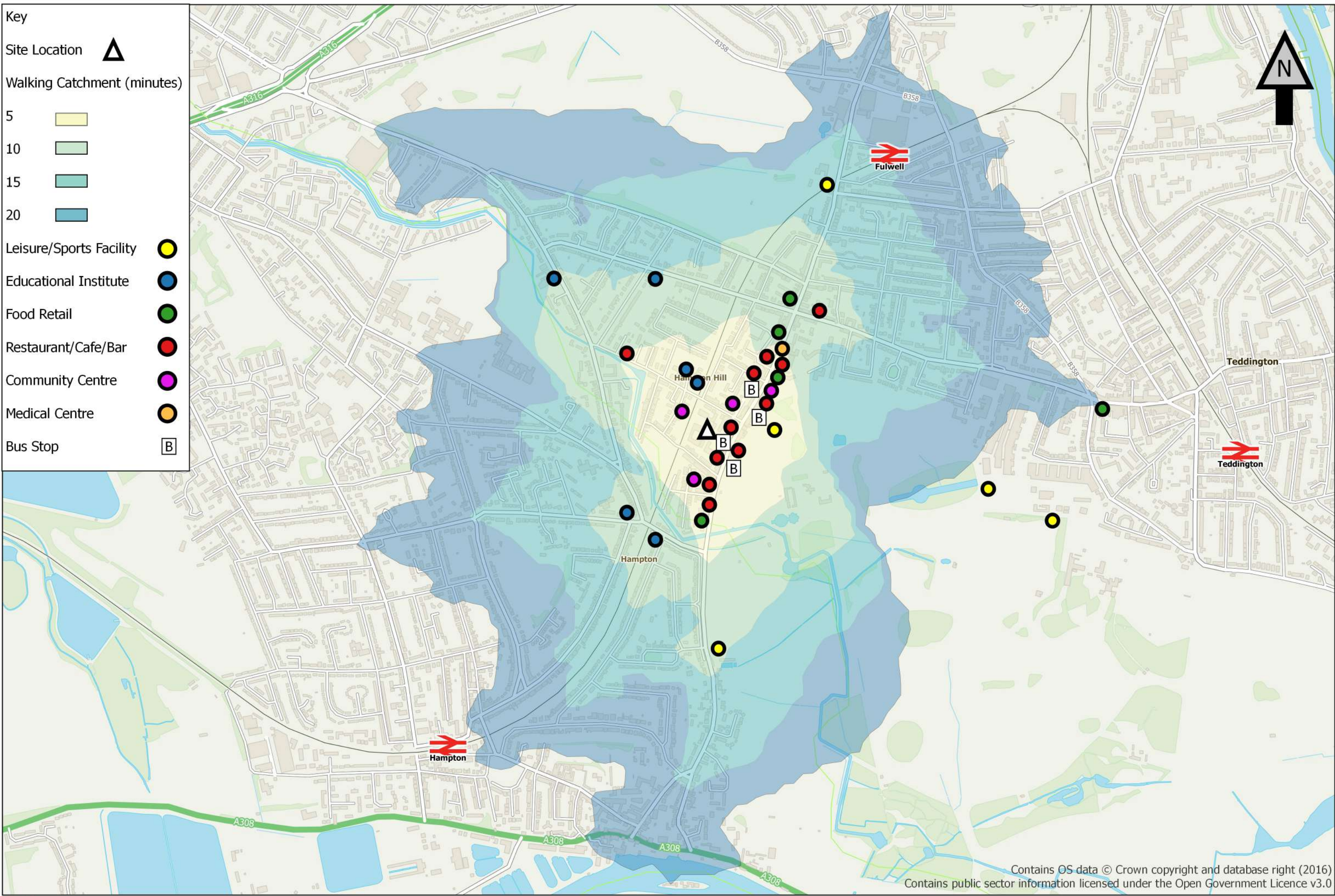
Food Retail 

Restaurant/Cafe/Bar 

