



Proposed Residential Development
Land to the rear of 24 Hampton Road,
Twickenham

Highways Technical Note

For

Park Property Group

Document Control Sheet

Proposed Residential Development

Land to the rear of 24 Hampton Road, Twickenham

Park Property Group

This document has been issued and amended as follows:

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25 th May 2022	1 st Draft	MS	DM
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- A Site Layout Plan
- B Swept Path Analysis
- C TRICS Output

1.0 Introduction

- 1.1 Motion has been instructed to prepare this Highways Technical Note on behalf of Park Property Group in respect of a planning application for the construction of three residential units located on land to the rear of 24 Hampton Road, in Twickenham. The site is located within the administrative boundary of The London Borough of Richmond Upon Thames.
- 1.2 Specifically, the proposals seek the construction of two 3-bed dwellings alongside one 2-bed dwelling. Sufficient car and cycle parking will be provided on site to accord with appropriate standards.
- 1.3 This technical note has been prepared to address the highway and transport matters relevant to the proposal, namely:
 - ▶ The location of the site in respect of sustainable travel modes and local amenities;
 - ▶ The level of car and cycle parking proposed on site;
 - ▶ Provision for general deliveries, as well as refuse collection and emergency access; and
 - ▶ The increase in traffic flow associated with the proposals.

2.0 Baseline Conditions

Site location

- 2.1 Access to the site is achieved from Hampton Road, to the south of the site. Hampton Road connects north to the A305, which routes west towards the A316. The A316 connects northbound to Hammersmith and southbound to Sunbury-on-Thames.
- 2.2 The site is located in a predominantly residential area, albeit with various local amenities, a church, and a primary school located within the immediate proximity of the site. The site in relation to the local area is shown in Figure 2.1 below.

