



Dukes Education Group Ltd

Kneller Hall, Twickenham

Transport Assessment

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1 INTRODUCTION

1.1 This Transport Assessment ('TA') has been prepared by Caneparo Associates on behalf of Dukes Education Group Ltd (the 'Applicant') in support of an application for the proposed redevelopment of Kneller Hall, Twickenham ('the Site'), within the London Borough of Richmond upon Thames (LBRuT).

1.1 The Site comprises the Grade II listed Kneller Hall, various ancillary buildings, open space, playing fields and services area, which was previously occupied by the Royal Military Music School for teaching with associated residential accommodation.

1.2 The description of development is as follows:

"The demolition of existing modern buildings on the site and the conversion of Kneller Hall and other ancillary buildings associated with the Royal Military Music School to a day school (use Class F1), together with the construction of associated new purpose-built buildings including teaching space, indoor sports facilities and sporting pavilion, and other ancillary works including landscaping, access and energy centre."

1.3 The proposed development comprises the following core elements:

- Use of the main Grade II listed Kneller Hall for Education Use (Use Class F1);
- Use of Guard Room and Band Practice Hall for Education Use (Class F1);
- Demolition of existing modern buildings on the Site and the conversion of other existing single storey modern buildings to use as an energy centre and for maintenance storage, ancillary to the main school use (Use Class F1);
- New build development to provide new purpose-built buildings for school use including, teaching space and classrooms, an indoor sports facility with a swimming pool and sporting pavilion (Use Class F1);
- Upgrading and enhancing the existing playing fields and outside sports pitches at the Site;
- Ancillary works to facilitate the use of the Site as a school to include high quality sports facilities and a Forest School programme; and
- Facilitation of managed local school and local community group access to the sports and forest school facilities.

- 1.4 The Site will be used as a day school and will initially provide circa 510 pupils, which will grow up to a potential 1,000 pupils by its 7th year or more. The Site will accommodate pupils between the ages of 11-18, equivalent to Year 7 through to Sixth Form. The Site will not provide boarding or residential accommodation.
- 1.5 A copy of the Architect's Site masterplan is included at **Appendix A**.

Pre-Application Discussions

- 1.6 Pre-application discussions were held with LBRuT at the end of 2021, with further pre-application discussions held on the 28th June 2022. In addition, Design Review Panel (DRP) meetings have been held to discuss proposals on the 22nd March 2022 and the 26th June 2022. Following pre-application discussions, the proposals have been developed to incorporate the relevant design feedback, with further studies and surveys also undertaken as requested by LBRuT.

Healthy Streets Approach & Vision Zero

- 1.7 TfL has adopted the Healthy Streets Approach (2017) to improve air quality, reduce congestion and help people lead a more active and healthy lifestyle. The Healthy Streets Approach puts people and their health at the centre of planning and therefore, this TA has sought to align the key transport planning proposals towards people first. This has been done in conjunction with Vision Zero, as set out in the Mayor's Transport Strategy, which aims to remove all deaths and serious injuries from London's transport network by 2041.
- 1.8 The proposed development seeks to prioritise active and sustainable means of travel above the private car and the Applicant is dedicated to moving parents, pupils and staff away from car reliance, through numerous measures and means of mitigation outlined both within this TA and the supplementary reports which accompany this TA.

Transport Assessment Structure

- 1.9 This TA has been prepared following discussions with the Applicant's project team, LBRuT, TfL and the DRP. The document has also been prepared in line with local policy as well as TfL's guidance regarding TA's, to examine the effects of the proposed development on the highway network and surrounding public transport facilities.

1.10 In addition, this TA outlines the supplementary reports provided in addition to this document at planning application stage, namely a Staff Travel Plan (STP), Pupil Travel Plan (PTP), Draft Delivery & Servicing Plan (DSP), and Outline Construction Logistics Plan (CLP).

1.11 The structure of the remainder of this TA is as follows:

- Section 2 reviews the relevant transport planning policy;
- Section 3 describes the existing Site, proposals and surroundings;
- Section 4 details the Site accessibility and presents the Active Travel Audit;
- Section 5 provides the multi-modal trip generation assessment and trip distribution;
- Section 6 assesses the effects of the development;
- Section 7 presents mitigation measures; and
- Section 8 provides a summary and conclusion.

2 TRANSPORT PLANNING POLICY

National Policy

National Planning Policy Framework (NPPF July 2021)

2.1 The latest version of the National Planning Policy Framework (NPPF) was published in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied.

2.2 Chapter 9 – 'Promoting Sustainable Transport' sets out the central Government national transport policy.

2.3 The chapter notes at paragraph 104 that:

"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

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

2.4 The chapter continues at paragraph 105 by stating:

“The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.”

2.5 When considering development proposals, paragraph 110 states that:

“In assessing Sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

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

2.6 With regards to assessing the impact of development, paragraph 111 and 112 state:

“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.

Within this context, applications for development should:

- a) Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second - so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- b) Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*

c) *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*

d) *Allow for the efficient delivery of goods, and access by service and emergency service vehicles; and*

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

2.7 The chapter concludes at paragraph 113 that:

“All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed”.

2.8 In addition to the above, paragraph 95 of the NPPF states that:

“It is important that a sufficient choice of school places is available to meet the needs of existing and new communities. Local planning authorities should take a proactive, positive and collaborative approach to meeting this requirement, and to development that will widen choice in education. They should:

a) *give great weight to the need to create, expand or alter schools through the preparation of plans and decisions on applications; and*

b) *work with schools promoters, delivery partners and statutory bodies to identify and resolve key planning issues before applications are submitted.”*

Regional Policy

The London Plan (March 2021)

- 2.9 The Mayor formally adopted a new London Plan in March 2021. The policies which are pertinent to the proposed development are set out below.

“Policy GG2 Making the best use of land – Point E: Plan for good local walking, cycling and public transport connections to support a strategic target of 80 per cent of all journeys using sustainable travel, enabling car-free lifestyles that allow an efficient use of land, as well as using new and enhanced public transport links to unlock growth.

Policy GG3 Creating a healthy city – Point B: Promote more active and healthy lives for all Londoners and enable them to make healthy choices.

Policy GG3 Creating a healthy city – Point C: Use the Healthy Streets Approach to prioritise health in all planning decisions.”

- 2.10 Policy T4 – Assessing and mitigating transport impacts provides the following advice:

B) “When required in accordance with national or local guidance, transport assessments / statements should be submitted with development proposals to ensure that 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 having regard to Transport for London guidance.”

- 2.11 Policy T5 addresses cycling, stating:

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:

- 1) Supporting the delivery of a London-wide network of cycle routes, with new routes and improved infrastructure.*

- 2) *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.”*

2.12 Paragraph 10.5.6 states that at schools, *“cycle parking should be located in close proximity to the entrances of all buildings to provide convenience and choice for users.”*

2.13 Policy T6 addresses car parking, stating:

- a) *“Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity.*
- b) *Car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport, with developments elsewhere designed to provide the minimum necessary parking (‘carlite’). Car-free development has no general parking but should still provide disabled persons parking in line with part D of this policy.*
- c) *An absence of local on-street parking controls should not be a barrier to new development, and boroughs should look to implement these controls wherever necessary to allow existing residents to maintain safe and efficient use of their streets.*
- i) *Adequate provision should be made for efficient deliveries and servicing and emergency access.*
- l) *Where sites are redeveloped, parking provision should reflect the current approach and not be re-provided at previous levels where this exceeds the standards set out in this policy. Some flexibility may be applied where retail sites are redeveloped outside of town centres in areas which are not well served by public transport, particularly in outer London.”*

2.14 There are no car parking standards for schools within the London Plan 2021, with reference only to 5% of the total provision needing to be provided for disabled users. The provision of parking is discussed in more detail within this report, as it needs to meet the requirements of the school to ensure there is no detrimental impact on the availability of parking for existing users in the local area.

2.15 In regard to cycle parking, **Table 2.1** sets out the minimum cycle parking standards.

Table 2.1: Minimum Cycle Parking Standards (London Plan 2021)		
Use Class	Long-stay	Short-stay
D1 – Primary / Secondary School	1 space per 8 FTE staff + 1 space per 8 students	1 space per 100 students

Local Policy

London Borough of Richmond upon Thames Local Plan (July 2018)

2.16 The London Borough of Richmond upon Thames (LBRuT) Local Plan, adopted in July 2018, sets out policies and guidance for the development of the borough over the next 15 years. The Local Plan also superseded the Core Strategy and is therefore the main document for development in the borough.

2.17 Policy LP 44 'Sustainable Travel Choices' states that the Council will:

"B. Walking and Cycling

Ensure that new development is designed to maximise permeability within and to the immediate vicinity of the development 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.

C. Public Transport

Ensure that major new development 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.

D. The Road Network

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."

2.18 Policy LP 45 'Parking Standards and Servicing' states that:

"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:

- 1) *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 encourage."*

2.19 The car parking standard for schools as outlined within Appendix 3 is *"1 space per 2 staff. Arrangements must also be made for visitor and disabled parking spaces as per London Plan. Facilities for the setting down of coaches off street required."* Cycle parking should be provided in accordance with the London Plan standards.

2.20 Paragraph 11.2.1 goes on to say:

"The borough has high levels of car ownership and use within fairly densely developed residential areas with some narrow streets and many older houses without off-street parking. This has led to high levels of on-street parking, worsened in areas where there is a demand for commuter parking. The standards set are maximum parking levels and car parking provision should not be at a level less than these standards, unless an exceptional circumstance is demonstrated."

2.21 Based on the above, a balance would need to be considered between providing sufficient on-site parking for staff and space for drop-off activity to ensure parking on local roads is not detrimentally impacted, whilst also limiting parking to ensure that staff/pupils travel sustainably where they can be reasonably expected to do so.

2.22 The Site is allocated for development under 'SA 14 Kneller Hall, Whitton', which states the following:

"It has been announced that Kneller Hall will be released for disposal. Appropriate land uses include residential (including affordable housing), employment (B uses) and employment generating uses as well as social infrastructure uses, such as health and community facilities. Any proposal should provide for some employment floorspace, including B1 offices. The Council will expect the playing fields to be retained, and the provision of high quality public open spaces and public realm, including links through the site to integrate the development into the surrounding areas as well as a new publicly accessible green and open space, available to both existing and new communities."

Kneller Hall Masterplan Supplementary Planning Document (SPD)

2.23 In 2016, the Secretary of State for Defence announced a long-term plan to optimise the Defence Estate for its future operational requirements. This included confirmation of the intent to release the Kneller Hall site to the market by 2020. The purpose of the Kneller Hall Masterplan SPD (the 'SPD') is to guide the future development of the Site, including the uses it could support, so that it can support the vitality and viability of the local area. The Site is divided into three broad sub-areas:

- Kneller Residential Community.
- Kneller Hall and its context.
- Kneller Park.

2.24 Kneller Hall is a Grade II listed building and therefore needs to be retained. Paragraph 5.2.2 states: *"A viable and long-term use for the building needs to be found to secure its future which provides public access to the Chapel. Uses that could potentially support this objective include residential, hotel, community, employment or institutional use"*.

2.25 Kneller Park will be designated as Metropolitan Open Land (MOL) and remain as an open space and will become a significant new publicly accessible park for Whitton.

2.26 Section 5.3 – Movement and Access Strategy, sets out the aims for site connectivity and reduced car reliance, stating that:

“The intention is to create a low-car / car-free character in the core of the site, with an emphasis on the provision of safe and direct pedestrian and cycle routes, limited vehicle permeability and reduced levels of car parking.”

2.27 Paragraph 5.3.1 ‘Vehicle Access’ states:

“There are currently two vehicular access points into the site which are:

- *The Main Gate off Kneller Road. This currently serves as the main access point into the site.*
- *The Lodge Gate on Kneller Road. This Gate is not in regular use at present. The associated tree-lined driveway provides a key approach to Kneller Hall*

...Any proposals for the re-use of the site should assess the feasibility of these existing access points to provide the primary vehicular access into the site.

...Any proposal to introduce a new vehicular access point would need to demonstrate that its provision is necessary to achieve the objective of enabling only limited vehicle permeability within the site and would not result in issues of highway and pedestrian safety, in particular.”

2.28 Paragraph 5.3.4 ‘Parking’ states:

“Development of the site is to support travel by sustainable modes to reduce the potential impact of the development in relation to congestion, air pollution and climate change, and maximise opportunities for encouraging active and healthy lifestyles.

Consequently, car parking provision should be limited to that which is necessary to support the development and to ensure that the site does not place additional pressure on on-street parking within the vicinity of the site (both within the LBRuT and the London Borough of Hounslow)... Development should make provision for 100% active electric vehicle parking. This does not mean that every parking space needs to be equipped with a charging point, as one fast or rapid charging point may cater for many vehicles.

Whilst the site is located in an area with low Public Transport Accessibility a car-free development may be considered if suitable mitigation can be secured to avoid adding to on-street parking pressure.

Short and long-term cycle parking and storage facilities are to be provided in line with the London Plan. These facilities should be located in well overlooked areas close to active frontages of properties to encourage use.”

Policy Summary

- 2.29 The proposals seek to align with all relevant Policy across a national, regional, and local level, as well as meeting the aspirations of the Kneller Hall SPD on transport considerations such as parking and access.
- 2.30 At the heart of policy is a presumption in favour of sustainable development and the proposed development therefore seeks to adopt this from a transport perspective, placing an emphasis on active travel and sustainable transport. In turn this will decrease the propensity for car travel and therefore the demand for parking and pick-up/drop-off activity, which needs to be balanced against where staff and pupils will travel from and prevailing travel choices.
- 2.31 Parking will be provided to a level that is appropriate to ensure that there is no materially detrimental parking overspill onto local roads, whilst also encouraging sustainable transport modes, aligning with the vision of the Kneller Hall SPD. Cycle parking will be provided in accordance with policy standards and designed to maximise the uptake of cycling over time which will be promoted through initiatives such as the School Travel Plan.
- 2.32 Vehicle access proposals align with the expectations of the Kneller Hall SPD in retaining the existing vehicle accesses and re-introducing an access onto Whitton Dene as a secondary means of access for the Site.

3 SITE AND SURROUNDING AREA

The Existing Site and Surrounding Area

- 3.1 The existing Site is comprised of Kneller Hall, a Grade II listed building which lies alongside a Guard Room and Band Practice Hall, as well as accommodation buildings, open space and playing fields, measuring 9.7ha in total. The existing Site was used as residential accommodation that served the Royal Military School of Music. It was used by regiments who came to stay at the Site for music training courses. The Site is also associated with rugby training connected to Twickenham Stadium.
- 3.2 Kneller Hall is accessed from Kneller Road via two priority junctions, one to the south and one to the west, with Kneller Road also routing along the southern boundary. The Site is bound to the north by Kneller Gardens and Amberside Close, predominantly residential streets as well as a tennis club. To the east the Site is bordered by Duke of Cambridge Close, a private residential road, with Kneller Road to the south and west, which in turn meets Whitton Dene. A Site location plan is included in **Figure 3.1** below.