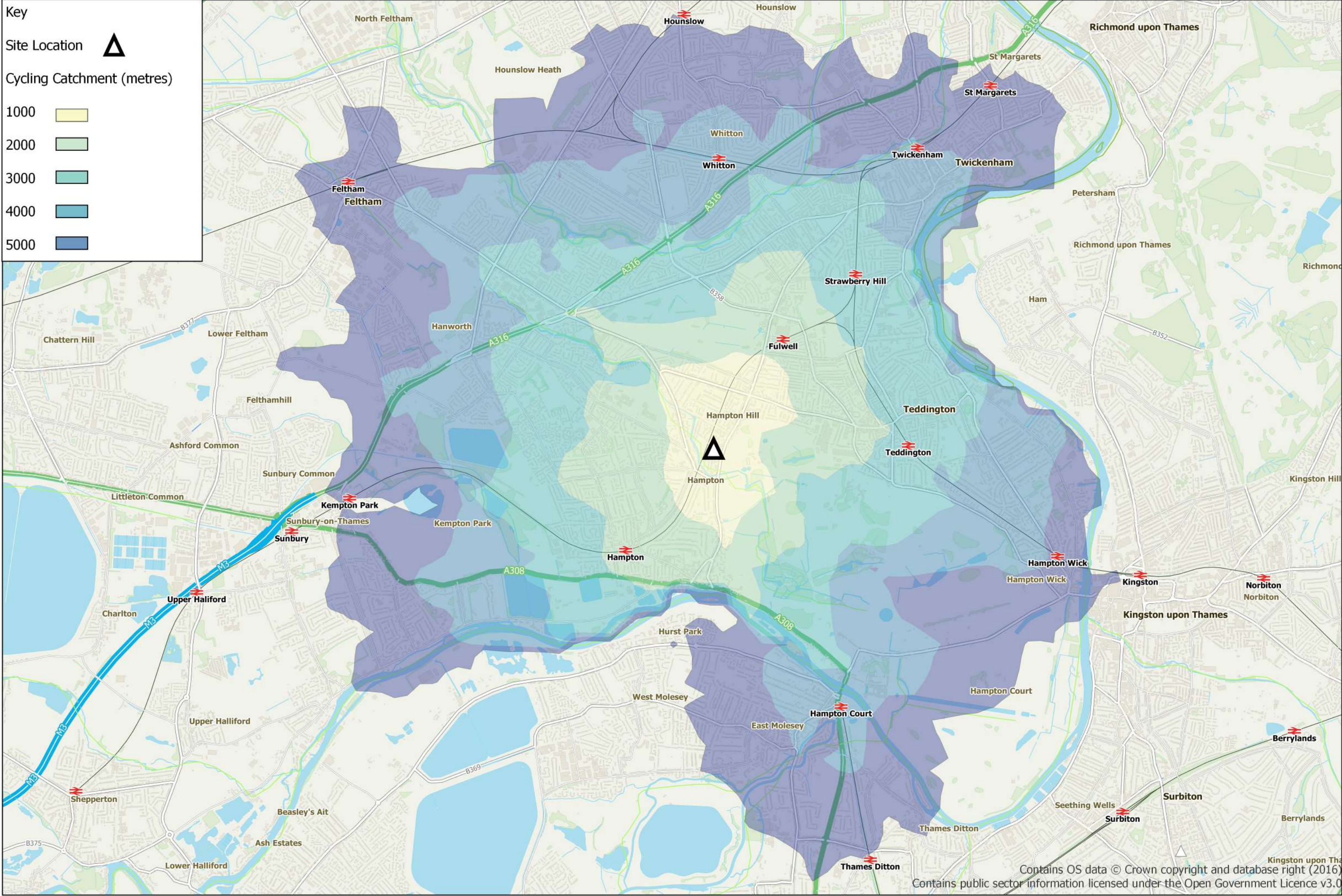
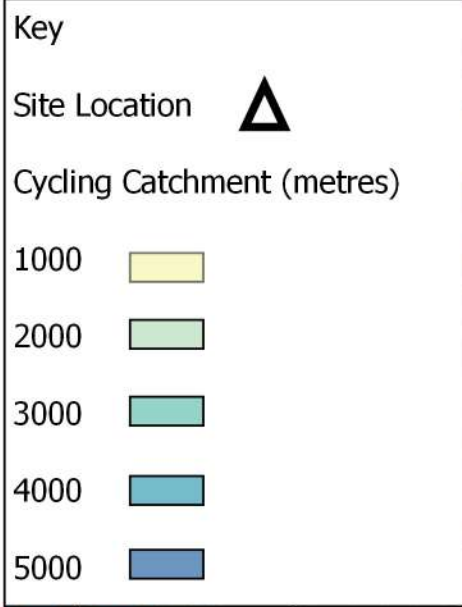
Community Centre 