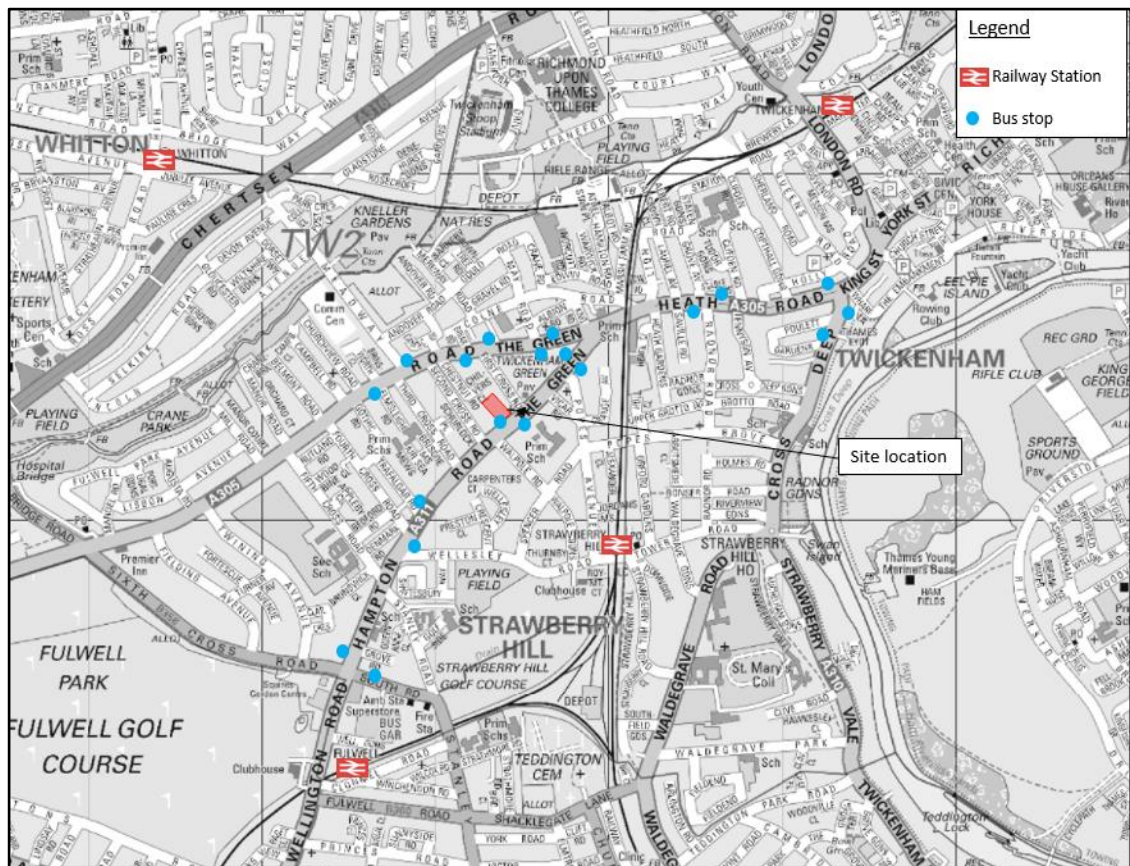


Figure 2.1 – The site in relation to the local area

Local Highway Network

- 2.3 The site access connects to Hampton Road which is a single carriageway road restricted to a 20mph speed limit. Hampton Road is provisioned with footways and street lighting on both sides of the road along with a pedestrian crossing point located 20m west of the site. Hampton Road is within a controlled parking zone for permit holders only Monday-Friday between the hours of 10:00am and 16:30pm. Directly adjacent to the site on the north side of the road, there is a single yellow line whilst on the south side of the road there are double yellow lines.

Accessibility

Accessibility on Foot

- 2.4 The footways running along both side of Hampton Road with street lighting. There is a pedestrian crossing point located 20m west of the site which if taken can lead to Walpole Road and Walpole gardens which connects to Strawberry Hill Railway Station.
- 2.5 Within the standard 2km walking distance there are a wide variety of amenities. This includes multiple convenience stores, schools, health facilities and employment areas are all easily accessible on foot.

Accessibility by Cycle

- 2.6 On the residential streets closest to the site, the 20mph speed limit makes the roads safe for cycling. While there are no designated cycle lanes along Hampton Road there are designated cycle lanes on nearby roads which suggests that cycling is safe and encouraged.
- 2.7 Within the standard 5km cycle distance, Richmond, Hampton and Hounslow can all be accessed.

Accessibility by Bus

- 2.8 The closest bus stop to the site is located on Hampton Road and is a 1-minute walk (20m) away from the site access. All bus stop locations surrounding the site can be located on figure 2.1 above. Services accessible from this bus stop are compiled in Table 2.1 below.

Service	Route	Approximate Frequency
267	From Hammersmith - to Fulwell	Every 20 mins
281	From Hounslow – to Tolworth Tower	Every 10-20 mins
290	From Staines Bus Station – to Arragon Road Twickenham	Every 20-30 mins
681	From Hounslow Bus Station – to Broom Road/Teddington School	Every 30 mins

Table 2.1 – Details of Bus services from nearby Bus stop

- 2.9 Local bus services provide easy access to Fulwell and other nearby towns such as Tolworth, Twickenham and Teddington.

Accessibility by Rail

- 2.10 Strawberry Hill Railway Station is the nearest Railway Station to the site. It is located 600 meters (8-minute walk) south-east of the site and there are a number of frequent departures from this station which are displayed in table 2.2 below.

Route	Approximate Frequency	Approximate Frequency
	Mon-Fri	Weekend
Strawberry Hill – London Waterloo	Every 30 mins	Every 10-20 mins
Strawberry Hill – Heathrow Airport	Every 30 mins	Every 10-20 mins
Strawberry Hill - Teddington	Every 30 mins	Every 30 mins

Table 2.2 – Details of Rail Services from Strawberry Hill Station

Access to Local Amenities

2.11 The site is located within close proximity to a variety of everyday amenities, including the following:

- ▶ Twickenham Local Food & Wine
- ▶ The Green Surgery
- ▶ Maple Leaf Pharmacy
- ▶ Archdeacon Cambridge’s C of E Primary School
- ▶ Twickenham Primary Academy
- ▶ Twickenham Green
- ▶ Twickenham United Reformed Church

3.0 Parking Arrangements

Car Parking Provision

- 3.1 The Public Transport Accessibility Level (PTAL) is a measure of the accessibility of a point to the public transport system, taking into account walk access time and service availability. Transport for London (TfL) state it is a way of measuring the density of the public transport network at any location within Greater London.
- 3.2 The TfL WebCAT online planning tool enables PTAL ratings for specific 100m grid squares across Greater London to be determined, with the PTAL rating for each grid square reflecting:
- ▶ Walking time from the point-of-interest to the public transport access points
 - ▶ The reliability of the service modes available
 - ▶ The number of services available within the catchment
 - ▶ The level of service at the public transport access points - i.e. average waiting time
- 3.3 Each grid area is graded between 0 and 6b, where a score of 0 represents very poor access to public transport, and 6b is excellent. Using the WebCAT online planning tool, the PTAL rating of the site has been established as 5, indicating that the site has a 'very good' accessibility level.
- 3.4 As displayed in figure 2.2 below, the site has a PTAL level of 3 which is an average level. This is despite the sites close proximity to bus and rail services as noted previously.