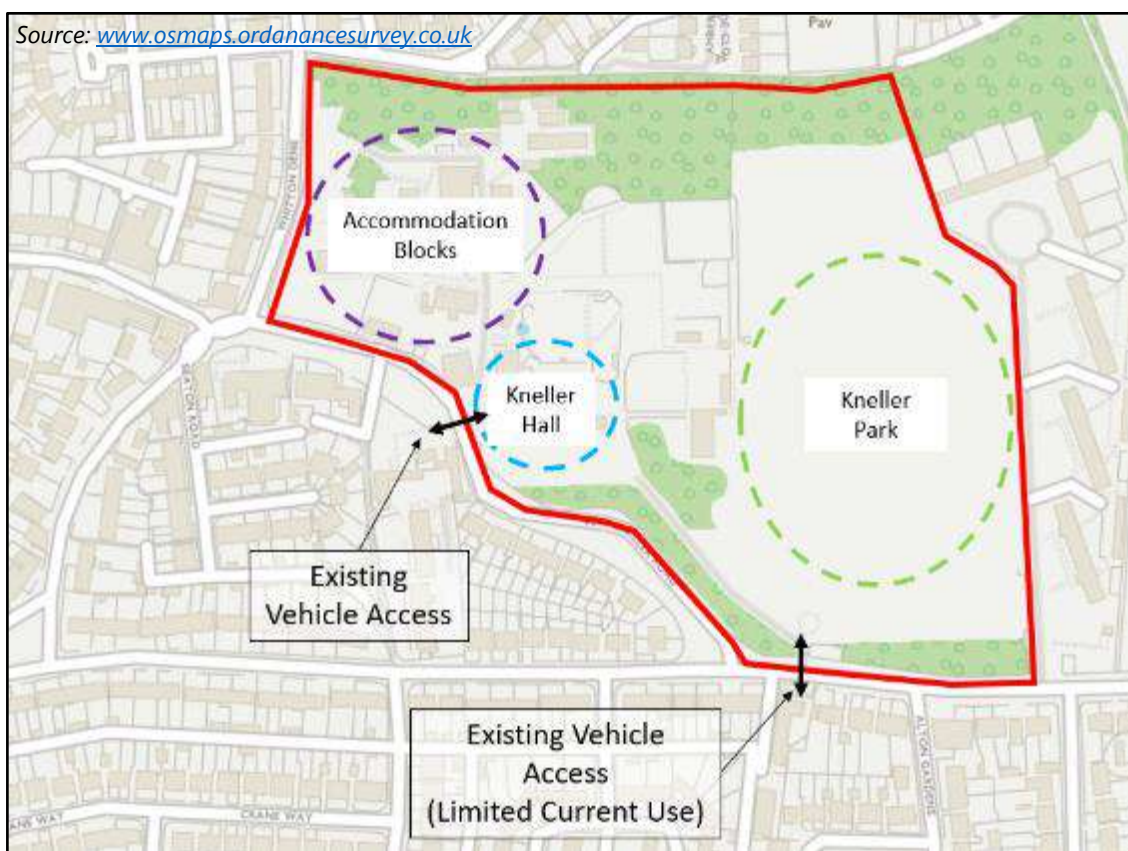


Figure 3.1: Site Location Plan

Local Highway Network

- 3.3 Kneller Road is a two-way single carriageway road which operates in a broadly east to west orientation between Warren Road to the east and Hounslow Road to the west, and forms part of the B361. In the vicinity of the Site along its western boundary, the carriageway is circa 5m in width with single yellow lines present on both sides with the exception of two rows of parking bays. There are footways on both sides with street lighting also present. Traffic is subject to a 30mph speed limit.
- 3.4 Warren Road (known as Kneller Road along the Site boundary to the south) is a two-way single carriageway road operating in an east to west orientation connecting to Whitton Road to the east and Nelson Road to the west. Warren Road also forms part of the B361 which provides access to the A316 to the south and the A314 to the north. Warren Road provides access into Kneller Road through a ghosted right-turn lane. In the vicinity, Warren Road measures circa 7.3m in width with cars able to park half-on / half-off the footway when driveways/vehicle crossovers are not present. Traffic is subject to a 20mph speed limit.
- 3.5 Operating to the northwest of the Site on the west and north boundaries of the Site respectively are Whitton Dene and Kneller Gardens. These roads are both primarily residential in nature, with kerbside controls and a mix of single yellow line and resident parking bays. The Site historically provided a vehicle access into the Site from Whitton Dene, now infilled but with dropped kerbs with tactile paving still present.
- 3.6 The A316 is a two-way dual carriageway operating in a broadly north-east to south-west orientation between the A4 to the north-east and to the M3 to the south-west. In the vicinity of the Site, the carriageway measures circa 19m in width, with a 2.5m central margin separating traffic. There are a mixture of signalised crossings, pedestrian footbridges and underpasses to allow pedestrians to cross safely. Traffic is subject to a 40mph speed limit.

Controlled Parking Zone

- 3.7 The Site is located within a Controlled Parking Zone ('CPZ') 'R' which is only in operation on days when an event is occurring at Twickenham Stadium. Therefore, for the majority of time, the parking bays are unrestricted.

Parking Surveys

- 3.8 A daytime parking survey has been undertaken on two neutral weekdays during school term time (16th and 17th March 2022), on roads within a 500m walking distance of the Site. This survey assists in understanding the existing parking demand in the local area at peak times.
- 3.9 The parking beat survey has been undertaken to cover key daytime periods and understand parking level fluctuation throughout the day. The survey covers the weekday time periods of 07:30-09:30, 12:00-12:30 and 15:30-19:00, which coincides with morning and evening peak periods on the highway network, expanded to also include school opening/closing times, as well as the lunchtime period. The parking survey is summarised in **Table 3.1** below, with the detailed survey data included at **Appendix B**.

Table 3.1: Parking Beat Survey 500m – 16th and 17th March 2022			
Time	Parked Vehicles	Empty Spaces	Occupancy (%)
Wednesday 16th March 2022 – Wet Weather			
07:30 – 08:00	370	146	72%
08:00 – 08:30	362	154	70%
08:30 – 09:00	380	136	74%
09:00 – 09:30	375	141	73%
07:30 – 09:30 Average	372	144	72%
12:00 – 12:30	344	172	67%
15:30 – 16:00	346	170	67%
16:00 – 16:30	351	165	68%
16:30 – 17:00	362	154	70%
17:00 – 17:30	368	148	71%
17:30 – 18:00	373	143	72%
18:00 – 18:30	365	151	71%
18:30 – 19:00	377	139	73%
15:30 – 19:00 Average	363	153	70%
Thursday 17th March 2022 – Clear and Sunny Weather			
07:30 – 08:00	368	148	71%
08:00 – 08:30	350	166	68%
08:30 – 09:00	374	142	72%
09:00 – 09:30	367	149	71%
07:30 – 09:30 Average	365	151	71%
12:00 – 12:30	343	173	66%
15:30 – 16:00	344	172	67%
16:00 – 16:30	346	170	67%
16:30 – 17:00	344	172	67%
17:00 – 17:30	352	164	68%
17:30 – 18:00	357	159	69%
18:00 – 18:30	357	159	69%
18:30 – 19:00	370	146	72%
15:30 – 19:00 Average	353	163	68%

3.10 **Table 3.1** demonstrates that the busiest on-street period recorded was 18:30 – 19:00 on Wednesday 16th March, in which the local on-street parking opportunities within 500m of the Site reached an occupancy level of 73%. This maximum recorded level of on-street parking indicates that there were still 139 parking spaces available on-street locally.

- 3.11 As detailed within paragraph 5.13 of the LBRuT Transport SPD (June 2020): *“On-street parking will be considered as being in short supply if the existing level of on-street parking stress is 85% or more of total on-street parking capacity..”*. It is therefore recognised that the local on-street parking occupancy level during the daytime periods in which the school will be open will not exceed the threshold for parking stress.
- 3.12 Looking at the highest occupancy period recorded of 18:30 – 19:00 (73% occupancy), a further 62 vehicles can park on-street before parking occupancy reaches the parking stress threshold of 85%, as recognised by LBRuT. When considering the school PM peak period of 16:00-17:00, the local on-street parking availability was 70% occupancy, which would enable 77 additional cars to park on-street before the 85% parking stress threshold is met.
- 3.13 It is also noted, as detailed within the full parking survey data included at **Appendix B**, that Kneller Road adjacent to the Site, recorded a lower parking occupancy during the school finish time (16:00-17:00) than that of the total parking area, with a parking occupancy level of 68% recorded on Thursday and 62% on Wednesday.
- 3.14 Whilst the proposals provide for on-site parking for staff and pick-up/drop-off facilities to avoid any on-street activity, the results of the survey do suggest that in the event that parents were to drop-off/pick-up pupils at an on-street location, it will not result in parking stress or be materially detrimental to local resident amenity.

Nearby Schools

Chase Bridge Primary School

- 3.15 Chase Bridge Primary School is located approximately 500m east of the Site access (6 minutes' walk) which provides a 3-form entry Primary School for up to 630 pupils (Planning Reference: 10/1914/FUL). It is understood that there are 98 staff employed by the school with 31 staff car parking spaces present. There is no drop-off facility, with approximately 40% of pupils being dropped-off by car on the local highway network.
- 3.16 The school, being a primary school, is considered to present a high number of pick-up/drop-off trips, which can be attributed to the need to take young pupils and Nursery/Reception aged children to the school safely. To mitigate the pick-up and drop-off activity the school operates staggered start and finish times for each school age grouping, as outlined within **Table 3.2** below.

Year Grouping	Start	Finish
Nursery AM	09:00	12:00
Nursery PM	12:05	15:05
Reception	09:00	15:10
Years 1 and 2	08:50	15:00
Years 3 and 4	08:50	15:15
Years 5 and 6	08:55	15:20

Radnor House Independent School

- 3.17 The existing Radnor House Independent School is located on the A310 Cross Deep, with the River Thames bordering its eastern boundary with Twickenham Railway Station located to the north. The school accommodates pupils from Years 5 – 13, with 455 pupils currently at the school. The school provides an off-site staff car park which accommodates up to 20 cars.
- 3.18 A travel survey was undertaken of the existing pupils and staff in 2013, with further details provided within Section 5.
- 3.19 The existing school, Radnor House Independent School, is looking to expand and it is envisaged that existing and future Years 7-13 pupils and the majority of staff would relocate to the Kneller Hall Site. This will allow for Year 5 and 6 pupils to remain at the Radnor House School and expand upon the junior school offering at the existing school Site.
- 3.20 The existing pupil locations from the Radnor House School from 2021/22 academic year has been reviewed for Years 7 – 13. **Figure 3.2** below presents the existing pupil cohort for the aforementioned years, with **Figure 3.3** presenting the local cohort in the context of the Kneller Hall Site and 20-minute walking and cycling isochrones to demonstrate those which are within a realistic walking distance of the Site.

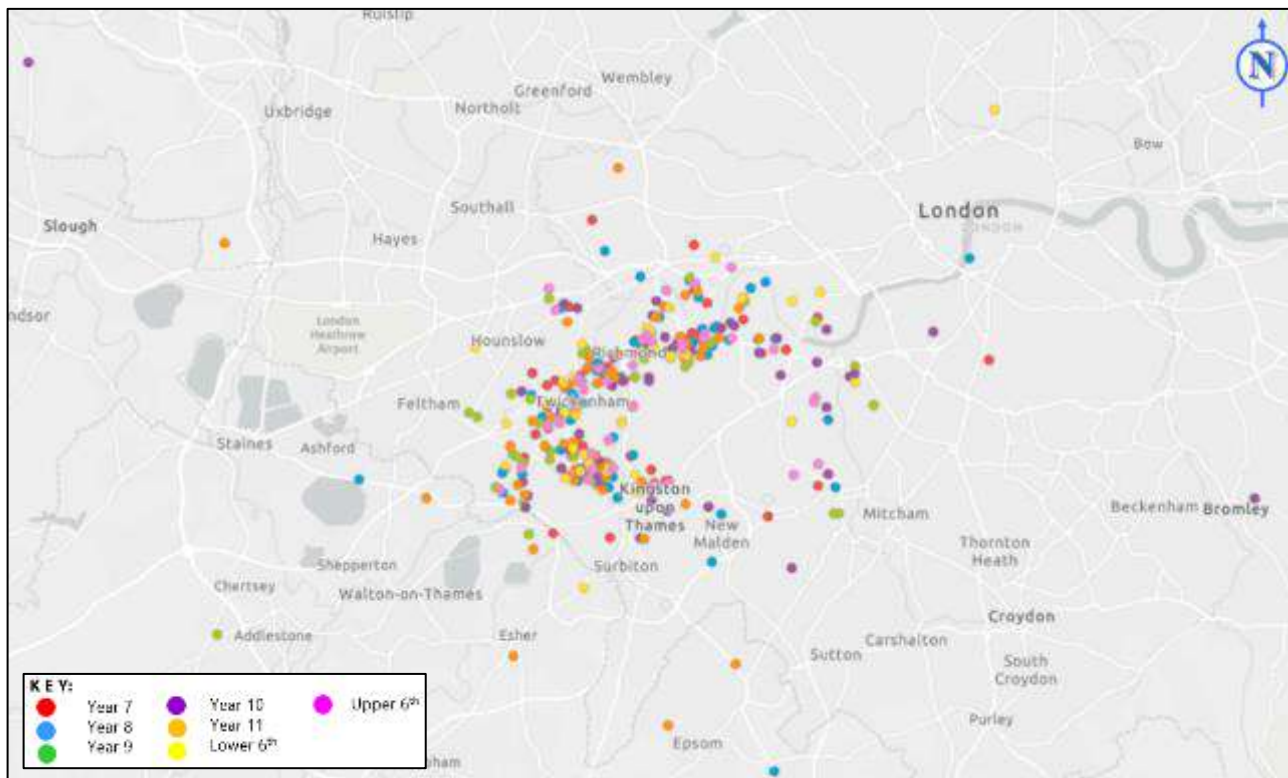


Figure 3.2: Existing 2021/22 Pupil Cohort at Radnor House School (Years 7-13)

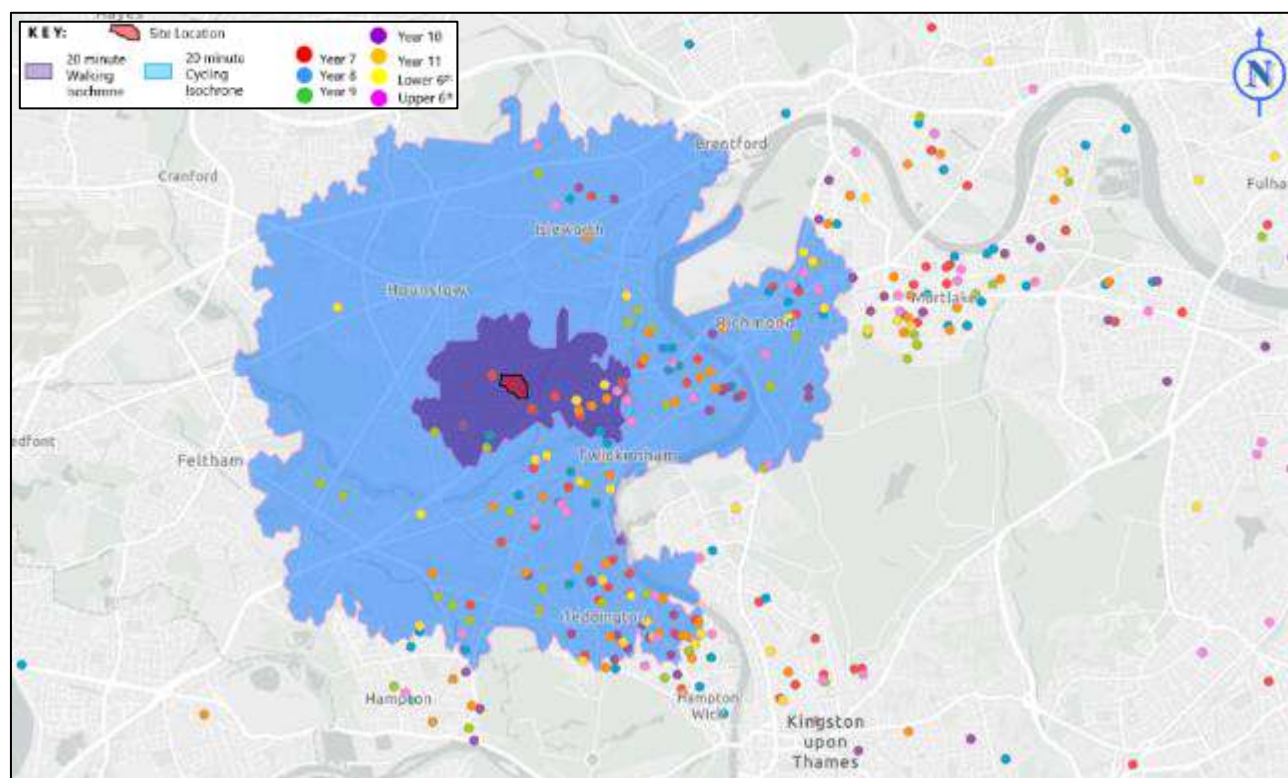


Figure 3.3: Existing 2021/22 Pupil Cohort in Context of Kneller Hall and Walking and Cycling Isochrones

3.21 As can be seen in **Figure 3.3**, it is noteworthy that a notable proportion of pupils within the Twickenham area will be within walking distance of the Site, with a high proportion of local pupils also being within cycling distance.

Other Local Schools

3.22 In addition to the Radnor House School, which will see the decanting of pupils to the Kneller Hall School, and the Chase Bridge School located approximately 500m east of the Kneller Hall Site, there are a number of other schools located within the local area, including:

- Nelson Primary School – Located approximately 800m west of the Site on Nelson Road, this school provides primary school education for approximately 370 pupils. It is accessed directly from Nelson Road and provides approximately 31 car parking spaces on-site.
- St. Edmund's Primary School & Nursery – Located opposite Nelson Primary School approximately 820m from the Site, this school provides primary school education for approximately 450 pupils. It is accessed directly from Nelson Road and provides approximately 29 parking spaces, shared with the adjacent St Edmund of Canterbury Church.
- Richmond upon Thames School and College – Located approximately 1.1km to the southeast of the Site on foot, this school and college provides secondary school and college aged education for approximately 600 secondary school pupils, and as of the latest Ofsted report, recorded circa 1,700 college students. The school and college recently underwent redevelopment and now provides new campus buildings with cycle parking and lockers for pupil use.

Proposed Development

3.23 The proposal is for a private school which has the capability of accommodating up to 1,000 pupils aged 11 to 18 (including sixth form). The school will be a day school only, operating Monday to Friday during term time. The proposals also include the addition of ancillary sports facilities on-site, pick-up/drop-off facilities accessed via the existing vehicle access on Kneller Road to the south, the closure of the western access onto Kneller Road to vehicles (pedestrian and cyclist access only) and the re-opening of the existing infilled access onto Whitton Dene to the northwest of the Site to facilitate access to staff parking and for servicing activity.