Medical Centre 

Bus Stop 




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






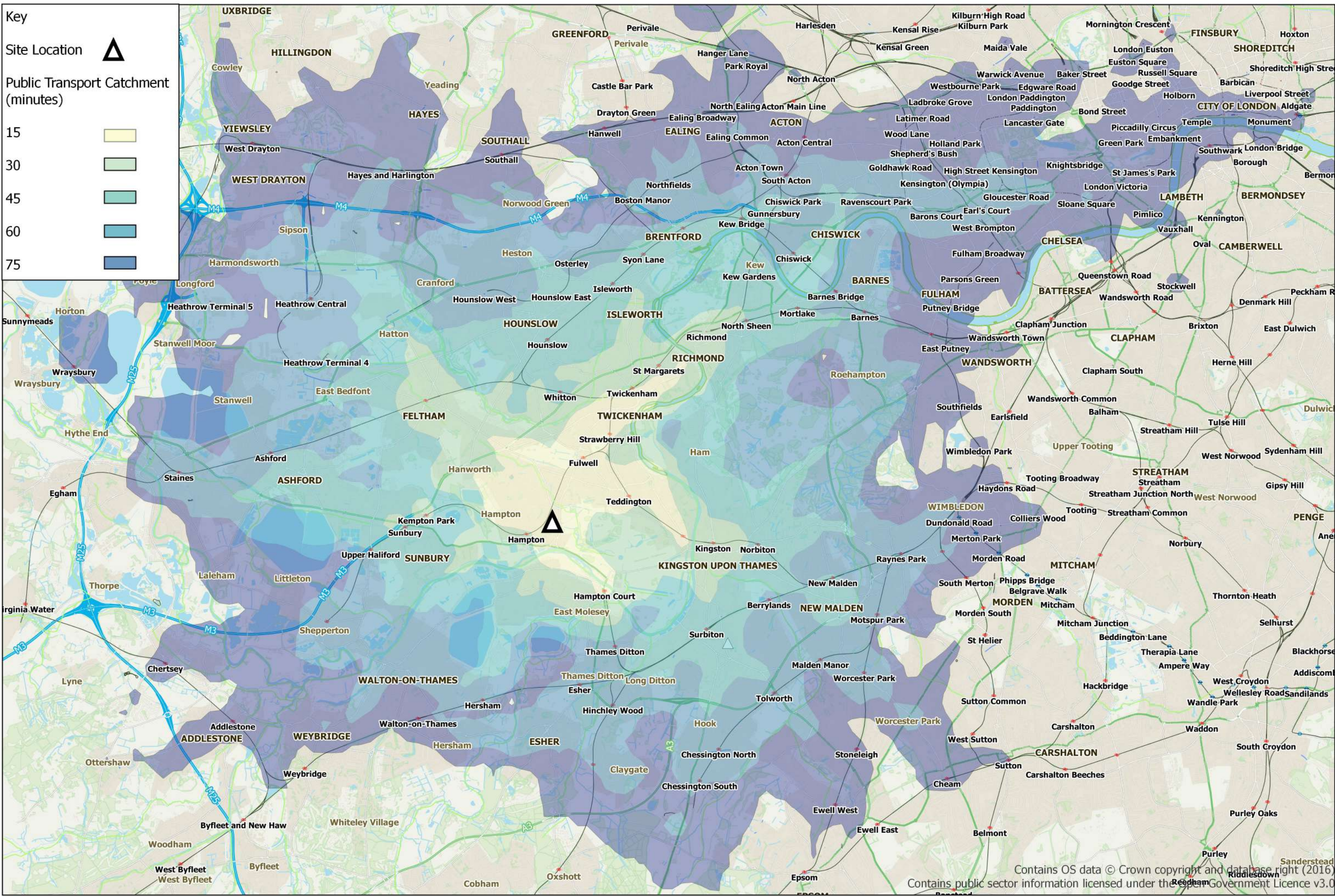
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**Key**

Site Location 

Public Transport Catchment (minutes)

- 15 
- 30 
- 45 
- 60 
- 75 



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**Appendix E - Trip Rates**

Calculation Reference: AUDIT-148302-171027-1039

## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : C - FLATS PRIVATELY OWNED  
 MULTI-MODAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BT BRENT	1 days
	HG HARINGEY	1 days
	HV HAVERING	1 days

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

## Secondary 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: Number of dwellings  
 Actual Range: 30 to 493 (units: )  
 Range Selected by User: 9 to 493 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 30/11/16

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:

Tuesday	1 days
Wednesday	2 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
------------------------------------	---

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

Selected Location Sub Categories:

Development Zone	1
Residential Zone	1
Built-Up Zone	1

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

## Secondary Filtering selection:

Use Class:

C3	3 days
----	--------

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

Population within 1 mile:

10,001 to 15,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	1 days

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

Travel Plan:

Yes	2 days
No	1 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:

2 Poor	1 days
3 Moderate	1 days
4 Good	1 days

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

LIST OF SITES relevant to selection parameters

1	BT-03-C-01	BLOCKS OF FLATS		BRENT
	LAKESIDE DRIVE			
	PARK ROYAL			
	Suburban Area (PPS6 Out of Centre)			
	Development Zone			
	Total Number of dwellings:	170		
	Survey date: WEDNESDAY	28/09/16		Survey Type: MANUAL
2	HG-03-C-02	BLOCK OF FLATS		HARINGEY
	HIGH ROAD			
	WOODSIDE PARK			
	WOOD GREEN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	30		
	Survey date: WEDNESDAY	01/10/14		Survey Type: MANUAL
3	HV-03-C-02	BLOCKS OF FLATS		HAVERING
	WATERLOO ROAD			
	ROMFORD			
	Suburban Area (PPS6 Out of Centre)			
	Built-Up Zone			
	Total Number of dwellings:	493		
	Survey date: TUESDAY	22/11/16		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
BT-03-C-02	Not comparable to site
HK-03-C-03	Not comparable to site
IS-03-C-03	Not comparable to site