Figure 2.2 – PTAL map of site location

- 3.5 In respect of car parking provision, the site must adhere with the 2021 London Plan. The car parking set out in the parking guidance are maximum parking standards. The London Plan 2021 car parking standards are displayed in table 2.1 below.

Location	Number of Beds	Maximum Car Parking Provision
Outer London PTAL 2-3	1-2	Up to 0.75 spaces per dwelling
Outer London PTAL 2-3	3	Up to 1 space per dwelling

Table 2.1 – Residential Car Parking Standards, The London Plan, 2021

- 3.6 As displayed in figure 2.2 above, the site is classified as an out of London PTAL level 3 location. Two dwellings contain 3-beds and one dwelling contains 2-beds. Therefore, table 2.1 above indicates that the development should contain 2.75 car parking spaces, which can be rounded up to three spaces where they are allocated.
- 3.7 The architect’s site layout plan (attached as **Appendix A**) includes three car parking spaces, one per dwelling. This conforms with the aforementioned London Plan Car Parking Standards. All parking spaces will benefit from an active electric charger.
- 3.8 Swept path analysis of a large car has been undertaken, which is attached as **Appendix B**. This demonstrates that it is possible for a large car to access each parking space.

Cycle Parking

- 3.9 The London Plan, 2021 adapts to minimum cycle parking standards which are set out in table 2.2 below

Dwellings	Long-stay
Studio or 1 person 1 bed dwelling	1 space
2-person, 1 bed dwelling	1.5 spaces
All other dwellings	2 spaces

Table 2.2 – Residential Cycle Parking Standards, The London Plan, 2021

- 3.10 To adhere with The London Cycle Parking standards, 2021 the development would require 6 cycle parking spaces, 2 for each dwelling. All three dwellings will contain cycle parking in a private garden, which would be incorporated in secure garden sheds.

4.0 Proposed Site Access

- 4.1 The site access is a private existing access located on Hampton Road serving four existing flats. This is shown within the aforementioned drawing attached as **Appendix A**. It is proposed to retain the existing crossover serving the site as per the existing arrangement.
- 4.2 **Visibility at the access is generous, which is aided by the wide footway fronting the site.** Hampton Road is a 20mph road; based on the speed limit, there is a visibility splay requirement of 25 metres in both directions which can be comfortably achieved. As set out in the following section of this report, the additional level of traffic flow generated by the proposals will be negligible, particularly when considering the site access already serves 4 flats. It is therefore considered appropriate to retain the access as existing.
- 4.3 Figure 4.1 below illustrates an extract from Crashmap of the local surrounding area.