3.24 It is expected that community groups and local schools will be able to hire some of the facilities at the school, at weekends, evenings and outside of the term time. It is noted that being a private school, term times are shorter than for non-private schools. This use will be managed by the school, and it will primarily be local groups / schools using the facilities that can travel to and from the Site by foot, or public transport. This usage will be outside of peak times and involve a low number of movements, relative to the school use. This Transport Assessment therefore focuses on the school use during the term time and peak periods.

Pupil and Staff Annual Growth

3.25 Upon occupation of the school, existing pupils in Years 7 – 13 at Radnor House School will move to the Kneller Hall Site. This will be approximately 410 pupils (330 pupils Years 7-11 and 80 Sixth Form students) and circa 90 staff members. This decanting of pupils and staff ensures that from the outset, the proposed School will primarily relocate and transfer existing staff and pupils in the locality, as opposed to generating an entirely new and additional demand on the transport and highway network in the Twickenham area.

3.26 Through the provision of additional school forms for Year 7 and some new pupils, the first year of operation of Kneller Hall is expected to receive 500-520 pupils. This will grow each year as new pupils are brought up through the school and intake capacities for each year group increase. **Table 3.3** below summarises the anticipated annual growth of the school by year group.

Table 3.3: Annual Anticipated Growth in Pupils at the School		
Year From	Form Groups per Year	Total Expected Pupils
Year 1 (Opening Year)	Year 7 = 144 pupils (6 x 24); Year 8 = 72 pupils (3 x 24); Year 9 = 72 pupils (3 x 24); Year 10 = 66 pupils (3 x 22); Year 11 = 66 pupils (3 x 22); Year 12 = 50 pupils (5 x 10); Year 13 = 50 pupils (5 x 10).	Circa 500 (to 520)
Year 2	Year 7 = 144 pupils (6 x 24); Year 8 = 144 pupils (6 x 24); Year 9 = 72 pupils (3 x 24); Year 10 = 72 pupils (3 x 24); Year 11 = 72 pupils (3 x 24); Year 12 = 50 pupils (5 x 10); Year 13 = 50 pupils (5 x 10).	Circa 600
Year 3	Year 7 = 144 pupils (6 x 24); Year 8 = 144 pupils (6 x 24);	Circa 680

	Year 9 = 144 pupils (6 x 24); Year 10 = 72 pupils (3 x 24); Year 11 = 72 pupils (3 x 24); Year 12 = 50 pupils (5 x 10); Year 13 = 50 pupils (5 x 10).	
Year 4	Year 7 = 144 pupils (6 x 24); Year 8 = 144 pupils (6 x 24); Year 9 = 144 pupils (6 x 24); Year 10 = 144 pupils (6 x 24); Year 11 = 72 pupils (3 x 24); Year 12 = 50 pupils (5 x 10); Year 13 = 50 pupils (5 x 10).	Circa 750
Year 5	Year 7 = 144 pupils (6 x 24); Year 8 = 144 pupils (6 x 24); Year 9 = 144 pupils (6 x 24); Year 10 = 144 pupils (6 x 24); Year 11 = 144 pupils (6 x 24); Year 12 = 75 pupils (5 x 15); Year 13 = 75 pupils (5 x 15).	Circa 870
Year 6	Year 7 = 144 pupils (6 x 24); Year 8 = 144 pupils (6 x 24); Year 9 = 144 pupils (6 x 24); Year 10 = 144 pupils (6 x 24); Year 11 = 144 pupils (6 x 24); Year 12 = 90 pupils (6 x 15); Year 13 = 90 pupils (6 x 15).	Circa 900
Future Years	Year 7 – 160 pupils (8x20) Year 8 – 160 pupils (8x20) Year 9 – 160 pupils (8x20) Year 10 – 160 pupils (8x20) Year 11 – 160 pupils (8x20) Year 12 (Sixth Form) – 100 pupils (5x20) Year 13 (Sixth Form) – 100 pupils (5x20)	Circa 1,000 pupils*
*Capacity Sought for up to 1,000 pupils but future split unknown at this stage. Split assumed aligning with prior year		

3.27 It is anticipated that once pupil numbers reach 750, the school would employ approximately 150 full-time staff at a staff to pupil ratio of 1 staff member for every 5 pupils, which is similar to other Duke's Education schools. Should the school be expanded to 1,000 pupils, the staffing level would likely increase to approximately 160-170 full-time staff. Whilst the school would initially be occupied by fewer staff and pupils as outlined above, numbers would increase year on year until the upper limit is reached, which provides the worst-case scenario in terms of any transport and highway related impacts to be considered.

3.28 As the school will initially be for 520 pupils but will grow over a period of 7+ years to potentially a 1,000-pupil school, this TA assesses the initial 520 pupils and 100 staff scenario, as well as the potential future scenario of up to 1,000 pupils and 170 staff.

Access

3.29 It is envisaged that pedestrian access to the school will be from the existing vehicle accesses into the Site from Kneller Road, with the existing vehicle access to the west of the Site onto Kneller Road to be re-imagined as a pedestrian and cyclist access only, providing a vehicle-free zone within the Site entrance to enable the safe movement of pupils and staff internally away from vehicles.

3.30 A new pedestrian gate access will also be provided adjacent to the existing vehicle access at the south of the Site onto Kneller Road, providing pedestrian and cyclists with a direct internal route to the School, without the need for travelling northbound along Kneller Road to the west of the Site.

3.31 The proposals also seek to re-open the now bricked-up entrance to the Site from Whitton Dene (which is not part of the listed fabric of the surrounding wall). This entrance will provide access to emergency vehicles, delivery vehicles and staff to access the on-site staff car park. The access has been designed to be secured with fencing and gated entry within the Site to ensure vehicles can enter the Site from Whitton Dene without waiting on the highway. The gated entrance provides space for two vehicles to wait and will be fob controlled on entry and automatic opening for vehicles exiting the Site. Included at **Appendix C** is a copy of the proposed car park accessed from Whitton Dene, which demonstrates parking provision for staff and associated car swept path analysis.

3.32 Access for coach/minibus vehicles associated with the Site, as well as parents picking-up/dropping-off pupils will be taken from the existing access from Kneller Road to the south of the Site, with vehicles then travelling north through the Site to the parade ground space adjacent to the Kneller Hall building. Coaches/Minibuses will proceed north to the east of the Kneller Hall building and make use of shared-use hardstanding which will be retained from the existing Site to provide coach and minibus management space during the school start and finish times and hardstanding play-space during school times.

Parking

Car Parking

- 3.33 The proposals seek to provide 40 on-site staff car parking spaces, to be provided on-site on existing amended hardstanding areas to the northwest corner of the Site, outside of the Metropolitan Open Land (MOL), to adhere to the Kneller Hall Masterplan SPD. It is pertinent to note that much of the area proposed to be used as a car park, is already in use as a car park.
- 3.34 The car park will be accessed through the re-opened access onto Whitton Dene, as can be seen within the car park plan included at **Appendix C**.
- 3.35 There is a need to strike a balance between providing on-site parking to accommodate a proportion of staff expected to travel to the Site by car, but also restricting the number of spaces to promote sustainable travel, whilst ensuring that any potential parking overspill does not have a material impact on the availability of parking for existing residents. The school is committed to moving staff away from private car use and towards using sustainable and active modes of travel where possible. The proposed car parking of 40 spaces aligns with LBRuT parking standards for schools and takes into account the existing parking demand at the Radnor House School for staff, as well as the PTAL rating of the Site.
- 3.36 All staff car parking spaces will be provided with electric vehicle charging opportunity, with 20% of spaces to be provided as active charging facilities and the remaining 80% passive from Year 1. This approach is in line with London Plan standards and allows for the addition of further charging facilities as necessary in the future.
- 3.37 Parking is also proposed for disabled visitors to the Site, with 3 disabled parking spaces currently proposed adjacent to and accessed via the parade grounds at the front of the Site, accessed from the access from Kneller Road to the south.
- 3.38 There is an existing hardstanding car park to the northeast of Kneller Hall, located within the Metropolitan Open Land. This currently accommodates space for 32 cars. This area is proposed to be used as an area for hardstanding play during the break and lunchtimes, by pupils. The hardstanding will be used flexibly, with the option of using it as a coach parking area, should there be sports matches against other school teams arriving by minibus / coach and/or for community groups to use if they require parking when using the sports facilities. In addition, the area will be used as the school minibus/ coach drop-off area.

Cycle Parking

- 3.39 Cycle parking will be provided in accordance with London Plan 2021 standards for all staff and pupils, as these standards are greater than LBRuT, standards, therefore providing increased opportunities for sustainable travel by bicycle. The long-stay spaces will be provided within cycle stores across the Site, with locations provided relevant to each school year and a separated secure store for staff cycle parking to the northwest of the Site.
- 3.40 The main pupil cycle store will be provided adjacent to the pedestrian and cycle access to the west of the Site, within a sheltered and secure store provided as Sheffield stand spaces for 80 cycles. The second pupil cycle store is to be located to the north of the new teaching block, providing 64 Sheffield stand spaces within a secure and sheltered store. The staff cycle store is located adjacent to the access from Whitton Dene, with 28 Sheffield stand spaces provided. Short-stay cycle parking is accommodated adjacent to the main pupil cycle store at the west access, with 10 spaces provided in the form of Sheffield stands.

Pick-Up & Drop-Off Arrangement

- 3.41 An on-site pick-up / drop-off facility will be provided for the school. This will ensure that pupils can be dropped-off and/or picked-up without vehicles waiting and potentially causing congestion on-street and on the public highway. The majority of drop-off activity is expected to be associated with the lower school element (Years 7-9), as upper school and sixth form pupils are older and therefore more likely to travel independently.
- 3.42 The proposed pick-up / drop-off facility will make use of the parade grounds at the frontage of the Site, with vehicles accessing and egressing the Site from the retained access to the south on Kneller Road. Pupils will be dropped-off/picked-up outside the building in a circular arrangement to assist the flow of vehicles and minimise the potential for queuing and delay.
- 3.43 The proposed arrangement is included at **Appendix D** which details the drop-off/pick-up layout and swept path analysis demonstrating vehicle circulation. As can be seen, the proposals include two banks of 'pull-in' parallel pick-up/drop-off areas, with a central zone free of vehicles to limit the area afforded to vehicles. The arrangement allows vehicles to circulate around waiting vehicles, as well as enabling on-site vehicle stacking should it occur, the advantage being that it prevents vehicles blocking back on to the public highway/Kneller Road.

3.44 The parade ground has been designed to provide a level surface to enable multiple uses of the space, with the design also made symmetrical to add to the appearance of the front of Kneller Hall, without creating an overly car-centric approach to the design of the drop-off arrangement. In the pre-application discussions with the heritage officers, it was made clear that the parade ground should remain undeveloped and free of landscaping. The proposed design does not inhibit the capacity of the drop-off area though, and the design is capable of accommodating 14 cars dropping-off within the bays, as well as a further capacity of 25 cars waiting along the access road, as demonstrated within the drop-off area capacity plan included at **Appendix E**. As such, the proposed drop-off area is not anticipated to result in any backing up of cars on the local highway awaiting access to the Site.

Coach and Minibus Travel

3.45 The existing Radnor House School currently operates three minibus routes for the school, operating pupil collection and drop-off services in the morning and at the end of the school day to Chelsea, Ealing, Richmond and Wimbledon areas. Included at **Appendix F** is a copy of the existing Radnor House School coach and public transport guide, providing information to parents and pupils on how to reach the site by the provided school coaches and local public transport opportunities.

3.46 In addition to morning and evening coach travel, the existing Radnor House School provides two minibuses, enabling pupils to be taken to local sporting and community events.

3.47 It is currently envisaged that coach/minibus travel will be utilised by the proposed school, with the school retaining the existing Radnor House School routes initially. As the school expands in future, it is proposed that amended and/or additional routes will become available. The Radnor House School has already confirmed that 6 additional minibus routes could be provided in addition to the existing routes. These routes have been investigated as the school has ambitions to increase its current transport offering to more areas, the benefit being that it helps to remove travel and distance as a barrier for new pupils joining the school and provides an alternative to car use. The additional planned routes are as follows:

A. Uxbridge – Hillingdon – Hayes – West Drayton – Cranford – Hounslow

B. Northolt – Greenford – Hanwell – Southall – Heston – Osterley – Isleworth

- C. Shepherds Bush – Hammersmith – Turnham Green – Chiswick – Kew – Richmond – St Margarets
- D. Egham - Staines - Ashford – Bedfont – Feltham
- E. Ewell – Surbiton – Thames Ditton – East Molesey – West Molesey – Hampton Hill – Teddington
- F. Chertsey – Weybridge – Walton – Shepperton – Sunbury – Hampton - Hanworth

3.48 Minibuses will be managed on-site, with vehicles entering/exiting from the south on Kneller Road. Should minibuses (or coaches) need to park in between journeys, as noted previously there will be a suitable area of hardstanding to the northeast of the Kneller Hall building. This will ensure no activity needs to occur on-street in the local area and that minibus/coach activity can also be separated from the main pick-up/drop-off area on the parade ground at the front of the Kneller Hall building. Included at **Appendix G** is a copy of the coach parking plan, which demonstrates how coaches can park at the Site and demonstrates the capacity of the aforementioned hardstanding area.

3.49 It is anticipated that at year 1 of the school being operational, the above routes will operate minibuses to collect pupils. As year-on-year growth occurs, each route will be actively managed to ensure that there is always capacity for pupils to travel on bus routes. To facilitate future growth, minibuses would be replaced by coaches if/where necessary and appropriate to increase passenger capacity.

Servicing and Refuse Collection

3.50 Servicing for the Site is proposed to take place from within the staff car park, accessed from Whitton Dene. The car park arrangement includes a turning area to the south of the car park to allow for servicing vehicles to manoeuvre on-site and be positioned so as to not block parking space access. Servicing vehicles up to and including a 7.5t box van will be able to enter the Site and service before egressing in forward gear, as can be seen within the swept path analysis included at **Appendix H**, which demonstrates the movement of a 7.5t box van and 8m refuse vehicle.

- 3.51 Following discussions with the existing Radnor House School, it is anticipated in the future 1,000 pupil scenario that the School will generate approximately 5 deliveries per day. This provision assumes 3 deliveries per day of food and drink and 2 deliveries of stationery and maintenance related ad hoc goods. The provision of 3 food and drink deliveries is considered to be a robust assumption based on information provided by the existing Radnor House School, which is understood to receive 1-2 deliveries of food and drink per day. As such, considering the uplift in pupils, 5 deliveries per day is an appropriate estimate for servicing demand.
- 3.52 Waste and recycling generated by the school will be stored within a waste store to be located adjacent to the servicing turning area, as can be seen within **Appendix A**, to ensure waste can be collected directly by the waste collection team. It is envisaged that waste vehicles will enter from the re-opened Whitton Dene access and will make use of the servicing vehicle turning area to collect waste. It is proposed that vehicles are limited to 8m in length to ensure there is sufficient manoeuvring space to enter the Site. Waste will be collected by a private collection team, with collections to be undertaken outside of school open hours where possible.
- 3.53 Submitted alongside this TA is a Draft Delivery, Servicing and Waste Management Plan (DSWMP), which sets out the way in which servicing and waste is managed at the Site, as well as outlining the initiatives and monitoring to be put in place to ensure servicing and waste activity is managed on-site appropriately. Further information on the DSWMP is included within Section 7.

4 ACCESSIBILITY AND ACTIVE TRAVEL AUDIT

- 4.1 The Healthy Streets approach is set out as part of the Mayor's Transport Strategy (2018) and puts human health and experience at the centre of planning. The aims of the strategy are to encourage all Londoners to do at least 20 minutes of active travel each day by 2041. To this end, TfL has defined 20-minute walking and cycling distances as an Active Travel Zone (ATZ).
- 4.2 An assessment of the accessibility of the Site by both active modes of travel and public transport will be undertaken, as well as an Active Travel Audit for the key routes in the locality, based on TfL's adopted Healthy Streets Transport Assessment guidance.

Accessibility by Active Travel Modes

Access by Foot

- 4.3 The surrounding area benefits from excellent pedestrian footway links, well paved footways provided on all desire lines in the vicinity of the Site. A footway of circa 1.6m wide is provided on the northern side of Kneller Road along the western boundary of the Site, which provides a walking route towards the bus stops on Nelson Road and on the B361.
- 4.4 Dropped kerbs are in place at the majority of crossing locations with refuge islands also present providing opportunities to cross, which are suitable for children, disabled users and the visually impaired. The nearest signalised crossings on Kneller Road and High Street Whitton are also provided with rotating cones suitable for visually impaired users.
- 4.5 There is an extensive network of Public Rights of Way (PRoW) in the vicinity of the Site, with the location and reference included in **Figure 4.1**.