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.045	3	231	0.074	3	231	0.119
08:00 - 09:00	3	231	0.026	3	231	0.084	3	231	0.110
09:00 - 10:00	3	231	0.042	3	231	0.045	3	231	0.087
10:00 - 11:00	3	231	0.040	3	231	0.053	3	231	0.093
11:00 - 12:00	3	231	0.029	3	231	0.049	3	231	0.078
12:00 - 13:00	3	231	0.033	3	231	0.033	3	231	0.066
13:00 - 14:00	3	231	0.056	3	231	0.056	3	231	0.112
14:00 - 15:00	3	231	0.046	3	231	0.049	3	231	0.095
15:00 - 16:00	3	231	0.065	3	231	0.052	3	231	0.117
16:00 - 17:00	3	231	0.081	3	231	0.058	3	231	0.139
17:00 - 18:00	3	231	0.091	3	231	0.052	3	231	0.143
18:00 - 19:00	3	231	0.100	3	231	0.061	3	231	0.161
19:00 - 20:00	1	170	0.118	1	170	0.059	1	170	0.177
20:00 - 21:00	1	170	0.118	1	170	0.071	1	170	0.189
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.890</b>			<b>0.796</b>			<b>1.686</b>

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

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

#### Parameter summary

Trip rate parameter range selected:	30 - 493 (units: )
Survey date date range:	01/01/09 - 30/11/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	3

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



TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL TAXIS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.004	3	231	0.003	3	231	0.007
08:00 - 09:00	3	231	0.001	3	231	0.003	3	231	0.004
09:00 - 10:00	3	231	0.004	3	231	0.003	3	231	0.007
10:00 - 11:00	3	231	0.001	3	231	0.001	3	231	0.002
11:00 - 12:00	3	231	0.000	3	231	0.001	3	231	0.001
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.001	3	231	0.001	3	231	0.002
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.004	3	231	0.004	3	231	0.008
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.003	3	231	0.003	3	231	0.006
18:00 - 19:00	3	231	0.003	3	231	0.003	3	231	0.006
19:00 - 20:00	1	170	0.012	1	170	0.012	1	170	0.024
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.033</b>			<b>0.034</b>			<b>0.067</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.004	3	231	0.006	3	231	0.010
08:00 - 09:00	3	231	0.001	3	231	0.000	3	231	0.001
09:00 - 10:00	3	231	0.003	3	231	0.004	3	231	0.007
10:00 - 11:00	3	231	0.007	3	231	0.006	3	231	0.013
11:00 - 12:00	3	231	0.000	3	231	0.001	3	231	0.001
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.000	3	231	0.001	3	231	0.001
14:00 - 15:00	3	231	0.001	3	231	0.001	3	231	0.002
15:00 - 16:00	3	231	0.000	3	231	0.000	3	231	0.000
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.003	3	231	0.001	3	231	0.004
18:00 - 19:00	3	231	0.000	3	231	0.000	3	231	0.000
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.020			0.039

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

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

#### Parameter summary

Trip rate parameter range selected:	30 - 493 (units: )
Survey date date range:	01/01/09 - 30/11/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.000	3	231	0.000
08:00 - 09:00	3	231	0.000	3	231	0.000	3	231	0.000
09:00 - 10:00	3	231	0.000	3	231	0.000	3	231	0.000
10:00 - 11:00	3	231	0.000	3	231	0.000	3	231	0.000
11:00 - 12:00	3	231	0.000	3	231	0.000	3	231	0.000
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.000	3	231	0.000	3	231	0.000
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.000	3	231	0.000	3	231	0.000
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.000	3	231	0.000	3	231	0.000
18:00 - 19:00	3	231	0.000	3	231	0.000	3	231	0.000
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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