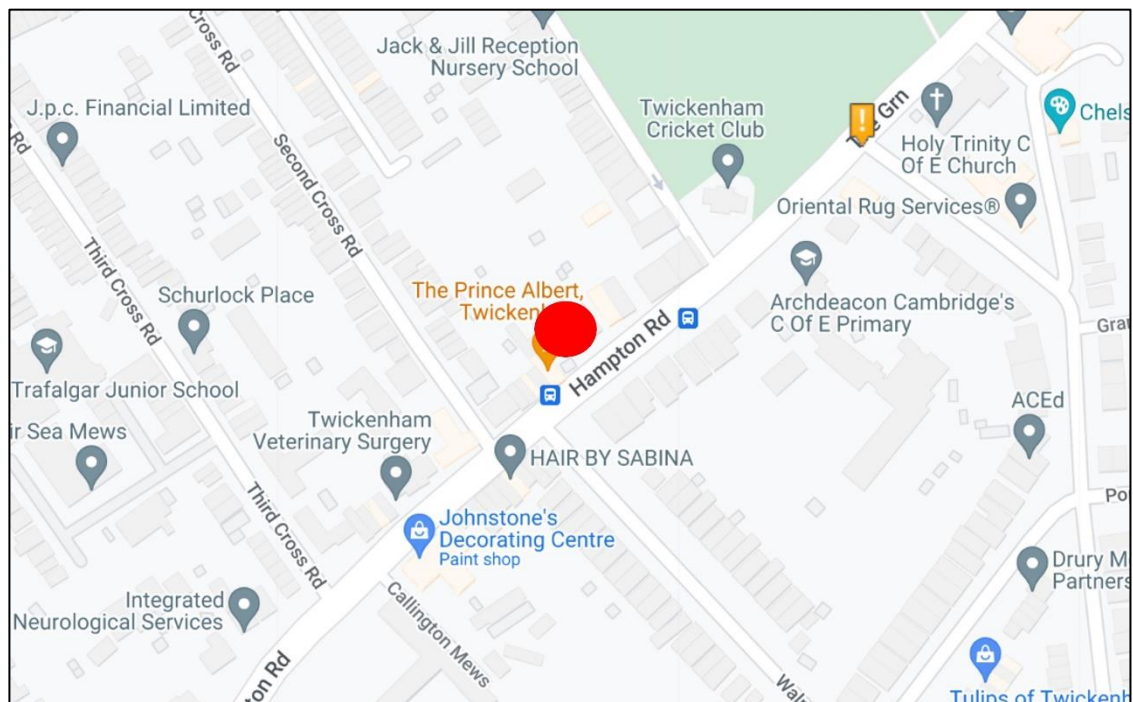


Figure 4.1 – CrashMap Extract

- 4.4 The above extract illustrates how no collisions have occurred in the immediate vicinity of the site within the most recent five year period.

Servicing Arrangements

- 4.5 Appropriate Refuse collection storage will be provided for each dwelling. Refuse collection will take place adjacent to Hampton Road which would require the residents to drag their refuse bins to the site access, where a dedicated collection facility will be provided. Refuse collection already takes place on Hampton Road for the existing dwellings therefore, it confirms that the refuse vehicle can sufficiently collect from this location by parking on-street on Hampton Road. Collections will take place as per the existing collection schedule of the surrounding dwellings.

Emergency Access

- 4.6 Typically, where a development is located within 45 metres of the public highway, a fire appliance would not be required to physically enter a site. This would accord with guidance contained within HM Government's document entitled 'The Building Regulations: Fire Safety Approved Document B – 2019 Edition'.
- 4.7 The furthest dwelling is located further than 45 metres from a fire appliance if parked on the highway, and therefore does not accord with 'Approved Document B'. However, the development proposal does accord with guidance contained within British Standard documents 'BS EN BS 9251:2014 - Code of practice for Fire sprinkler systems for domestic and residential occupancies' and 'BS EN BS 9991:2015 Fire safety in the design, management and use of residential buildings'.
- 4.8 To accord with the above guidance, a sprinkler system will need to be installed in line with BS 9251, with the development being designed to BS 9991, rather than Approved Document B. In this case, the permitted distance from the furthest point in the furthest house to the fire appliance parking location is 90 metres, measured as the hose would be laid.
- 4.9 The proposed development will be designed in accordance with BS 9991 with a sprinkler system according to BS 9251 being installed and therefore the houses will fall within the permitted distance allowed from the fire appliance parking location. The fire appliance will not therefore be required to physically enter the site.

5.0 Trip Generation

- 5.1 In order to establish the likely number of additional trips to the site, the TRICS database has been interrogated. The analysis focuses on the peak hours of 08:00-09:00 and 17:00-18:00 to represent the peak residential travel on the local highway network.
- 5.2 The trip generation potential of the residential development has been assess based on trip rates taken from the TRICS data using both categories '03 Residential – Houses Privately Owned' for sites located in Greater London with similar PTAL levels. The full TRICS output for this calculation is attached at **Appendix C**.