Figure 4.1: Map of Public Rights of Way (LBRuT)

Source: gisrichmond.gov.uk

4.6 **Table 4.1** below summarises local amenities available for future users of the proposed development. This summarises the location of each amenity and provides approximate walking distances (measured from the southern Site access on Kneller Road), as well as approximate walking times, assuming an average walking speed of 80 metres per minute.

Table 4.1: Approximate Distances to local amenities			
Amenity	Location	Distance (metres)	Approximate Walking Time (minutes)
Public Transport Opportunities			
'Kneller Hall' Bus Stop A		50	<1
'Kneller Hall' Bus Stop Q		120	1
'Warren Road' Bus Stop V		250	3
'Warren Road' Bus Stop T		290	4
Whitton Rail Station		1,100	14
Hounslow Rail Station		1,600	20
Twickenham Rail Station		1,600	20
Facilities and Amenities			
Duke of Cambridge Pub	Kneller Road	50	1
Alton Convenience Store	Kneller Road	250	3
Chase Bridge Primary School	Kneller Road	350	4
Murray Park	Kneller Road	500	6
Minal Pharmacy	High Street Whitton	700	9
Caribbean Restaurant	Hounslow Road	750	10
Lidl Supermarket	High Street Whitton	750	10
Starbucks	High Street Whitton	800	10
Murray Park Community Hall	Murray Park	850	11
Sainsbury's Bank ATM	High Street Whitton	850	11
Post Office	High Street Whitton	850	11
Londis	Whitton Road	1,200	15
Maswell Park Health Centre	Hounslow Avenue	1,300	16
Anytime Fitness	London Road	1,600	21

4.7 The above table highlights that numerous local amenities and services, including several public transport nodes, are available within walking distance of the Site.

Access by Bicycle

4.8 As defined by TfL within the Healthy Streets guidance, a 20-minute cycle from the Site represents a suitable distance for staff / visitors to travel to / from the Site by bicycle. Therefore, there is scope for the uptake of this sustainable mode by users of the Site.

4.9 **Figure 4.2** shows a 20-minute cycle isochrone around the Site including areas such as Hampton, Teddington, Richmond, Osterley and Lampton.

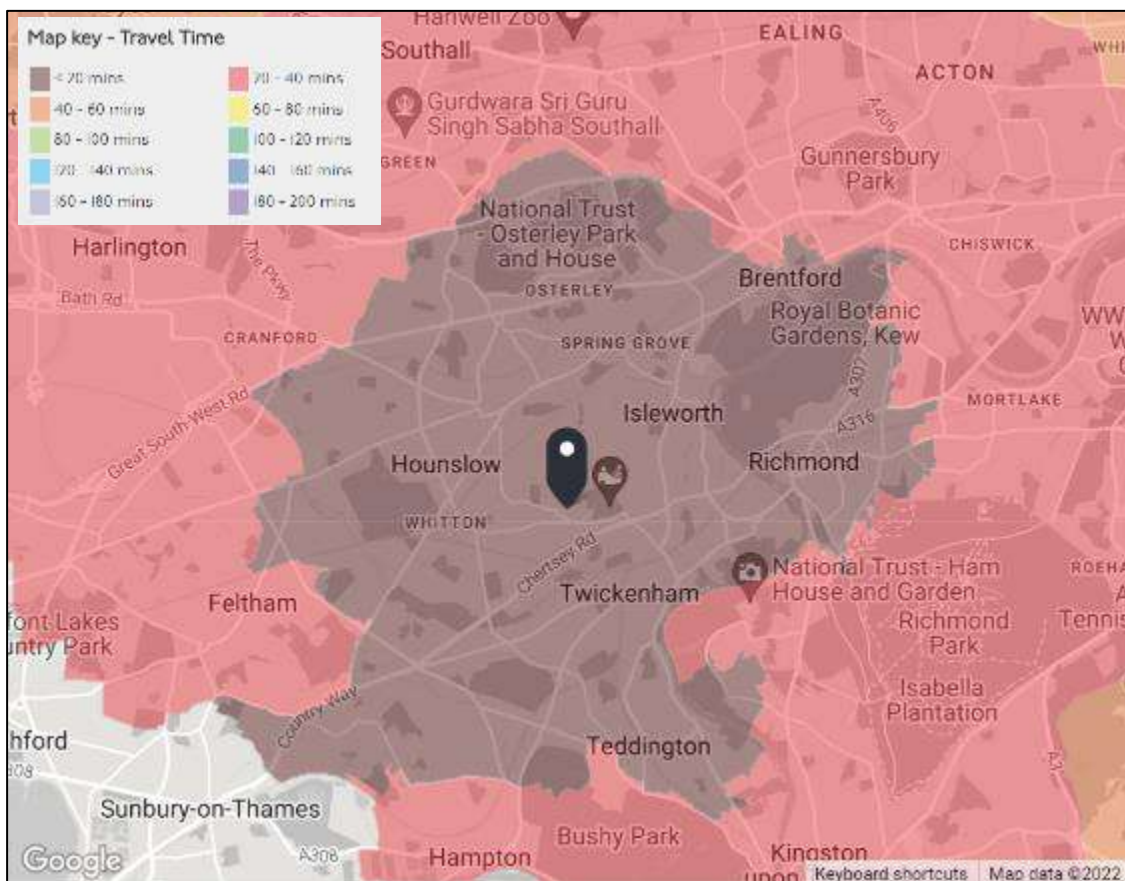


Figure 4.2: 20-minute Cycle Isochrone

Source: TfL

- 4.10 Despite the lack of dedicated on-road cycle lanes in the vicinity of the Site, Richmond upon Thames Cycle Network Map (RuTCNP) highlights roads that are suitable for cycling on-road, as well as off-road routes.
- 4.11 Nelson Road and Whitton Dene are classified as 'main road cycle routes' within the RuRCNP, with Chertsey Road being classified as 'off-road and quiet cycle routes suitable for family groups'. An extract has been provided in **Figure 4.3** with a copy of the map included in **Appendix I**.
- 4.12 National Cycle Network Route 4 is located approximately 4.8km (19-minute cycle) to the southeast of the Site on the eastern side of the River Thames. This provides a route between London and Fishguard via Reading.

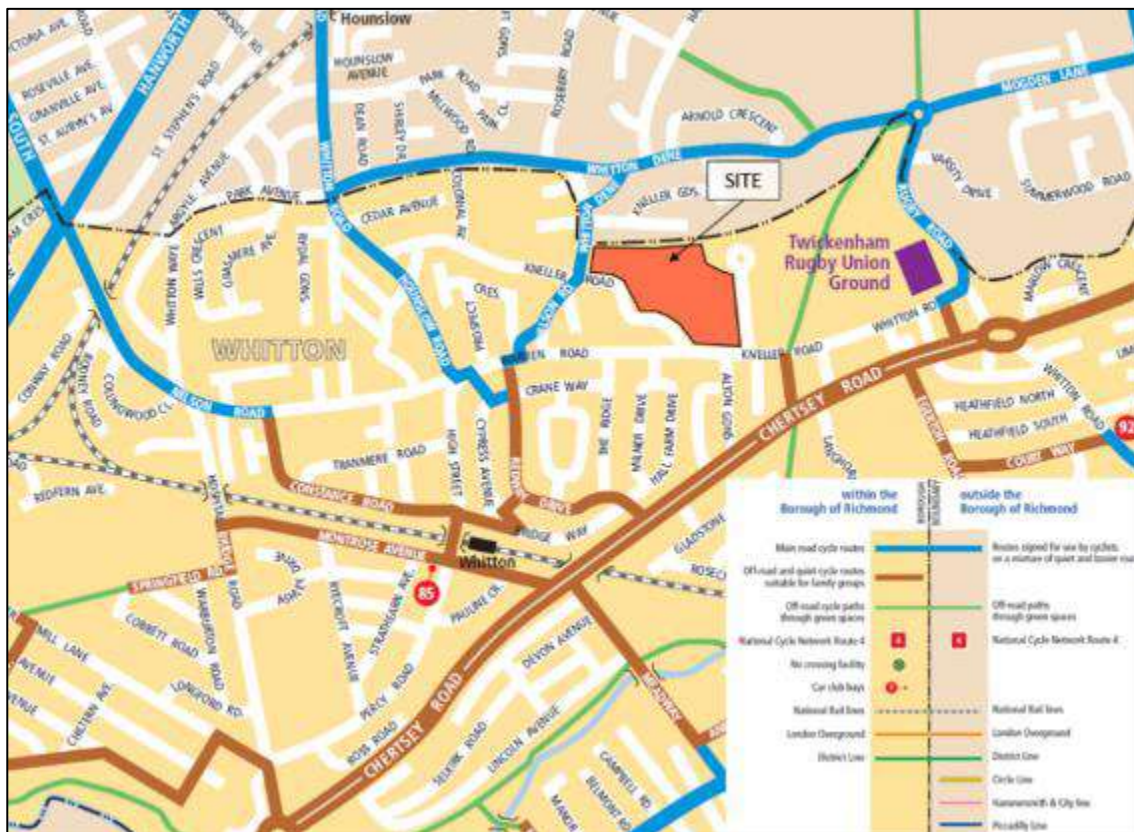


Figure 4.3: Richmond upon Thames Cycle Network Map

Source: www.richmondcc.co.uk

- 4.13 A Brompton Bike Hire Station is provided approximately 125m to the south of Twickenham Station, where folding Brompton Bikes can be hired for 24 hours for £5 a day.
- 4.14 There are a number of dockless cycle hire companies across London, which provide a growing offer of cycle hire opportunities, and may allow people to cycle to / from the Site without needing to own a bike.

Accessibility by Public Transport

Public Transport Accessibility Level (PTAL)

- 4.15 Public Transport Accessibility Levels (PTALs) are a theoretical measure of the accessibility of a given point to the public transport network, taking into account walking time and service availability. The method is essentially a way of measuring the density of the public transport network at a particular point.

4.16 The PTAL is categorised in six levels, 1 to 6 where 6 represents a high level of accessibility and 1 a low level of accessibility. The PTAL levels 1 and 6 are further subdivided into 'a' and 'b' levels, with level 'a' indicating the location is rated towards the lower end of the PTAL category and 'b' towards the higher end.

4.17 The Site achieves a PTAL rating of between 1b and 2, which suggests there is a 'poor' level of access to public transport facilities surrounding the Site. It is noted, however, that the Site is within a 20-minute walk of three rail stations, including Twickenham Station. As such, the actual accessibility of the Site can be considered to be higher than that which a PTAL 1b or 2 represents. A copy of the PTAL report for the Site is included at **Appendix J**.

Bus Services

4.18 Several bus stops are located within a short walking distance of the Site, including the nearest stop located on Kneller Road ('Kneller Hall' Stop A & Q) and Warren Road ('Warren Road' Stop V & T) near the Site.

4.19 **Table 4.2** provides a summary of frequencies and routes of bus services available within the vicinity of the Site.

Table 4.2: Bus Services and Frequencies				
Bus No.	Route	Frequency (Every 'x' Minutes)		
		Weekday	Saturday	Sunday
110	School Road – Hammersmith Bus Station	14 – 15	14 – 15	20
281	Hounslow Bus Station – Tolworth Tower	8 – 12	9 – 12	10 – 13
481	Cromwell Rd Bus Station – West Middlesex Hospital	30	30	60
H22	Hounslow High Street – West Middlesex Hospital	10 – 14	11 – 13	19 – 20

Rail Services

4.20 Whitton Rail Station is located approximately 1.1km from the Site (14 minutes' walk) which provides access to services operated by South Western Railway towards London Waterloo and Windsor & Eton Riverside. Two services operate in each direction each hour (off-peak).

4.21 In terms of station facilities, Whitton Station provides step-free access to all platforms. A total of 32 cycle parking spaces are also available at the booking hall entrance.

4.22 Twickenham Rail Station is located circa 1.6km from the Site (20 minutes' walk). The station is the following / preceding stop after Whitton Station for services towards London Waterloo and Windsor & Eton Riverside. Other South Western Railway services also operate to / from Twickenham, with 8 services towards London Waterloo and 2 services to Reading in addition to the aforementioned 2 services per hour towards Windsor & Eton Riverside (off-peak).

4.23 In terms of station facilities, Twickenham has step-free access to all platforms, with 78 cycle parking spaces also provided.

4.24 Hounslow Rail Station is also located approximately 1.6km from the Site (20 minutes' walk). The station is also served by South Western Railway trains on a different branch to the other aforementioned nearby stations. Services towards London Waterloo (via Chiswick) operate from the station every 30 mins, with services towards Weybridge also operating every 30 mins (off-peak). Cycle parking facilities are provided at the station, with 40 storage spaces available.

Active Travel Audit

4.25 In accordance with TfL's Healthy Streets approach, an assessment of the Active Travel Zone (ATZ) has been undertaken. ATZs are the areas surrounding development Sites in which users are expected to walk and cycle to access services, points of interests, and transport nodes.

4.26 The Active Travel Audit (ATA) was undertaken on Monday 22nd August 2022, between 14:30-17:00. The ATA captured the following routes to / from the Site:

- Route 1: to / from Hounslow Rail Station (via Murray Park);
- Route 2: to / from Hounslow Rail Station (via Whitton Road);
- Route 3: to / from Whitton Rail Station; and
- Route 3: to / from Twickenham Rail Station.

4.27 The routes are shown at **Figure 4.5** below.



Figure 4.5: ATA Routes

- 4.28 Photos were taken approximately every 150m along the routes, with images included in this ATA focussing on noteworthy elements on each route.
- 4.29 This audit has been undertaken in accordance with the Healthy Streets Approach utilising the 'Guide to the Healthy Streets Indicators – Delivering the Healthy Streets Approach' (November 2017) and 'Healthy Streets Check for Designers' (April 2019).

Healthy Streets Approach

- 4.30 The Healthy Streets Approach to assessing the local environment has now been adopted by TfL and the Mayor of London as the principle means of evaluating the local area with the aim of reducing car use and helping Londoners to walk, cycle and use public transport more.

4.31 The Approach is based on 10 indicators of what forms a Healthy Street with a particular focus on the experience of people using streets, as detailed within the '*Guide to the Healthy Streets Indicators – Delivering the Healthy Streets Approach, November 2017*' document. The document outlines 10 Healthy Streets indicators which provide initial starting points for discussions around the quality of the pedestrian environment. The 10 Healthy Streets indicators are summarised within **Figure 4.6**, which illustrates the Healthy Streets Indicator Wheel.

4.32 It is recognised that not all of the sections within the Healthy Streets Approach are necessarily relevant to each individual street, but in conjunction, form a holistic approach to street appraisal. Section 6 of this report assesses how the proposed development provides improvements to the pedestrian environment against the 10 Healthy Streets indicators.



Figure 4.6: Healthy Streets Indicators

Vision Zero

4.33 TfL's Vision Zero sets out the Mayor's goal, that by 2041, all deaths and serious injuries will be eliminated from London's transport network. An aim of the Vision Zero Action Plan is for Safe Streets: designing an environment that is forgiving of mistakes by transforming junctions which see the majority of collisions, and ensuring safety is at the forefront of all design schemes.

4.34 **Figure 4.7** details the audit area in conjunction with the latest accident data (Killed or Seriously Injured – KSI) along the routes assessed for the last 5 years – a copy of the data is included at **Appendix K**. For the purposes of this assessment, an accident cluster is classified as a location in which two or more ‘serious’ accidents were recorded or one or more fatality. A summary of the key accidents recorded is provided below.



Figure 4.7: KSIs and ATA Routes

4.35 Within the ATA Audit Area, four accident clusters were identified, all of which involved ‘serious’ collisions, with 1 fatal collision also recorded on one of the ATA routes. The collisions recorded with the accident clusters are summarised below.

London Road / Brewery Lane

4.36 A cluster of 3 serious incidents occurred at the London Road / Brewery Lane junction near Twickenham Station. Of the three collisions, only one involved a vulnerable road user. The collisions are summarised as follows:

- The first collision involved a car and pedal cyclist. It was recorded that the pedal cyclist was overtaking a non-moving vehicle, but it is not known how the collision occurred.
- The second incident involved a standing passenger on a bus who was injured when the bus was moving off.
- The third collision involved a single vehicle, occurring when the car was driven into the barriers on the central reservation and the car collided with a building site.

Whitton Road / Grimwood Road / Heathfield South

4.37 A cluster of two serious accidents was recorded between Whitton Road, Grimwood Road and Heathfield South. Neither of the incidents involved pedestrians or cyclists but are summarised as follows:

- The first collision involved a car and motorcyclist, occurring when the car turned in front of the motorcyclist and the motorcycle hit the front of the car.
- The second collision also involved a car and motorcyclist. It is not known how the collision occurred, but it is noted that both vehicles were moving off, with both drivers failing to look properly and the car driver failing to signal.

Whitton Road / Chudleigh Road

4.38 A cluster of two serious incidents occurred at the Whitton Road / Chudleigh Road junction, with one collision involving a pedal cyclist. The incidents are summarised below:

- The first collision involved a pedal cyclist and a car, although it is not known how the collision occurred.
- The second incident occurred on a bus, when a seated passenger on board was injured while the bus was slowing down, causing them to fall in the aisle.