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

#### Parameter summary

Trip rate parameter range selected:	30 - 493 (units: )
Survey date date range:	01/01/09 - 30/11/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.003	3	231	0.003
08:00 - 09:00	3	231	0.001	3	231	0.004	3	231	0.005
09:00 - 10:00	3	231	0.003	3	231	0.004	3	231	0.007
10:00 - 11:00	3	231	0.000	3	231	0.001	3	231	0.001
11:00 - 12:00	3	231	0.000	3	231	0.000	3	231	0.000
12:00 - 13:00	3	231	0.001	3	231	0.000	3	231	0.001
13:00 - 14:00	3	231	0.001	3	231	0.003	3	231	0.004
14:00 - 15:00	3	231	0.000	3	231	0.007	3	231	0.007
15:00 - 16:00	3	231	0.003	3	231	0.003	3	231	0.006
16:00 - 17:00	3	231	0.006	3	231	0.001	3	231	0.007
17:00 - 18:00	3	231	0.004	3	231	0.001	3	231	0.005
18:00 - 19:00	3	231	0.003	3	231	0.001	3	231	0.004
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.022</b>			<b>0.028</b>			<b>0.050</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL VEHICLE OCCUPANTS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.056	3	231	0.091	3	231	0.147
08:00 - 09:00	3	231	0.030	3	231	0.134	3	231	0.164
09:00 - 10:00	3	231	0.049	3	231	0.049	3	231	0.098
10:00 - 11:00	3	231	0.046	3	231	0.069	3	231	0.115
11:00 - 12:00	3	231	0.042	3	231	0.065	3	231	0.107
12:00 - 13:00	3	231	0.046	3	231	0.039	3	231	0.085
13:00 - 14:00	3	231	0.066	3	231	0.071	3	231	0.137
14:00 - 15:00	3	231	0.062	3	231	0.071	3	231	0.133
15:00 - 16:00	3	231	0.095	3	231	0.079	3	231	0.174
16:00 - 17:00	3	231	0.128	3	231	0.072	3	231	0.200
17:00 - 18:00	3	231	0.121	3	231	0.074	3	231	0.195
18:00 - 19:00	3	231	0.136	3	231	0.078	3	231	0.214
19:00 - 20:00	1	170	0.147	1	170	0.076	1	170	0.223
20:00 - 21:00	1	170	0.153	1	170	0.088	1	170	0.241
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>1.177</b>			<b>1.056</b>			<b>2.233</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL PEDESTRIANS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.009	3	231	0.023	3	231	0.032
08:00 - 09:00	3	231	0.017	3	231	0.097	3	231	0.114
09:00 - 10:00	3	231	0.033	3	231	0.027	3	231	0.060
10:00 - 11:00	3	231	0.010	3	231	0.040	3	231	0.050
11:00 - 12:00	3	231	0.025	3	231	0.029	3	231	0.054
12:00 - 13:00	3	231	0.046	3	231	0.020	3	231	0.066
13:00 - 14:00	3	231	0.022	3	231	0.029	3	231	0.051
14:00 - 15:00	3	231	0.029	3	231	0.019	3	231	0.048
15:00 - 16:00	3	231	0.066	3	231	0.023	3	231	0.089
16:00 - 17:00	3	231	0.032	3	231	0.023	3	231	0.055
17:00 - 18:00	3	231	0.046	3	231	0.020	3	231	0.066
18:00 - 19:00	3	231	0.023	3	231	0.014	3	231	0.037
19:00 - 20:00	1	170	0.076	1	170	0.065	1	170	0.141
20:00 - 21:00	1	170	0.029	1	170	0.047	1	170	0.076
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.463</b>			<b>0.476</b>			<b>0.939</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL BUS/TRAM PASSENGERS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.001	3	231	0.017	3	231	0.018
08:00 - 09:00	3	231	0.004	3	231	0.016	3	231	0.020
09:00 - 10:00	3	231	0.001	3	231	0.009	3	231	0.010
10:00 - 11:00	3	231	0.001	3	231	0.007	3	231	0.008
11:00 - 12:00	3	231	0.000	3	231	0.001	3	231	0.001
12:00 - 13:00	3	231	0.007	3	231	0.000	3	231	0.007
13:00 - 14:00	3	231	0.000	3	231	0.003	3	231	0.003
14:00 - 15:00	3	231	0.007	3	231	0.003	3	231	0.010
15:00 - 16:00	3	231	0.012	3	231	0.010	3	231	0.022
16:00 - 17:00	3	231	0.014	3	231	0.012	3	231	0.026
17:00 - 18:00	3	231	0.013	3	231	0.004	3	231	0.017
18:00 - 19:00	3	231	0.014	3	231	0.006	3	231	0.020
19:00 - 20:00	1	170	0.006	1	170	0.012	1	170	0.018
20:00 - 21:00	1	170	0.018	1	170	0.006	1	170	0.024
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.098			0.106			0.204