	Weekday AM Peak		Weekday PM Peak		Total Daily Trips	
	Arr	Dep	Arr	Dep	Arr	Dep
Total Vehicle Trip Rate	0.247	0.370	0.384	0.342	3.219	3.259
Total Vehicle Trips	1	1	1	1	10	10

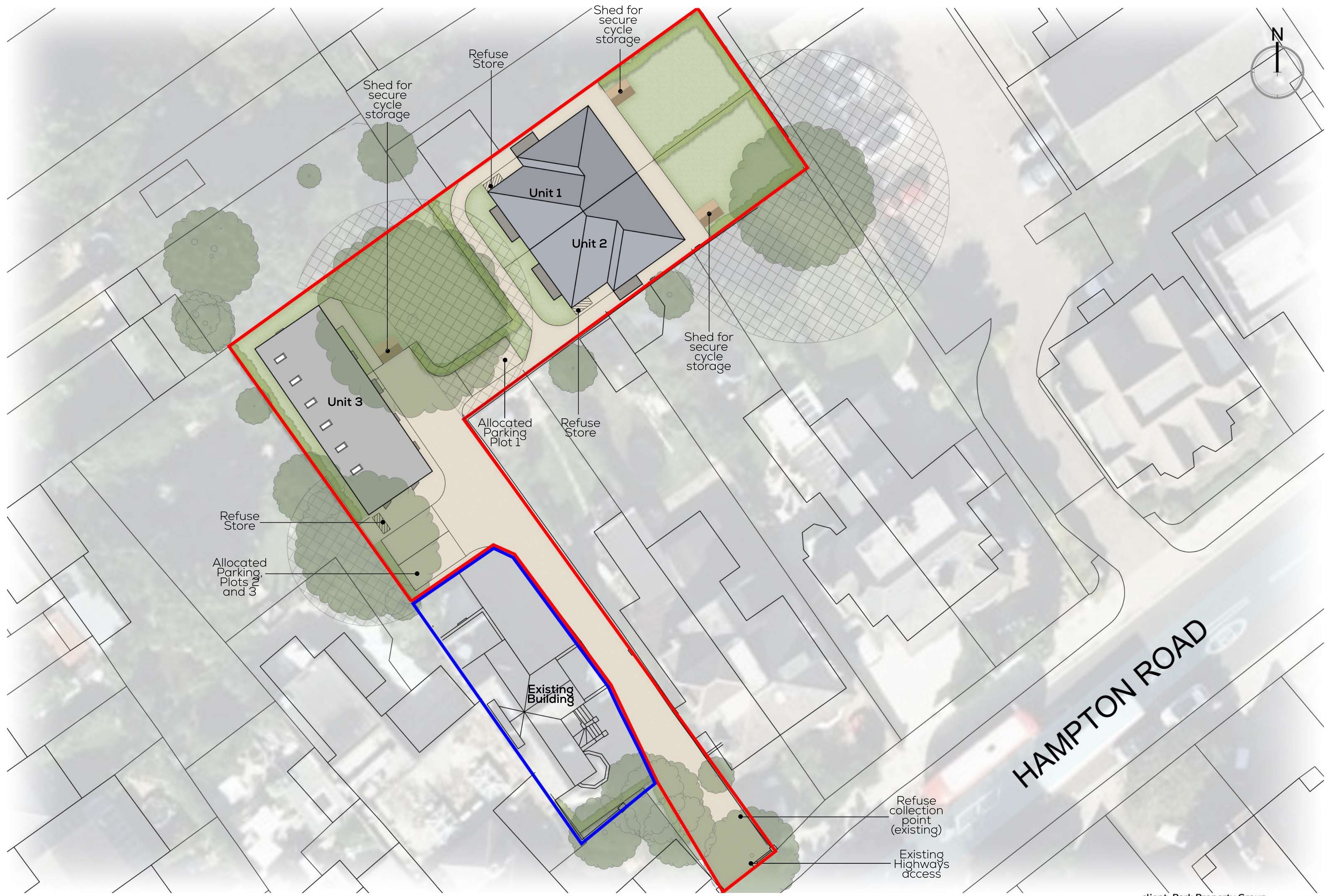
Table 5.1 – Proposed Vehicle trips

- 5.3 Table 5.1 suggests that the proposed development would generate 2 vehicular trips during both the weekday AM peak and PM peak periods. Over a typical weekday the development would generate 20 two-way vehicular trips. This is only a low generation of an increase in 6 more trips than the existing development.
- 5.4 On the basis of the above it is clear that the proposal will have a negligible vehicular trip impact on the roads surrounding the site. This is particularly relevant when considering the site currently accommodates three dwellings, whilst there is no accident record on surrounding roads.