Kneller Road / Alton Gardens

4.39 A cluster of two serious collisions was recorded between Kneller Road / Alton Gardens / Duke of Cambridge Close. Both collisions involved vulnerable road users and are summarised as follows:

- The first collision involved a pedestrian and a car. It is not known how the collision occurred but the collision report noted that both the pedestrian and the car driver failed to look properly and the pedestrian also failed to judge the vehicle's path or speed.
- The second collision occurred between a pedal cyclist and a car. While it is not known how the collision occurred, it was noted that the car driver failed to look properly.

Whitton Road / Station Road

4.40 A fatal collision occurred on Whitton Road, near the junction with Station Road. The collision report for the incident is summarised as follows:

- The collision involved a car and two pedestrians, which occurred when the vehicle travelling along Whitton Road struck the two pedestrians causing injury. It was noted that the vehicle was an emergency vehicle on a call, so it is inferred that the vehicle may have been travelling at speed.

Collision Summary

4.41 Based on the above, it is evident that the total number of serious collisions over the past 5 years on the identified routes is relatively low. Additionally, the collisions occurring on the relevant routes were due to driver / pedestrian error and therefore it is concluded that no additional works are required on the surrounding roads in order to improve the area for the safety of vulnerable road users.

Audit of Routes

4.42 To align with the Healthy Streets and Active Travel Zone Transport Assessment Guidance, each ATA route has been assessed. A thorough assessment of the 'worst' part of each journey is then undertaken using the Healthy Streets indicators as the structure, including a description of aspects that could improve the active travel experience and environment in the location. The ATA concludes with a list of recommendations which could be implemented in the locality to meet the Healthy Streets indicators.

Route 1 – To / From Hounslow Rail Station (via Murray Park)

- 4.43 The active travel route between the Site and Hounslow Station provides a good overall environment for non-vehicular users, particularly pedestrians. Large sections of the route are car-free and designed specifically for pedestrians with part of the route also routing through green space in Murray Park. Footways along the route are also of suitable width and are well maintained.
- 4.44 The worst section of the route is shown at **Figure 4.8** (Photograph 1I) which shows a dedicated pedestrian route which connects Park Road with Maswell Park Road near Hounslow Station, which had a poor sense of place and lacked overlooking, leading to potential for feeling unsafe, particularly at night.



Figure 4.8: Pedestrianised route between Milwood Road and Park Road

4.45 A photographic record of Route 1 is provided in **Figure 4.9** below and the route has been assessed against the Healthy Streets indicators with details provided in **Table 4.3**.



Figure 4.9: Photographic Record of Route 1

Table 4.3: Healthy Streets Indicators for Route 1		
Healthy Streets Indicator	Observations	Area for Improvements
Pedestrians from all walks of life	The route provides a good general pedestrian environment with footways provided on the majority of the route for pedestrians of all abilities.	Some pedestrians will feel unsafe on the pedestrianised sections of the route as they are not well overlooked. It can be ensured that adequate lighting is provided and foliage cover is reduced to reduce the enclosed feeling.
Easy to cross	Dropped kerbs are provided at all crossings and desire lines to facilitate pedestrians crossing safely.	There is no need for improvement.
Shade and shelter	Surrounding buildings and trees further on the route offer shade and shelter along the route.	There is no need for improvement.
Places to stop and rest	Places to stop and rest are provided at other sections of the route, particularly at Murray Park.	There is no need for improvement.
Not too noisy	Large sections of the route are pedestrianised and away from main roads.	There is no need for improvement.
People choose to walk, cycle and use public transport	Certain sections of the route are attractive for pedestrians, particularly where it is pedestrianised and away from vehicles. The route provides access to local bus stops and Hounslow Rail Station.	The pedestrianised sections of the route are not well overlooked and may not be suited to all pedestrians. Cyclists are also not permitted to travel along some sections of the route and will therefore need to travel to Hounslow Station via the alternative route which is shared with vehicles.
People feel safe	The lack of vehicles along sections of the route may allow pedestrians to feel safer walking and crossing the road.	Some of the pedestrianised sections of the route are not well overlooked and may cause pedestrians to feel unsafe.
Things to see and do	Within close proximity to a variety of public transport services and retail amenities in the locality.	There is no area of improvement.
People feel relaxed	Fairly pleasant environment for active travellers on the majority of the route.	Improvement of poorly overlooked sections of the route.
Clean air	Greenery within Murray Park facilitates cleaner air in the area	There is no need for improvement.

Route 2 – To / From Hounslow Rail Station via Whitton Road

- 4.46 The alternative route for pedestrians and cyclists between the Site and Hounslow Station, via Whitton Road is very good, providing well-maintained footways of a suitable width throughout.
- 4.47 The worst section of the route is shown below in **Figure 4.10**, where a lack of dropped kerbs and tactile paving is identified along the pedestrian desire line between Maswell Park Road and Hounslow Avenue, where no suitable crossing facilities are provided to the opposite side of the route, creating a confusing environment for pedestrians travelling to / from Hounslow Station.



Figure 4.10 Lack of Crossing Facilities on Maswell Park Road / Hounslow Ave

4.48 Photos have been taken along the route and shown in **Figure 4.11** and the route has been assessed against the Healthy Street Indicators in **Table 4.4**.



Figure 4.11: Photographic Record of Route 2

Table 4.4: Healthy Streets Indicators for Route 2		
Healthy Streets Indicator	Observations	Area for Improvements
Pedestrians from all walks of life	The route provides a good general pedestrian environment with footways provided on the entire route for pedestrians of all abilities.	There is no need for improvement.
Easy to cross	Dropped kerbs with tactile paving are provided at the majority of crossings on desire lines.	Provision of dropped kerbs between the eastern and western footway on Maswell Park Road to make it easier for pedestrians to cross and navigate the immediate surrounding area.
Shade and shelter	Surrounding buildings and trees further on the route offer shade and shelter along the route.	There is no need for improvement.
Places to stop and rest	Places to stop and rest are provided at other sections of the route, particularly at Murray Park.	There is no need for improvement.
Not too noisy	Noise pollution along Whitton Road is caused by regular passing vehicle traffic.	A reduction in vehicular traffic would assist in reducing the level of noise.
People choose to walk, cycle and use public transport	The route provides good footway provision for pedestrians with access to several bus stops and Hounslow Rail Station. Cyclists can also use the local roads to travel to / from Hounslow Station.	Provision of dedicated marked cycle lanes on Whitton Road to segregate cyclists and increase safety.
People feel safe	Route is well overlooked, with wide footways and excellent crossing provision for pedestrians, causing people to feel safe.	Provision of dropped kerbs between the eastern and western footway on Maswell Park Road to allow pedestrians to feel safer while crossing.
Things to see and do	Within close proximity to a variety of public transport services and retail amenities in the locality.	There is no area of improvement.
People feel relaxed	Fairly pleasant environment for active travellers on the majority of the route.	Ensure dropped kerbs and tactile paving are provided for pedestrians to cross easily and safely.
Clean air	Greenery within Murray Park facilitates cleaner air in the area.	There is no need for improvement.

Route 3 – To / From Whitton Rail Station

- 4.49 The active travel environment between the Site and Whitton Rail Station is excellent for pedestrians overall. All footways along the route are of suitable width and pedestrian zebra crossings are in place on desire lines on the route. Cycle parking facilities are also provided along the route to encourage cycling in the area, particularly to / from the High Street and the station.
- 4.50 The worst section of the route is shown at **Figure 4.12** (Photograph 3A) which is located on the northern footway of Warren Road, where the footways are showing signs of poor maintenance which may deteriorate. While this section of the route does not present any particular concerns for pedestrians, it does not provide the same quality environment for pedestrians as the remainder of the route, which is paved with high quality materials.



Figure 4.12: Footway on Warren Road

- 4.51 A photo study taken along the route is provided in **Figure 4.13** and the route has been assessed against the Healthy Streets indicators with details provided in **Table 4.5**.

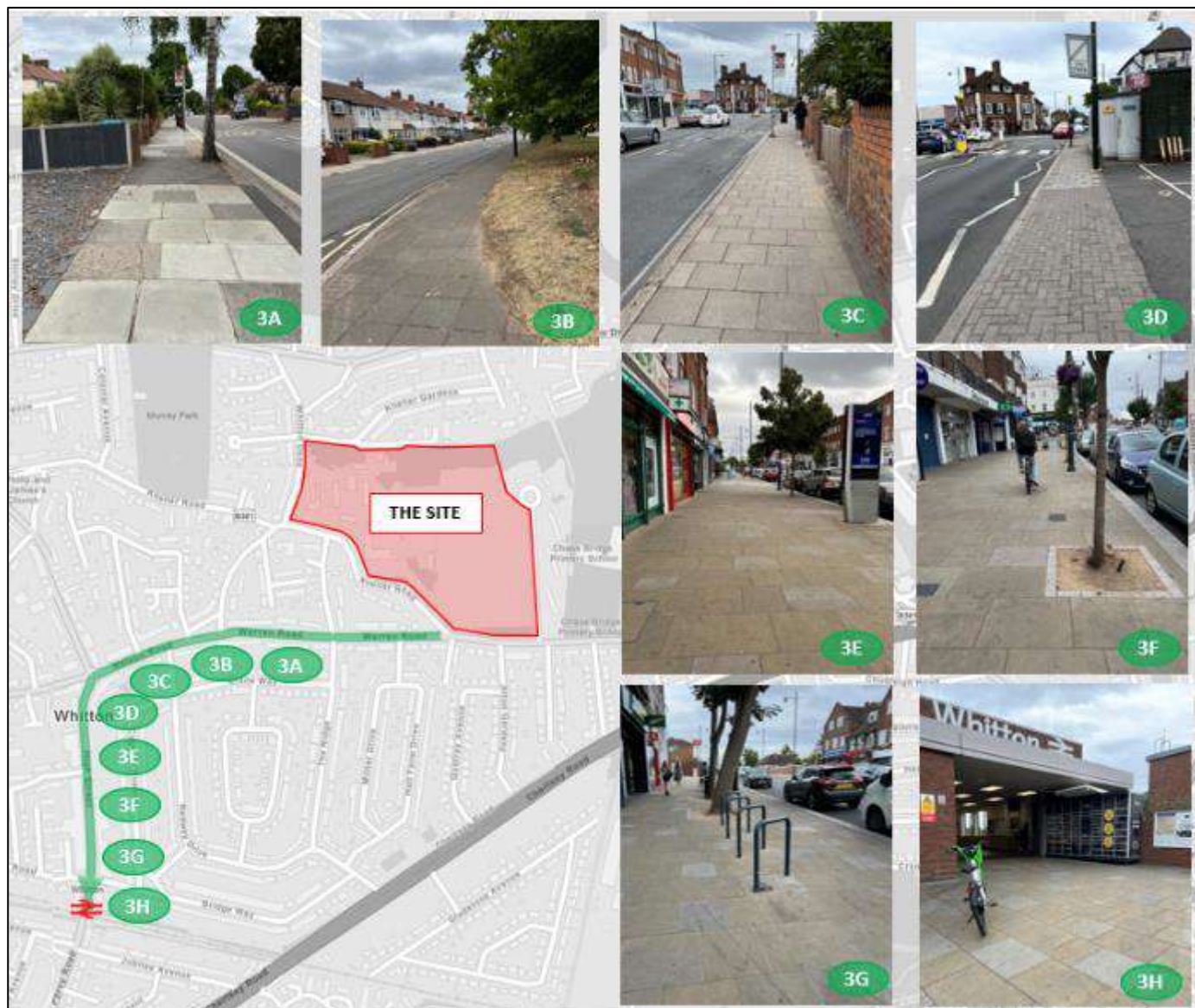


Figure 4.13: Photographic Record of Route 3

Table 4.5: Healthy Streets Indicators for Route 3		
Healthy Streets Indicator	Observations	Area for Improvements
Pedestrians from all walks of life	Good pedestrian environment provided for all pedestrians.	Further maintenance of footways where they have become cracked or damaged.
Easy to cross	Crossings on the route are provided with colour contrasted tactile paving and are located on key desire lines.	There is no need for improvement.
Shade and shelter	Surrounding buildings offer suitable shade and shelter along the route.	There is no need for improvement.
Places to stop and rest	Places to stop and rest are provided on High Street Whitton along the route.	There is no need for improvement.
Not too noisy	Noise pollution along Warren Road and High Street Whitton is caused by regular passing vehicle traffic.	A reduction in vehicular traffic in the area would assist in reducing the level of noise.
People choose to walk, cycle and use public transport	The route provides good footway provision for pedestrians with access to several bus stops and Whitton Rail Station. Cyclists can also use the local roads to travel to / from Whitton Station.	Provision of dedicated marked cycle lanes on Warren Road and High Street Whitton to segregate cyclists and increase safety.
People feel safe	The route is well overlooked, with wide footways and excellent crossing provision for pedestrians, causing people to feel safe.	There is no area for improvement.
Things to see and do	Within close proximity to a variety of public transport services and retail amenities within Whitton town centre.	There is no area for improvement.
People feel relaxed	Fairly pleasant environment for active travellers.	There is no area for improvement.
Clean air	Warren Road and High Street Whitton are regular bus routes which accommodate moderate vehicle flow.	A reduction in the reliance of the private vehicle is required, in line with the Mayors Transport Strategy.

Route 4 – To / From Twickenham Rail Station

4.52 The active travel route between the Site and Twickenham Rail Station is good for pedestrians overall. Footways along the route are generally well maintained and of a suitable width, with both zebra crossings and signalised pedestrian crossings provided on the key desire lines.

4.53 The worst section of the route is shown at **Figure 4.14** (Photograph 4F) which is located on Chudleigh Road. This photo shows a section of footway which is width constrained and damaged by tree roots, causing a pinch point and uneven footway surface for pedestrians.



Figure 4.14: Damaged Footway on Chudleigh Road (Photograph 4F)

4.54 A photographic record of Route 4 is provided in **Figure 4.15** below and the route has been assessed against the Healthy Street Indicators in **Table 4.6** below.



Figure 4.15: Photographic Record of Route 4

Table 4.6: Healthy Streets Indicators for Route 4		
Healthy Streets Indicator	Observations	Area for Improvements
Pedestrians from all walks of life	The pedestrian environment in the vicinity is good, with generally well-maintained footways provided along the route.	Damaged footways caused by tree roots to be repaired.
Easy to cross	Pedestrian crossings along the route are provided on desire lines with colour contrasted tactile paving and dropped kerbs.	There is no need for improvement.
Shade and shelter	Surrounding buildings and bus stops offer shade and shelter along the route.	There is no need for improvement.
Places to stop and rest	Places to stop and rest are provided outside Twickenham Station.	There is no need for improvement.
Not too noisy	Noise pollution along Whitton Road is caused by regular passing traffic.	A reduction in vehicular traffic would assist in reducing the level of noise.
People choose to walk, cycle and use public transport	Attractive for pedestrians due to footway provision and provision of crossing facilities in the area. Public transport is also accessible along the route with bus stops provided and direct footways towards Twickenham Station.	Dedicated and signed cycle routes provided on Whitton Road could be provided to prioritise cyclists.
People feel safe	Route is well overlooked, with wide footways and excellent crossing provision for pedestrians, causing people to feel safe.	A reduction in vehicle traffic could further assist in allowing pedestrians and cyclists to feel safe while using the route.
Things to see and do	Within close proximity to a variety of public transport services and retail amenities.	There is no area of improvement.
People feel relaxed	Fairly pleasant environment for active travellers.	If footways are repaired in the suitable locations, this could lead to pedestrians feeling more relaxed while walking along the route.
Clean air	Whitton Road and the A316 which crosses the route are heavily trafficked roads.	A reduction in the reliance of the private vehicle is required, in line with the Mayors Transport Strategy.

Summary, Recommendations and Conclusions

Summary

4.55 An ATZ has been identified that includes routes to / from key public transport nodes and amenities in the area. The worst locations were identified as follows:

- Poorly overlooked dedicated pedestrian route towards Hounslow Station.
- Lack of dropped kerbs and tactile paving on desire line on Maswell Park Road.
- Poorly maintained footway on Warren Road.
- Damaged footway caused by tree roots on Chudleigh Road.

Recommendations

- 4.56 As part of the Healthy Streets Approach and TfL transport assessment guidance, a number of recommendations for improvements to the local transport network have been identified which would facilitate an environment that encourages walking and cycling.
- Ensure that adequate street lighting is provided and foliage cover is reduced to reduce the enclosed feeling on the dedicated pedestrian route towards Hounslow Station.
 - Provision of dropped kerbs and tactile paving on desire lines on Maswell Park Road towards Hounslow Station.
 - Repair footway in required locations on Warren Road and Chudleigh Road.
 - Provision of cycle signage / cycle markings on suitable roads in the area.
- 4.57 Each of the above recommendations are considered to improve the pedestrian / cyclist environment in the area and would contribute towards an area in which walking, cycling or public transport would be preferred over the private vehicle.
- 4.58 The development itself will contribute towards promoting walking, cycling and public transport by providing high quality cycle parking on-site and operating pupil and staff Travel Plans to promote active and sustainable travel, as the use of non-car modes or travel are viable for the Site, being withing walking distance to several bus stops and rail stations with access to numerous shops and amenities.
- 4.59 The Applicant confirms that the improvements that have been identified remain recommendations rather than commitments. The Applicant is willing to engage with LBRuT to agree an appropriate contribution towards pedestrian and cyclist improvements scaled in kind to the quantum of development and its relevance to future pupils, staff and visitors.