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.001	3	231	0.065	3	231	0.066
08:00 - 09:00	3	231	0.003	3	231	0.094	3	231	0.097
09:00 - 10:00	3	231	0.000	3	231	0.027	3	231	0.027
10:00 - 11:00	3	231	0.003	3	231	0.016	3	231	0.019
11:00 - 12:00	3	231	0.006	3	231	0.014	3	231	0.020
12:00 - 13:00	3	231	0.007	3	231	0.010	3	231	0.017
13:00 - 14:00	3	231	0.006	3	231	0.012	3	231	0.018
14:00 - 15:00	3	231	0.014	3	231	0.009	3	231	0.023
15:00 - 16:00	3	231	0.012	3	231	0.014	3	231	0.026
16:00 - 17:00	3	231	0.014	3	231	0.003	3	231	0.017
17:00 - 18:00	3	231	0.042	3	231	0.012	3	231	0.054
18:00 - 19:00	3	231	0.085	3	231	0.004	3	231	0.089
19:00 - 20:00	1	170	0.212	1	170	0.012	1	170	0.224
20:00 - 21:00	1	170	0.082	1	170	0.018	1	170	0.100
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.487			0.310			0.797

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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



TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL COACH PASSENGERS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.000	3	231	0.000
08:00 - 09:00	3	231	0.000	3	231	0.000	3	231	0.000
09:00 - 10:00	3	231	0.000	3	231	0.000	3	231	0.000
10:00 - 11:00	3	231	0.000	3	231	0.000	3	231	0.000
11:00 - 12:00	3	231	0.000	3	231	0.000	3	231	0.000
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.000	3	231	0.000	3	231	0.000
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.000	3	231	0.000	3	231	0.000
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.000	3	231	0.000	3	231	0.000
18:00 - 19:00	3	231	0.000	3	231	0.000	3	231	0.000
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.000</b>			<b>0.000</b>			<b>0.000</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL PUBLIC TRANSPORT USERS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.003	3	231	0.082	3	231	0.085
08:00 - 09:00	3	231	0.007	3	231	0.110	3	231	0.117
09:00 - 10:00	3	231	0.001	3	231	0.036	3	231	0.037
10:00 - 11:00	3	231	0.004	3	231	0.023	3	231	0.027
11:00 - 12:00	3	231	0.006	3	231	0.016	3	231	0.022
12:00 - 13:00	3	231	0.014	3	231	0.010	3	231	0.024
13:00 - 14:00	3	231	0.006	3	231	0.014	3	231	0.020
14:00 - 15:00	3	231	0.022	3	231	0.012	3	231	0.034
15:00 - 16:00	3	231	0.023	3	231	0.025	3	231	0.048
16:00 - 17:00	3	231	0.029	3	231	0.014	3	231	0.043
17:00 - 18:00	3	231	0.055	3	231	0.016	3	231	0.071
18:00 - 19:00	3	231	0.100	3	231	0.010	3	231	0.110
19:00 - 20:00	1	170	0.218	1	170	0.024	1	170	0.242
20:00 - 21:00	1	170	0.100	1	170	0.024	1	170	0.124
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.588</b>			<b>0.416</b>			<b>1.004</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.068	3	231	0.199	3	231	0.267
08:00 - 09:00	3	231	0.056	3	231	0.345	3	231	0.401
09:00 - 10:00	3	231	0.087	3	231	0.117	3	231	0.204
10:00 - 11:00	3	231	0.061	3	231	0.134	3	231	0.195
11:00 - 12:00	3	231	0.072	3	231	0.110	3	231	0.182
12:00 - 13:00	3	231	0.108	3	231	0.069	3	231	0.177
13:00 - 14:00	3	231	0.095	3	231	0.117	3	231	0.212
14:00 - 15:00	3	231	0.113	3	231	0.108	3	231	0.221
15:00 - 16:00	3	231	0.188	3	231	0.130	3	231	0.318
16:00 - 17:00	3	231	0.195	3	231	0.111	3	231	0.306
17:00 - 18:00	3	231	0.227	3	231	0.111	3	231	0.338
18:00 - 19:00	3	231	0.261	3	231	0.104	3	231	0.365
19:00 - 20:00	1	170	0.441	1	170	0.165	1	170	0.606
20:00 - 21:00	1	170	0.282	1	170	0.159	1	170	0.441
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.254			1.979			4.233