6.0 Summary and Conclusion

- 6.1 Motion has been instructed to prepare this Highways Report on behalf of Park Property Group in respect of a planning application for the construction of three residential dwellings on land located adjacent to Hampton Road, Twickenham.
- 6.2 In summary, this Transport Statement has identified the following:
- ▶ The site is situated in a sustainable location which leads to easy access of amenities such as healthcare facilities, shops, and leisure opportunities via non-car methods of travel;
 - ▶ The proposed number of car and cycle parking spaces on-site complies with the 2021 London Plan
 - ▶ Appropriate provision is made for refuse collection and emergency access; and
 - ▶ The level of vehicular trips generated from the proposals will be negligible
- 6.3 Based on the above, the development proposal is accepted in transport terms and accord with the local and national policies concerning transport. The assessment work demonstrates that there would not be any significant harm arising from the proposed scheme and it will not cause any severe impacts. Therefore, there are no traffic or transport related reasons why this development should not be granted planning consent.

Appendix A
Site Layout Plan



**24 hampton road, twickenham
proposed site plan**

 Tree root protection zones
Refer to Fellgrove Arboricultural Report for further details.

number: 4257/P100 | date: may 2022

scale: 1:200@A2 | drn: ral chkd: ge appd: ge

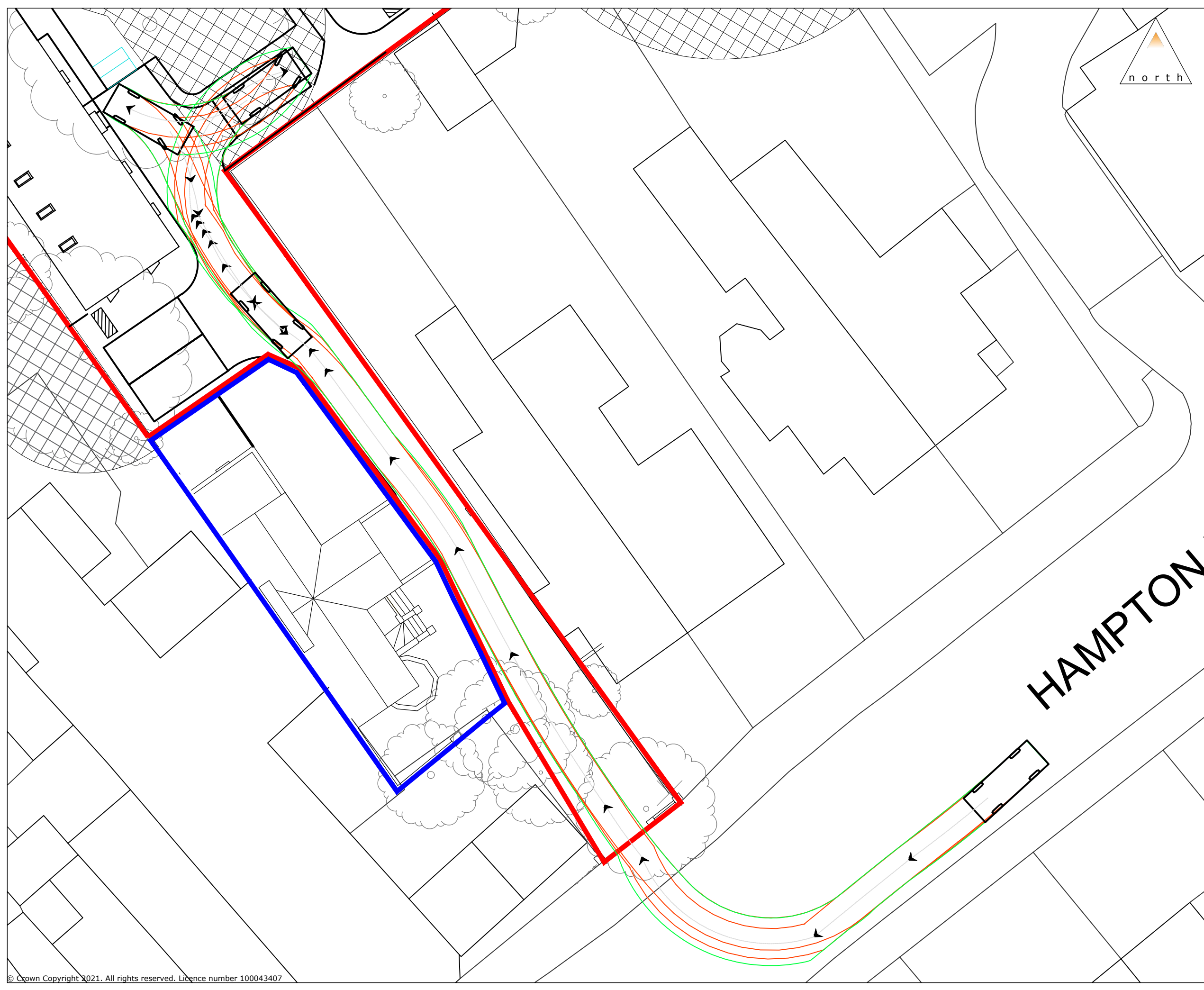
client: Park Property Group
subject to site survey and l.a. approvals