Conclusion

- 4.60 The overall results of the Active Travel Audit indicate that the pedestrian and cyclist environment within the vicinity of the Site was generally positive and very good in most areas. Although not considered necessary to make the development acceptable in planning terms, the introduction of minor improvements to the pedestrian and cyclist environment in the area would further promote active travel for all users of the development.

5 TRIP GENERATION

- 5.1 This section sets out the multi-modal trip generation methodology and assessment for the proposed development.
- 5.2 This trip generation assessment has been undertaken to determine the number of trips by mode that could be generated at the anticipated school peak periods (i.e. 08:00 – 09:00 and 15:00 – 16:00 on a weekday), assessing both the Year 1 school occupancy of 520 pupils and 100 staff, as well as the maximum future capacity of 1,000 pupils and 170 staff.
- 5.3 This assessment utilises data from the existing Radnor House School to estimate future pupil numbers per day based on the uptake of breakfast clubs, afterschool activities and absences, to determine a realistic study into peak hour movements at the proposed school.

Pupil Extra-Curricular Activity

- 5.4 The existing Radnor House School has provided 2021/22 academic year information on the uptake of breakfast clubs, afterschool activity and absence estimates for the school. **Table 5.1** below presents the average weekday before and after school clubs at the existing School for years relevant to the Kneller Hall Site, with relevant staffing requirements indicated against each club.

Table 5.1: Existing Average Weekday Before School and After School Clubs			
Day	Club Information		
	Clubs (Staff Required in Brackets)	Times	Year Groups
Everyday	Breakfast Club (4)	07:45-08:15	All
	Homework Club (1)	16:00-17:00	All
Monday Mornings	Music Rehearsals (1)	08:00-08:45	All
	Rowing @ Twickenham Rowing Club (1)	07:00-08:30	Y10, Y11, Y12, Y13
	Fencing (1)	07:40-08:30	Y7
Monday Evenings	Art Club (1)	16:00-17:00	Y10, Y11, Y12, Y13
	Football Training (2)	16:00-17:30	Y7
	Netball (1)	16:00-17:30	Y7
	Rowing @ Twickenham Rowing Club (1)	16:00-18:00	Y9
	Science Magazine (1)	16:00-17:00	All
	Maths Team Challenge (1)	16:00-17:00	Y8, Y9
Tuesday Mornings	Music Rehearsals (1)	08:00-08:45	All
Tuesday Evenings	Life Drawing (1)	16:00-17:00	Y11, Y12, Y13
	Coding Club (1)	16:00-17:00	Y9, Y10, Y11, Y12, Y13

	Musical Theatre (1)	16:30-17:30	Y7
	Rowing @ Twickenham Rowing Club (1)	16:00-18:00	Y10, Y11, Y12, Y13
	Hockey Training (1)	16:00-17:30	Y8, Y9, Y10, Y11, Y12, Y13
	Netball (1)	16:00-17:30	Y8, Y9, Y10, Y11, Y12, Y13
	Football Training (2)	16:00-17:30	Y8, Y9, Y10, Y11, Y12, Y13
	'Top of the bench' Science (1)	16:00-17:00	Y9, Y10, Y11
Wednesday Mornings	Elite Cricket Nets (1)	07:40-08:30	All
Wednesday Evenings	Art Club (1)	16:00-17:00	Y10, Y11, Y12, Y13
	Digital Art and Photography (1)	16:00-17:00	Y7, Y8
	Music Rehearsals (1)	16:00-18:00	All
	School of Comedy (1)	16:00-17:00	Y7, Y8
	Music Tech (1)	16:00-17:00	Y7, Y8
	Golf Club @ Strawberry Hill Golf Club (1)	16:00-17:30	Y7, Y8, Y9
	Rowing @ Twickenham Rowing Club (1)	16:00-18:00	Y9
	History Film Club (1)	16:00-17:00	Y12, Y13
Thursday Mornings	Music Rehearsals (1)	08:00-08:45	All
	Choir (2)	08:00-08:45	All
	Rowing @ Twickenham Rowing Club (1)	07:00-08:30	Y11, Y12, Y13
	Fencing (1)	07:40-08:30	Y8, Y9, Y10, Y11, Y12, Y13
Thursday Evenings	Orchestra (2)	16:00-17:00	All
	Senior Play (2)	16:00-17:00	Y9, Y10, Y11, Y12, Y13
	Cross-Fit @ Blitz Twickenham (1)	16:30-17:30	All
	Girls Football (1)	16:00-17:30	Y7, Y8, Y9
	Badminton Club (1)	16:00-17:00	All
	Rowing @ Twickenham Rowing Club (1)	16:00-18:00	Y8
	Mandarin Lessons (1)	16:00-17:00	Y7
	Science Club (2)	16:00-17:00	Y9, Y10, Y11, Y12, Y13
Friday Mornings	Touch Typing Lessons (1)	07:40-08:30	Y7, Y8, Y9
	Music Rehearsals (1)	08:00-08:45	All
	Self Defence (1)	07:40-08:25	All
Friday Evenings	Movie Makers (1)	16:00-17:00	Y7
	Rowing @ Twickenham Rowing Club (1)	16:00-18:00	Y10, Y11, Y12, Y13
	Professional Tennis Lessons (1)	16:00-17:00	Y7, Y8
	Basketball (1)	16:00-17:00	All

5.11 **Table 5.2** below presents the average weekday uptake of the above activities for years 7-13 (410 pupils total to move to Kneller Hall Site) at the existing Radnor House School. **Table 5.3** below outlines the anticipated number of absences, breakfast and morning clubs and afterschool attendances when a pro-rata approach is applied to the Year 1 development scenario with an occupancy of 520 pupils, with **Table 5.4** presenting the pro-rata 1,000 pupil development scenario.

Table 5.2: Existing 410 Pupil Average Weekday Absences and Club Attendance			
Year Group	Absences	Breakfast and Morning Clubs	Afterschool Clubs
Years 7 – 9 (200 pupils)	10	42	98
Years 10 – 13 (210 pupils)	10	39	33
Total	20	81	121

Table 5.3: Anticipated 520 Pupil Average Weekday Absences and Club Attendance			
Year Group	Absences	Breakfast and Morning Clubs	Afterschool Clubs
Years 7 – 9 (288 pupils)	14	60	141
Years 10 – 13 (232 pupils)	11	43	36
Total	25	103	177

Table 5.4: Anticipated 1,000 Pupil Average Weekday Absences and Club Attendance			
Year Group	Absences	Breakfast and Morning Clubs	Afterschool Clubs
Years 7 – 9 (480 pupils)	24	102	239
Years 10 – 13 (520 pupils)	25	95	80
Total	49	197	319

5.12 In addition to the above club attendances by pupils across different school years and operational capacities, the existing staff presence at these clubs has been assessed to understand how many members of staff will be required for clubs, therefore providing a more realistic spread of staff arrival times as opposed to assuming all staff arrive at the peak periods. **Table 5.5** below presents the average weekday staff attendance at breakfast and morning clubs and afterschool clubs for each the opening year and future 1,000 pupil school scenarios.

Table 5.5: Anticipated Average Weekday Staff Attendance at School Clubs		
School Year Scenario	Breakfast and Morning Clubs	Afterschool Clubs
Year 1 – 100 Staff	7	9
Future Year (2029+) – 170 Staff	11	15

5.13 The wide array of facilities that are proposed at the Kneller Hall Site present the school with the ability to offer a much wider range of extra-curricular clubs before and after school than is currently possible due to the lack of facilities at the existing Site, placing more reliance on off-site facilities.

5.14 The above absences and school club attendances have been applied to the peak hour trip generation assessment below, to ensure a realistic scenario is forecast based on actual attendance.

Staff and Pupil Travel Modes

5.15 The proposals seek the ability for up to 1,000 pupils to be accommodated at the school. This assessment applies the current and future anticipated split between lower and upper school and the sixth form element as 80% lower and upper school and 20% sixth form. It is estimated that the proposals will require circa 170 members of staff for 1,000 pupils, based on information from Duke's Education on their anticipated staffing requirements and experience of other schools.

5.16 It is expected that the initial occupants of the school will be pupils and staff decanted from the Radnor House Independent School, as well as new Year 7 pupils, with natural growth then occurring year on year following initial occupation of the Site. In order to determine the method by which staff and pupils will travel to the school, existing staff and pupil travel survey data for the Radnor House Independent School has been investigated. This data demonstrated that 37% of staff in 2013 travelled to school by private car, 7% of which were with passengers. The Applicant is committed to ensuring sustainable means of travel are adopted by staff where possible and as such, the modal split has been adjusted to represent a realistic reduction in private car use from that of the 2013 surveys, based on the importance of sustainable travel being made clear to staff from Year 1, in which modal splits will be ratified through surveys of staff and pupil travel as part of the Travel Plans to be implemented at the Site. **Table 5.6** below outlines the staff method of travel to work modal splits assumed for future staff.

Table 5.6: Staff Method of Travel to Work	
Mode	Percentage
Train	37%
Bus	11%
Taxi	0%
Motorcycle	0%
Car Driver (Solo)	17%
Car Driver (With Passengers)	7%
Bicycle	12%
On Foot	16%
Total	100%

- 5.17 Survey data from the Radnor House Independent School covered all year groups from Year 5 – 13. Data recognised as part of a study that a significantly higher percentage of car driver trips occur for younger pupils, with Years 7 – 9 descending in car mode share from 25% down to 7%, and Years 10 – 13 at 8% car trips. Based on the known information on car driver trips, the modal split across all years (which presents a 23% car trip profile) and the Applicant’s commitment to promote active and sustainable means of travel to the Site, including through the provision of 6 additional school bus routes, the mode share for private car has been reduced.
- 5.18 Similarly, through the provision of additional school bus routes from Year 1 at the Site, the modal share for public buses has been reduced and reapportioned to school bus, as public bus routes will be covered by school bus routes from Year 1 at the Site. **Table 5.7** below details the 2013 pupil travel data and the adjusted travel forecasts.

Table 5.7: Pupil Method of Travel to School			
Mode	2013 Radnor House Pupil Survey (Percentage)	Mode Splits Used (Reducing Car %)	
		Lower Forms	Upper and Sixth Form
Train	11%	11%	13%
Bus (Public)	26%	16%	18%
Bus (School)	15%	30%	35%
Taxi	0%	0%	0%
Motorcycle	0%	0%	0%
Car (Passenger or Driver)	23%	18%	5%
Bicycle	7%	7%	8%
On Foot	14%	14%	16%
Other	4%	4%	5%
Total	100%	100%	100%

Year 1 Trip Generation (520 Pupils and 100 Staff)

Staff Trip Generation

- 5.19 To assess staff trip generation for Year 1, it is assumed that all staff will remain on-site throughout the school day. The assessment of staff trip generation assumes all staff, other than those who will be present for before and after school activities, as outlined in **Table 5.5** above, will arrive during the AM peak (08:00-09:00) and depart at school finish (16:00-17:00), so as to robustly assess staff activity.
- 5.20 **Table 5.8** below summarises the anticipated arrival and departure trips of the estimated Year 1 100 staff members for the school (93 staff during the AM peak and 91 staff during the school finish peak as per Table 5.5 staff presence at clubs).

Table 5.8: Proposed Trip Generation by Mode – 93 Staff in AM and 91 Staff at Finish					
Mode	Split	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
		In	Out	In	Out
Train	37%	34	0	0	34
Bus	11%	10	0	0	10
Taxi	0%	0	0	0	0
Motorcycle	0%	0	0	0	0
Car Driver (Solo)	17%	16	0	0	15
Car Driver (With Passengers)	7%	7	0	0	6
Bicycle	12%	11	0	0	11
On Foot	16%	15	0	0	15
Total	100%	93	0	0	91

5.21 Based on Table 5.8, it is expected that there would be up to approximately 23 private car vehicles arriving to the Site (solo and with passengers being car sharing with other staff). The Applicant will actively promote sustainable travel to staff and seek the use of sustainable and active modes of travel to staff who can suitable use such means of travel, as well as car sharing with other staff members or indeed local car sharing networks.

Pupil Trip Generation

5.22 The pupil trip generation applies all absences, morning clubs and afterschool clubs to pupils arriving and departing to the AM peak/school start time and school finish hours of 08:00-09:00 and 16:00-17:00 respectively, as per figures outlined in **Table 5.3. Table 5.9 and 5.10** below applies the adjusted pupil modal split to the proposed lower school and upper and sixth form elements respectively.

5.23 To understand pupil numbers for the lower and upper schools, the anticipated Year 1 pupils have been split as per **Table 3.3**, which results in 288 lower school pupils and 232 upper school pupils (520 pupils). These pupil figures are then reduced as per Table 5.3 to present realistic AM and PM peak hour pupil movements.

Table 5.9: Proposed Lower School Trip Generation by Mode – Pupils (213 Pupils in AM Peak and 133 Pupils in PM Peak)

Mode	Split	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
		In	Out	In	Out
Train	11%	23	0	0	15
Bus (Public)	16%	34	0	0	21
Bus (School)	30%	64	0	0	40
Taxi	0%	0	0	0	0
Motorcycle	0%	0	0	0	0
Car (Passenger or Driver)	18%	38	38	24	24
Bicycle	7%	15	0	0	9
On Foot	14%	30	0	0	19
Other	4%	9	0	0	5
Total	100%	213	38	24	133

Table 5.10: Proposed Upper and Sixth Form Trips by Mode – Pupils (178 Pupils in AM Peak and 184 Pupils in PM Peak)

Mode	Split	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
		In	Out	In	Out
Train	13%	23	0	0	24
Bus (Public)	18%	32	0	0	33
Bus (School)	35%	62	0	0	64
Taxi	0%	0	0	0	0
Motorcycle	0%	0	0	0	0
Car (Passenger or Driver)	5%	9	9	9	9
Bicycle	8%	14	0	0	15
On Foot	16%	28	0	0	29
Other	5%	9	0	0	9
Total	100%	178	9	9	184

Total School Trip Generation

5.24 **Table 5.11** below summarises the combined total trip generation for the proposed school elements for Year 1, including staff travel.

Table 5.11: Proposed Year 1 School Total Trip Generation by Mode*				
Mode	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
	In	Out	In	Out
Train	81	0	0	72
Bus (Public)	76	0	0	64
Bus (School)	126	0	0	104
Taxi	0	0	0	0
Motorcycle	0	0	0	0
Car (Passenger or Driver)	63	47	33	49
Car with Passenger (Staff)	7	0	0	6
Bicycle	40	0	0	35
On Foot	73	0	0	63
Other	17	0	0	15
Total	484	47	33	408

**Discrepancies due to rounding*

5.25 As can be seen in Table 5.11, it is estimated that the Site (Year 1) will generate up to 117 car trips during the busiest period (weekday AM Peak), accounting for both car arrivals which will be parking on-site (staff) and pick-up/drop-off activity of pupils arriving/departing. Within this, it is anticipated that 94 of the anticipated AM Peak vehicle movements will be attributed to pick-up/drop-off activity, as the majority of movements relate to passenger trips for pupils. These movements will be from the south access onto Kneller Road and account for 47 cars arriving and dropping-off pupils, with 94 trips in total also including their egress movement. The remaining 23 staff trips are associated with the access on Whitton Dene.

Future Year Trip Generation (1,000 Pupils and 170 Staff)

Staff Trip Generation

5.26 To assess staff trip generation for the future scenario of 170 staff, it is assumed that all staff will remain on-site throughout the school day. In the same manner as the Year 1 assessment into staff trip generation, the assessment assumes all staff, other than those who will be present for before and after school activities, as outlined in **Table 5.5** above, will arrive during the AM peak (08:00-09:00) and depart at school finish (16:00-17:00), so as to robustly assess staff activity.

5.27 **Table 5.12** below summarises the anticipated arrival and departure trips of the estimated future scenario of 170 staff members for the school (159 staff during the AM peak and 155 staff during the school finish peak as per Table 5.5 staff presence at clubs).