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL CARS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.030	3	231	0.059	3	231	0.089
08:00 - 09:00	3	231	0.023	3	231	0.078	3	231	0.101
09:00 - 10:00	3	231	0.029	3	231	0.030	3	231	0.059
10:00 - 11:00	3	231	0.023	3	231	0.036	3	231	0.059
11:00 - 12:00	3	231	0.019	3	231	0.035	3	231	0.054
12:00 - 13:00	3	231	0.026	3	231	0.026	3	231	0.052
13:00 - 14:00	3	231	0.048	3	231	0.049	3	231	0.097
14:00 - 15:00	3	231	0.039	3	231	0.043	3	231	0.082
15:00 - 16:00	3	231	0.056	3	231	0.042	3	231	0.098
16:00 - 17:00	3	231	0.074	3	231	0.052	3	231	0.126
17:00 - 18:00	3	231	0.075	3	231	0.042	3	231	0.117
18:00 - 19:00	3	231	0.089	3	231	0.048	3	231	0.137
19:00 - 20:00	1	170	0.088	1	170	0.041	1	170	0.129
20:00 - 21:00	1	170	0.112	1	170	0.065	1	170	0.177
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.731</b>			<b>0.646</b>			<b>1.377</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL LGVS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.006	3	231	0.004	3	231	0.010
08:00 - 09:00	3	231	0.000	3	231	0.001	3	231	0.001
09:00 - 10:00	3	231	0.006	3	231	0.004	3	231	0.010
10:00 - 11:00	3	231	0.009	3	231	0.010	3	231	0.019
11:00 - 12:00	3	231	0.010	3	231	0.010	3	231	0.020
12:00 - 13:00	3	231	0.007	3	231	0.007	3	231	0.014
13:00 - 14:00	3	231	0.007	3	231	0.004	3	231	0.011
14:00 - 15:00	3	231	0.006	3	231	0.004	3	231	0.010
15:00 - 16:00	3	231	0.003	3	231	0.006	3	231	0.009
16:00 - 17:00	3	231	0.007	3	231	0.006	3	231	0.013
17:00 - 18:00	3	231	0.007	3	231	0.006	3	231	0.013
18:00 - 19:00	3	231	0.003	3	231	0.006	3	231	0.009
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.071</b>			<b>0.068</b>			<b>0.139</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.001	3	231	0.001
08:00 - 09:00	3	231	0.000	3	231	0.001	3	231	0.001
09:00 - 10:00	3	231	0.000	3	231	0.003	3	231	0.003
10:00 - 11:00	3	231	0.000	3	231	0.000	3	231	0.000
11:00 - 12:00	3	231	0.000	3	231	0.001	3	231	0.001
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.000	3	231	0.000	3	231	0.000
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.001	3	231	0.000	3	231	0.001
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.003	3	231	0.000	3	231	0.003
18:00 - 19:00	3	231	0.004	3	231	0.004	3	231	0.008
19:00 - 20:00	1	170	0.018	1	170	0.006	1	170	0.024
20:00 - 21:00	1	170	0.006	1	170	0.006	1	170	0.012
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.032</b>			<b>0.022</b>			<b>0.054</b>

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

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

#### Parameter summary

Trip rate parameter range selected:	30 - 493 (units: )
Survey date date range:	01/01/09 - 30/11/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL Underground Passengers  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.001	3	231	0.048	3	231	0.049
08:00 - 09:00	3	231	0.000	3	231	0.046	3	231	0.046
09:00 - 10:00	3	231	0.000	3	231	0.012	3	231	0.012
10:00 - 11:00	3	231	0.003	3	231	0.010	3	231	0.013
11:00 - 12:00	3	231	0.004	3	231	0.007	3	231	0.011
12:00 - 13:00	3	231	0.004	3	231	0.006	3	231	0.010
13:00 - 14:00	3	231	0.006	3	231	0.009	3	231	0.015
14:00 - 15:00	3	231	0.013	3	231	0.009	3	231	0.022
15:00 - 16:00	3	231	0.007	3	231	0.013	3	231	0.020
16:00 - 17:00	3	231	0.010	3	231	0.003	3	231	0.013
17:00 - 18:00	3	231	0.013	3	231	0.007	3	231	0.020
18:00 - 19:00	3	231	0.040	3	231	0.004	3	231	0.044
19:00 - 20:00	1	170	0.182	1	170	0.012	1	170	0.194
20:00 - 21:00	1	170	0.076	1	170	0.018	1	170	0.094
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.359</b>			<b>0.204</b>			<b>0.563</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL DLR Passengers

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.000	3	231	0.000
08:00 - 09:00	3	231	0.001	3	231	0.001	3	231	0.002
09:00 - 10:00	3	231	0.000	3	231	0.000	3	231	0.000
10:00 - 11:00	3	231	0.000	3	231	0.000	3	231	0.000
11:00 - 12:00	3	231	0.000	3	231	0.000	3	231	0.000
12:00 - 13:00	3	231	0.000	3	231	0.001	3	231	0.001
13:00 - 14:00	3	231	0.000	3	231	0.000	3	231	0.000
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.000	3	231	0.000	3	231	0.000
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.000	3	231	0.000	3	231	0.000
18:00 - 19:00	3	231	0.000	3	231	0.000	3	231	0.000
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.002			0.003

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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



TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL Overground Passengers  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.000	3	231	0.000
08:00 - 09:00	3	231	0.000	3	231	0.000	3	231	0.000
09:00 - 10:00	3	231	0.000	3	231	0.000	3	231	0.000
10:00 - 11:00	3	231	0.000	3	231	0.000	3	231	0.000
11:00 - 12:00	3	231	0.000	3	231	0.000	3	231	0.000
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.000	3	231	0.000	3	231	0.000
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.000	3	231	0.000	3	231	0.000
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.000	3	231	0.000	3	231	0.000
18:00 - 19:00	3	231	0.000	3	231	0.000	3	231	0.000
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.000			0.000			0.000