gdm architects

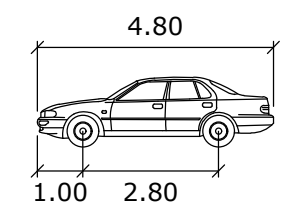
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Appendix B

Swept Path Analysis



Rev: Description: Date: Rev By: Chk'd:



TURISMO

	meters
Width	: 1.80
Track	: 1.80
Lock to Lock Time	: 6.0
Steering Angle	: 24.3

HAMPTON



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Project:
24 Hampton Road, Twickenham

Title:
Swept Path Analysis Car

Client:

Drawing Status:

Scale: 1:200 (@ A3) Date: 22/07/2022

Drawn: AN Checked: DM Approved: DM

Drawing: **2203038 - TK03** Revision: **C**

C:\Users\charlottehiscott\Motion\StaffSite - Hctwik 2203038\Drawings\2203038-TK03B.dwg

Appendix C

TRICS Output

Calculation Reference: AUDIT-734001-220525-0521

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BN BARNET	1 days
	EN ENFIELD	1 days
	HG HARINGEY	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 20 to 32 (units:)
 Range Selected by User: 9 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 24/11/21

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	2 days
Wednesday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	2
High Street	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 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000 2 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:

500,001 or More 3 days

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

Car ownership within 5 miles:

0.6 to 1.0 3 days

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

Travel Plan:

Yes 1 days

No 2 days

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

PTAL Rating:

1b Very poor 1 days

2 Poor 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	BN-03-A-02 SWEETS WAY WHETSTONE	MIXED HOUSES	BARNET
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 21 <i>Survey date: TUESDAY 03/07/18</i>		<i>Survey Type: MANUAL</i>
2	EN-03-A-01 BOLLINGBROKE PARK COCKFOSTERS	TERRACED & SEMI -DETACHED	ENFIELD
	Edge of Town Residential Zone Total No of Dwellings: 32 <i>Survey date: WEDNESDAY 24/11/21</i>		<i>Survey Type: MANUAL</i>
3	HG-03-A-01 LAWRENCE ROAD TOTTENHAM WEST GREEN	DETACHED & SEMI -DETACHED	HARINGEY
	Neighbourhood Centre (PPS6 Local Centre) High Street Total No of Dwellings: 20 <i>Survey date: TUESDAY 05/11/19</i>		<i>Survey Type: MANUAL</i>

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 TOTAL 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	24	0.082	3	24	0.247	3	24	0.329
08:00 - 09:00	3	24	0.247	3	24	0.370	3	24	0.617
09:00 - 10:00	3	24	0.192	3	24	0.164	3	24	0.356
10:00 - 11:00	3	24	0.260	3	24	0.260	3	24	0.520
11:00 - 12:00	3	24	0.151	3	24	0.164	3	24	0.315
12:00 - 13:00	3	24	0.219	3	24	0.192	3	24	0.411
13:00 - 14:00	3	24	0.205	3	24	0.205	3	24	0.410
14:00 - 15:00	3	24	0.233	3	24	0.247	3	24	0.480
15:00 - 16:00	3	24	0.315	3	24	0.260	3	24	0.575
16:00 - 17:00	3	24	0.123	3	24	0.178	3	24	0.301
17:00 - 18:00	3	24	0.219	3	24	0.110	3	24	0.329
18:00 - 19:00	3	24	0.384	3	24	0.342	3	24	0.726
19:00 - 20:00	3	24	0.301	3	24	0.219	3	24	0.520
20:00 - 21:00	3	24	0.288	3	24	0.301	3	24	0.589
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.219			3.259			6.478

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

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

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Parameter summary

Trip rate parameter range selected: 20 - 32 (units:)
 Survey date range: 01/01/14 - 24/11/21
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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.