Table 5.12: Proposed Trip Generation by Mode – 159 Staff in AM and 155 Staff in PM					
Mode	Split	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
		In	Out	In	Out
Train	37%	59	0	0	57
Bus	11%	18	0	0	17
Taxi	0%	0	0	0	0
Motorcycle	0%	0	0	0	0
Car Driver (Solo)	17%	27	0	0	26
Car Driver (With Passengers)	7%	11	0	0	11
Bicycle	12%	19	0	0	19
On Foot	16%	25	0	0	25
Total	100%	159	0	0	155

5.28 Based on Table 5.12, it is expected that there would be approximately 38 private car vehicles arriving to the Site during the AM peak (solo and with passengers being car sharing with other staff). The Applicant will actively promote sustainable travel to staff and seek the use of sustainable and active modes of travel to staff who can suitable use such means of travel, as well as car sharing with other staff members or indeed local car sharing networks.

Pupil Trip Generation

- 5.29 The pupil trip generation applies all absences, morning clubs and afterschool clubs to pupils arriving and departing to the AM peak/school start time and school finish hours of 08:00-09:00 and 16:00-17:00 respectively, as per figures outlined in **Table 5.4. Table 5.13 and 5.14** below applies the adjusted pupil modal split to the proposed lower school and upper and sixth form elements respectively.
- 5.30 To understand pupil numbers for the lower and upper schools, the anticipated future scenario 1,000 pupils have been split as per **Table 3.3**, which results in 480 lower school pupils and 520 upper school pupils. These pupil figures are then reduced as per Table 5.4 to present realistic AM and PM peak hour pupil movements.

Table 5.13: Proposed Lower School Trip Generation by Mode – Pupils (354 Pupils in AM Peak and 217 Pupils in PM Peak)					
Mode	Split	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
		In	Out	In	Out
Train	11%	39	0	0	24
Bus (Public)	16%	57	0	0	35
Bus (School)	30%	106	0	0	65
Taxi	0%	0	0	0	0
Motorcycle	0%	0	0	0	0
Car (Passenger or Driver)	18%	64	64	39	39
Bicycle	7%	25	0	0	15
On Foot	14%	50	0	0	30
Other	4%	14	0	0	9
Total	100%	354	64	39	217

Table 5.14: Proposed Upper and Sixth Form Trips by Mode – Pupils (400 Pupils in AM Peak and 415 Pupils in PM Peak)

Mode	Split	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
		In	Out	In	Out
Train	13%	52	0	0	54
Bus (Public)	18%	72	0	0	75
Bus (School)	35%	140	0	0	145
Taxi	0%	0	0	0	0
Motorcycle	0%	0	0	0	0
Car (Passenger or Driver)	5%	20	20	21	21
Bicycle	8%	32	0	0	33
On Foot	16%	64	0	0	66
Other	5%	20	0	0	21
Total	100%	400	20	21	415

Total School Trip Generation

5.31 **Table 5.15** below summarises the combined total trip generation for the proposed school elements for the future year scenario, including staff travel.

Table 5.15: Future Scenario 1,000 Pupil Total Trip Generation by Mode*

Mode	AM Peak (08:00 – 09:00)		School Finish (16:00 – 17:00)	
	In	Out	In	Out
Train	150	0	0	135
Bus (Public)	146	0	0	126
Bus (School)	246	0	0	210
Taxi	0	0	0	0
Motorcycle	0	0	0	0
Car (Passenger or Driver)	111	84	60	86
Car with Passenger (Staff)	11	0	0	11
Bicycle	76	0	0	67
On Foot	139	0	0	122
Other	34	0	0	29
Total	913	84	60	787

*Discrepancies due to rounding

- 5.32 As can be seen in Table 5.15, it is estimated that the future scenario of 1,000 pupils will generate up to 206 car trips during the busiest period (weekday AM Peak), accounting for both car arrivals which will be parking on-site (staff) and pick-up/drop-off activity of pupils arriving/departing. Within this, it is anticipated that 168 of the anticipated AM Peak vehicle movements will be attributed to pick-up/drop-off activity, as the majority of movements relate to passenger trips for pupils. These movements will be from the south access onto Kneller Road and account for 84 cars arriving and dropping-off pupils, with 84 trips also assessing their egress movement. The remaining 38 staff trips are associated with the access on Whitton Dene.
- 5.33 It is pertinent to note that this assessment retains the same modal split for the future 1,000 pupil scenario as the Year 1 assessment. It is realistic to assume that following 7+ years of operations at the school and development of Travel Planning measures, the modal splits would shift further away from private car use and towards active and sustainable travel opportunities. This has not been factored into the assessments to ensure robustness of the trip generation study.

6 EFFECTS OF THE DEVELOPMENT

6.1 This section considers the potential traffic and transport effects of the proposed development on the local highway network and public transport facilities.

Impact on Active Travel

6.2 As previously outlined in **Table 5.15**, the proposals will result in 76 bicycle trips during the AM Peak (08:00-09:00). Therefore, more cyclists are anticipated to use the local cycle network, although the increase in cycle trips is encouraged and will not produce a detrimental impact of cyclist facilities.

6.3 In terms of walking trips, the proposed development is expected to result in 139 trips by foot during the AM Peak (08:00-09:00). The local network provides a good provision of footways, with minor deficiencies in footway width recognised along Kneller Road to the west of the Site, where 1.6m wide footways are present. It is pertinent to note however, that as recognised in Manual for Streets, Figure 6.8, a footway of 1.6m wide would provide sufficient width to allow for the passing of two adults, indicating sufficient footway width for use. In addition to this, the development will provide a pedestrian route through the Site to a new gate entrance for pedestrians adjacent to the existing vehicle entrance at the south of the Site. This will attract a notable proportion of pedestrian movements, resulting in a lower reliance on Kneller Road to the west of the Site for pedestrians.

6.4 During pre-application stage, the LBRuT raised concerns that there are no formal signalised crossing facilities across Warren Road in the vicinity of the Site and bus stops for routes 110, 281 and 481. Crossing facilities are provided across Warren Road in the vicinity of bus stops, with dropped kerbs with tactile paving and a central refuge provided to ease the crossing of the road by pedestrians. It is recognised however, that these crossings do not afford any form of material safeguarding for pedestrians once crossing the road, i.e signalised controls stopping vehicles. As such, should it be considered necessary to LBRuT, the Applicant is willing to provide the necessary financial contribution to LBRuT to provide a single signalised crossing over Warren Road, envisaged to be located in a suitable location to the east or west of the junction between Warren Road and Kneller Road adjacent to the Site boundary.

Impact on Public Transport

- 6.5 As set out previously in Section 4, the location of the Site presents a significant opportunity for pupils and staff to make use of public transport, in the form of bus services and rail services from Whitton Station, Twickenham Station and Hounslow Station, all of which are within a 20-minute walk of the Site.
- 6.6 Within **Table 5.15** it can be seen that the proposed development future scenario of 1,000 pupils and 170 staff, is forecast to result in 150 AM peak (08:00-09:00) trips by rail and 146 AM peak (08:00-09:00) trips by public bus. As such, a review of trips against service frequencies has been undertaken for both rail and bus services alike.

Impact on Rail Services

- 6.7 Reviewing the rail interchanges of Twickenham, Whitton and Hounslow, it is considered that the most prominent stations which pupils and staff will make use of are that of Twickenham, which provides access to trains into London and out to areas to the south of Wimbledon and Kingston, as well as services westbound to Reading and Windsor & Eton Riverside, and Whitton, which provides access to London and Windsor & Eton Riverside, however is located closer to the Site. Hounslow provides access to areas including Brentford and Kew Bridge, but this is considered to present fewer locations for commuting pupils and staff.
- 6.8 As such, the approach has been made to assess these stations as Twickenham attracting 50% of rail trips, owing to the wider network of commuting stations which arrive to Twickenham, with 30% of trips attributed to Whitton, which is the closest station to the Site, and finally 20% of trips via Hounslow Station. Assessing the service frequency of each station as services per hour, making use of PTAL service frequency information, **Table 6.1** presents the number of trips attributed to each station by the Site during the busiest peak (AM peak), the services per hour to each station and the associated additional passengers per service which the Site would generate in the future scenario of 1,000 pupils and 170 staff.

Table 6.1: AM Peak (08:00-09:00) Trips per Service per Rail Station

Station	Trips per Station	Services (per Hour)	Additional Passengers per Service
Twickenham Station	75 trips (50%)	18.98 services	3.95 passengers
Whitton Station	45 trips (30%)	7.63 services	5.90 passengers
Hounslow Station	30 trips (20%)	6.99 services	4.29 passengers

- 6.9 As can be seen within **Table 6.1**, the anticipated maximum increase in passengers per services will be 6 passengers (5.90) utilising Whitton Station. This level of additional passengers is not considered to represent a material increase in rail users, particularly as based on existing catchment information, many of these trips will be westbound and heading away from central London and against the general commuter tide heading the other direction into London in the AM peak.
- 6.10 It is pertinent to note that the existing Radnor House School pupils make use of services into Twickenham Station, which also comprise services through to Whitton Station. As such, the additional passengers per service may in practice be lower than the assessment included within Table 6.1, albeit in any case, the assessment does not indicate a significant increase in passengers.

Impact on Bus Services

- 6.11 Located within walking distance of the Site are TfL bus services 110, 281, 481 and H22. It is recognised from a review of these routes that all provide connections to key catchment areas recognised for the existing Radnor House School, as detailed further within the below section. Reviewing timetable information for each service, it is recognised that the bus stops adjacent to the Site receive a total of 16.5 services per hour. Based on the 1,000 pupil and 170 staff future scenario AM peak, which estimates 146 trips by public bus, it is estimated that the development will result in an additional 9 passengers (8.8) per service.
- 6.12 Appreciating this is a high-level assessment as to bus loading in relation to the Site and the potential for 9 additional passengers per service during the AM peak hour in the future scenario, discussions with TfL Buses are ongoing and the Applicant is committed to ensuring the development does not result in a material impact on the local public transport network.
- 6.13 As such, the Applicant is willing to provide the necessary financial contributions to TfL Buses to ensure service capacities on each route during school peak hours are not materially impacted. This alongside travel planning at the School will ensure appropriate mitigation measures are in place to enable the local bus network to continue to operate effectively and efficiently. Discussions with TfL Buses will continue and the necessary relevant contributions will be discussed and agreed prior to determination of the Planning Application for which this TA has been prepared.

6.14 It is pertinent to note that the three existing Radnor House School bus services, which will be retained for the Kneller Hall Site, as well as the proposed additional six bus services for pupils will provide coverage for the public bus routes noted above. **Figures 6.1, 6.2, 6.3 and 6.4** below present the routing maps of public bus services 110, 281, 481 and H22 respectively.