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL National Rail Passengers  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.017	3	231	0.017
08:00 - 09:00	3	231	0.001	3	231	0.046	3	231	0.047
09:00 - 10:00	3	231	0.000	3	231	0.016	3	231	0.016
10:00 - 11:00	3	231	0.000	3	231	0.006	3	231	0.006
11:00 - 12:00	3	231	0.001	3	231	0.007	3	231	0.008
12:00 - 13:00	3	231	0.003	3	231	0.003	3	231	0.006
13:00 - 14:00	3	231	0.000	3	231	0.003	3	231	0.003
14:00 - 15:00	3	231	0.001	3	231	0.000	3	231	0.001
15:00 - 16:00	3	231	0.004	3	231	0.001	3	231	0.005
16:00 - 17:00	3	231	0.004	3	231	0.000	3	231	0.004
17:00 - 18:00	3	231	0.029	3	231	0.004	3	231	0.033
18:00 - 19:00	3	231	0.045	3	231	0.000	3	231	0.045
19:00 - 20:00	1	170	0.029	1	170	0.000	1	170	0.029
20:00 - 21:00	1	170	0.006	1	170	0.000	1	170	0.006
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.123			0.103			0.226

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL Bus Passengers  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.001	3	231	0.017	3	231	0.018
08:00 - 09:00	3	231	0.004	3	231	0.016	3	231	0.020
09:00 - 10:00	3	231	0.001	3	231	0.009	3	231	0.010
10:00 - 11:00	3	231	0.001	3	231	0.007	3	231	0.008
11:00 - 12:00	3	231	0.000	3	231	0.001	3	231	0.001
12:00 - 13:00	3	231	0.007	3	231	0.000	3	231	0.007
13:00 - 14:00	3	231	0.000	3	231	0.003	3	231	0.003
14:00 - 15:00	3	231	0.007	3	231	0.003	3	231	0.010
15:00 - 16:00	3	231	0.012	3	231	0.010	3	231	0.022
16:00 - 17:00	3	231	0.014	3	231	0.012	3	231	0.026
17:00 - 18:00	3	231	0.013	3	231	0.004	3	231	0.017
18:00 - 19:00	3	231	0.014	3	231	0.006	3	231	0.020
19:00 - 20:00	1	170	0.006	1	170	0.012	1	170	0.018
20:00 - 21:00	1	170	0.018	1	170	0.006	1	170	0.024
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.098			0.106			0.204

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL Tram Passengers  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.000	3	231	0.000
08:00 - 09:00	3	231	0.000	3	231	0.000	3	231	0.000
09:00 - 10:00	3	231	0.000	3	231	0.000	3	231	0.000
10:00 - 11:00	3	231	0.000	3	231	0.000	3	231	0.000
11:00 - 12:00	3	231	0.000	3	231	0.000	3	231	0.000
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.000	3	231	0.000	3	231	0.000
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.000	3	231	0.000	3	231	0.000
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.000	3	231	0.000	3	231	0.000
18:00 - 19:00	3	231	0.000	3	231	0.000	3	231	0.000
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.000</b>			<b>0.000</b>			<b>0.000</b>

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

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

#### Parameter summary

Trip rate parameter range selected: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL Water Service Passengers  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	231	0.000	3	231	0.000	3	231	0.000
08:00 - 09:00	3	231	0.000	3	231	0.000	3	231	0.000
09:00 - 10:00	3	231	0.000	3	231	0.000	3	231	0.000
10:00 - 11:00	3	231	0.000	3	231	0.000	3	231	0.000
11:00 - 12:00	3	231	0.000	3	231	0.000	3	231	0.000
12:00 - 13:00	3	231	0.000	3	231	0.000	3	231	0.000
13:00 - 14:00	3	231	0.000	3	231	0.000	3	231	0.000
14:00 - 15:00	3	231	0.000	3	231	0.000	3	231	0.000
15:00 - 16:00	3	231	0.000	3	231	0.000	3	231	0.000
16:00 - 17:00	3	231	0.000	3	231	0.000	3	231	0.000
17:00 - 18:00	3	231	0.000	3	231	0.000	3	231	0.000
18:00 - 19:00	3	231	0.000	3	231	0.000	3	231	0.000
19:00 - 20:00	1	170	0.000	1	170	0.000	1	170	0.000
20:00 - 21:00	1	170	0.000	1	170	0.000	1	170	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.000			0.000			0.000

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: 30 - 493 (units: )  
 Survey date date range: 01/01/09 - 30/11/16  
 Number of weekdays (Monday-Friday): 3  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 1  
 Surveys manually removed from selection: 3

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.



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