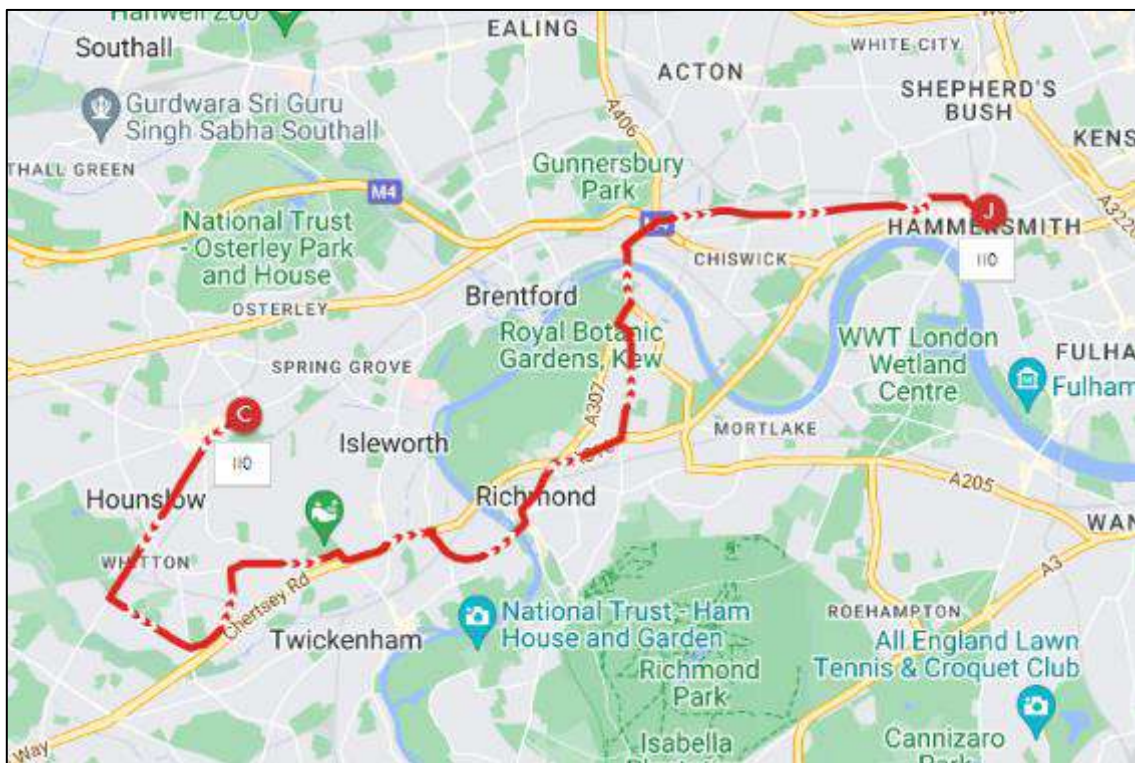


Figure 6.1: Bus Route 110

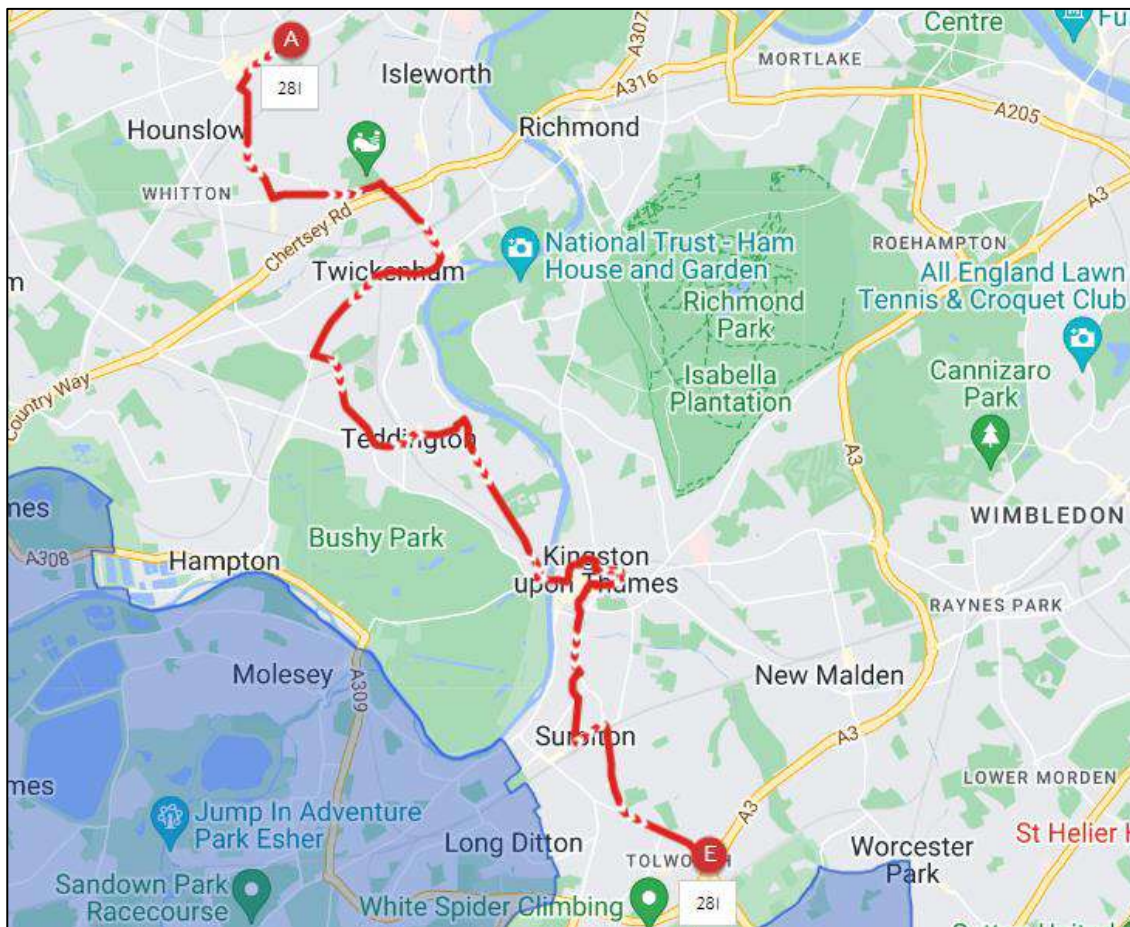


Figure 6.2: Bus Route 281

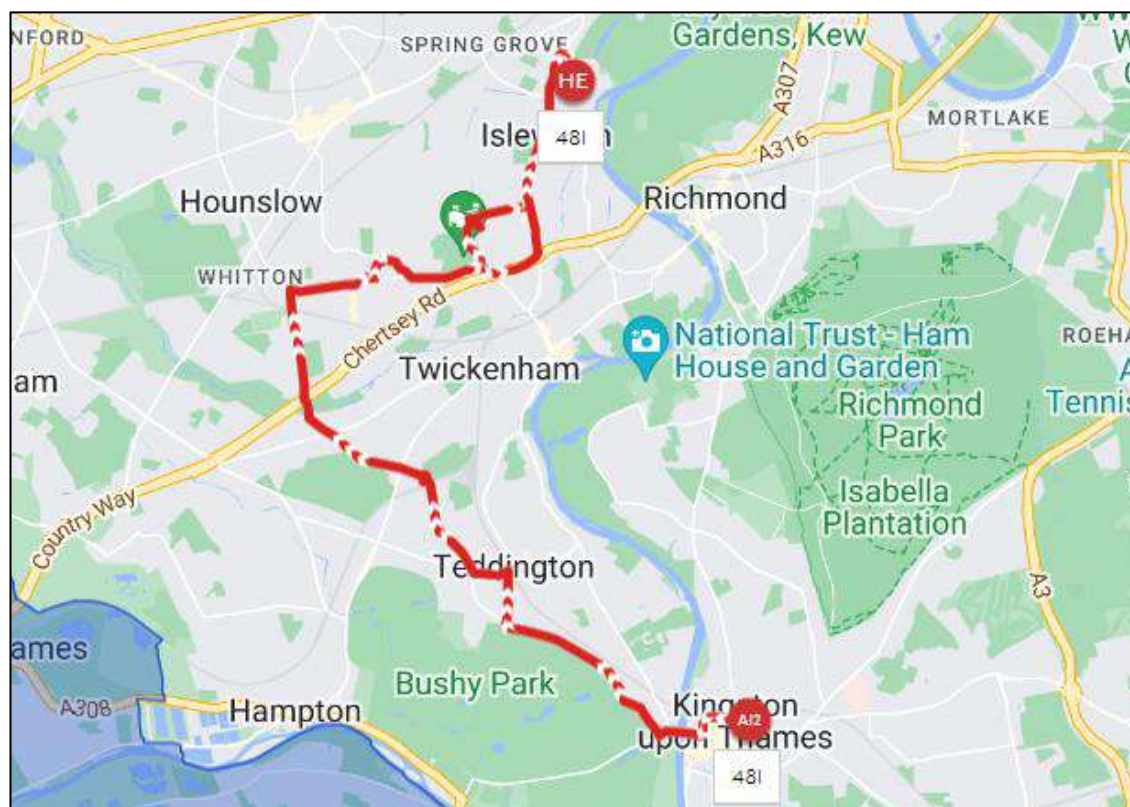


Figure 6.3: Bus Route 481

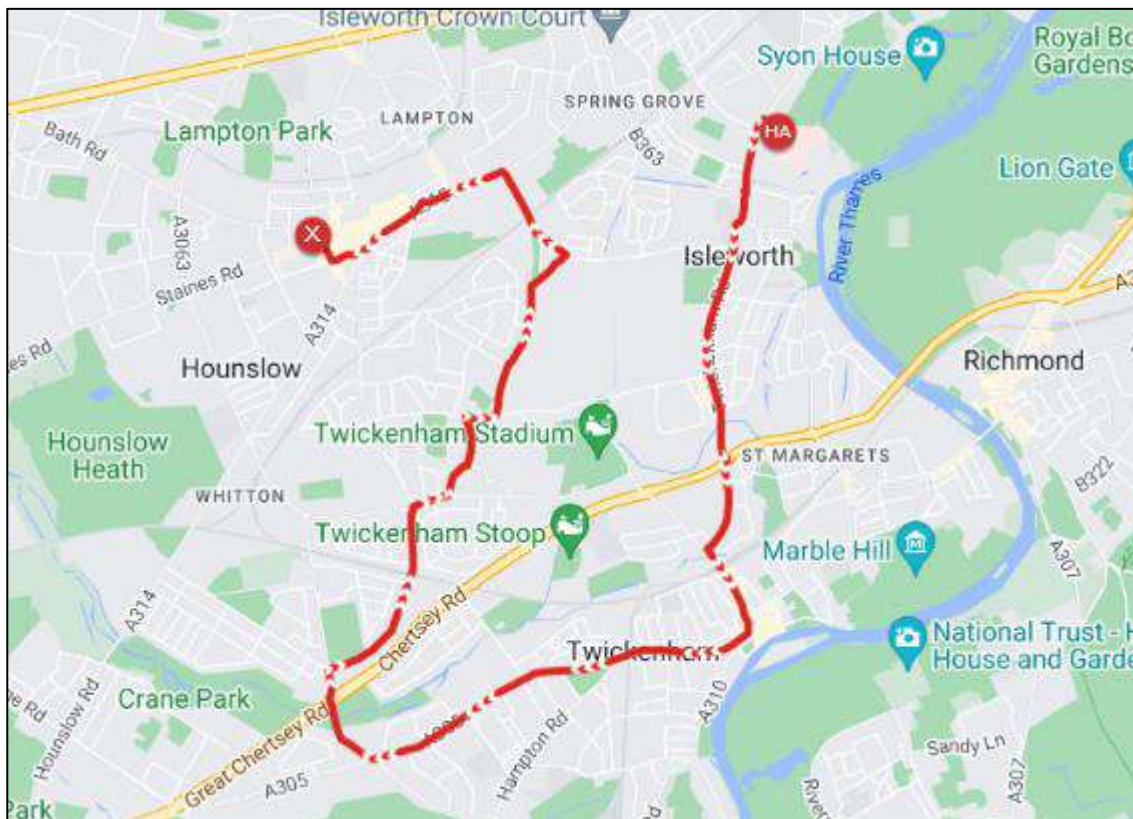


Figure 6.4: Bus Route H22

6.15 The bus routes which are available locally to the Site provide routing to Hammersmith, Tolworth, Kingston upon Thames and the Twickenham area. Included in **Figure 6.5** below is an extract from **Appendix F**, which presents the existing three Radnor House School bus routes. As can be seen by this, the routing provides connections to Richmond and through Chiswick, reducing the need for the use of bus route 110 by pupils. Additionally, access to the school from the Wimbledon and Fulham areas can be achieved, whereby reliance on rail and private car would be necessary without these routes.

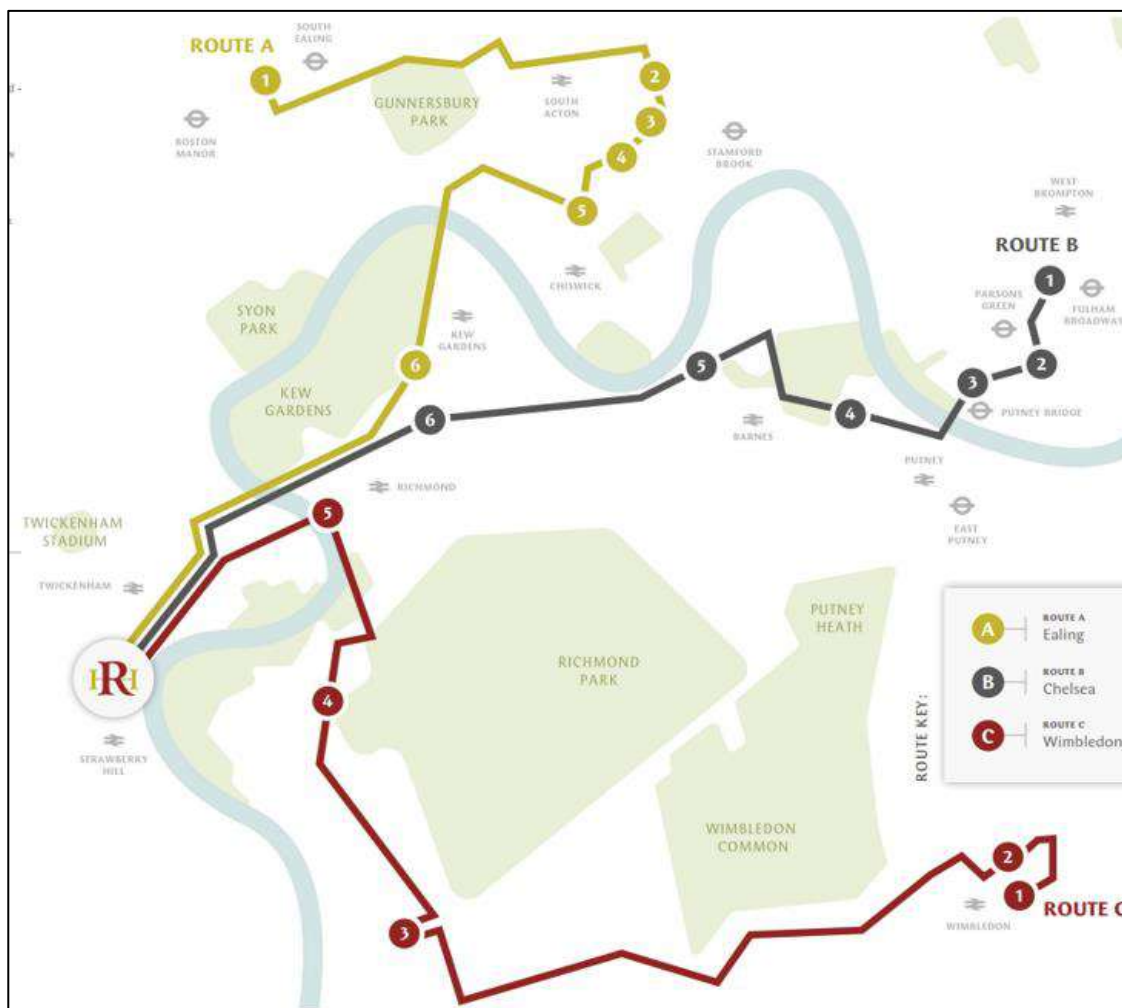


Figure 6.5: Existing Radnor House School Bus Service Routes

6.16 Beyond the opportunity to reduce pupil reliance on route 110, the schools' proposed six additional routes will not only provide opportunities for bus travel within the more local setting but will also encompass areas not currently covered, including to the south towards Tolworth and Ewell, to the north to Hounslow and to the west towards Egham and Staines. **Figure 6.6** below presents theoretical bus routing for these additional routes as provided by the School.

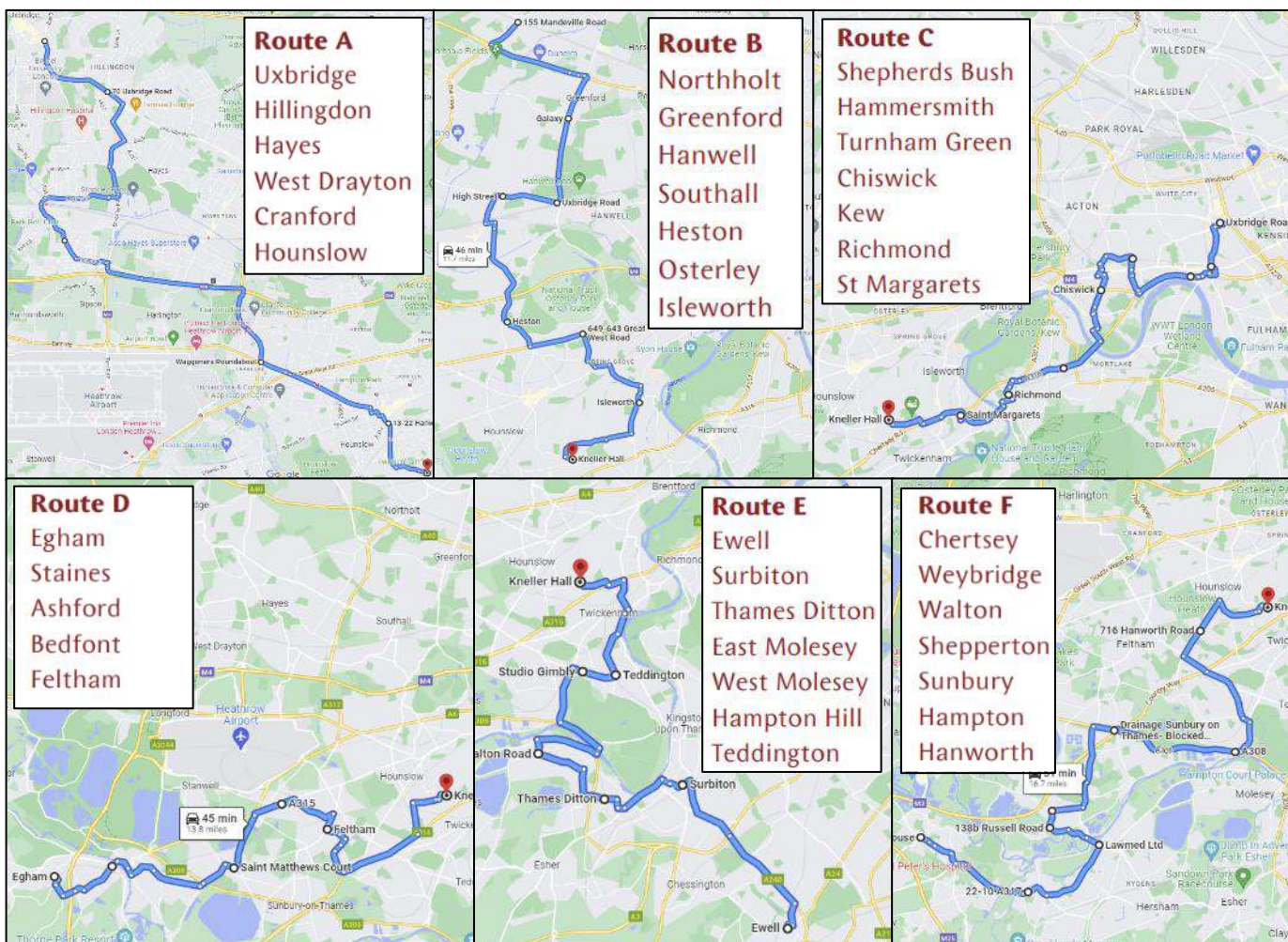


Figure 6.6: Potential Routing of Future School Bus Services at the Site

- 6.17 These bus routes will be implemented from the opening of the School, subject to pupil uptake, and will be monitored as the School grows over the first seven years, to ensure that not only are all pupils aware of the bus routes, but the capacities of each route are monitored, to ensure space on services can be afforded to pupils. It is anticipated that the initial approach will use minibuses, with coaches provided in later years if required to meet demand on each route.
- 6.18 As these routes are not finalised, it provides the opportunity for routes to be adjusted to meet the demand of the growing school pupil catchment, with routes altered to ensure the largest catchment of pupils can be reached by school bus services.
- 6.19 As such, it is anticipated that the approach to not only providing viable travel alternatives to private car is appropriate, but also that the requirement for pupils to rely on public transport will be reduced, with school buses to take precedent to pupils in their travel choice.

Impact on Local Highway Network

Car Parking

- 6.20 The existing Kneller Hall site provides approximately 121 marked car parking spaces across the sites' hardstanding areas, as well as two 6-door garages.
- 6.21 The development has been designed to enable a car parking provision which will meet the demand for car parking by staff in the future scenario, whilst also being conscious of the aim to promote active and sustainable travel to staff, with 40 parking spaces proposed. The Site will also retain an area of hardstanding which is currently marked for use by 32 cars, which will remove marked spaces but will be retained as multi-use hardstanding for pupil play space, school activities, coach pick-up/drop-off parking and for use intermittently outside of school open times, such as for short-term parking for parent's evenings.
- 6.22 As outlined within the trip generation assessment above, the Site, without the proposed travel planning tools to reduce private car use by staff, is anticipated to receive 38 cars per day in the future 1,000 pupils and 170 staff scenario. As such, the provision for parking on-site is sufficient.
- 6.23 Sixth Form pupils have the potential to also generate the need for car parking, with those pupils over 17 legally able to drive with a license. As such, a key element to travel planning at the School will be to make it absolutely clear that no pupils are allowed to travel to the Site by car and are strongly advised to avoid parking on local streets, through strict monitoring of pupil activity. If it is recognised that a pupil is driving to school and parking on-street locally, the school will speak with the pupil and parents to discuss travel arrangements and seek more appropriate alternatives to private car use on an individual basis.
- 6.24 Notwithstanding this, as recognised within **Table 3.1**, the local highway network has significant available capacity throughout the day, with the busiest period recorded being an occupancy level of 73% between the hours of 18:00-19:00, where there was still space for a further 139 cars to park. Within this, the LBRuT recognised threshold of parking stress is 85% and before this is met, a further 62 cars could park on-street locally. As such, while all efforts will be made to ensure staff and pupils do not park on-street locally, in the event that this did occur, it would not materially impact the local highway network.

Drop-Off Arrangement

- 6.25 In order to ensure the development does not result in cars parking on-street locally to pick-up/drop-off pupils, the provision of a suitable drop-off area has been included within the design of the scheme, as can be seen within **Appendices A and D**. This drop-off/pick-up area can accommodate 14 vehicles and the approach access road within the Site can accommodate 25 vehicles before vehicles would back up onto the local highway network, as can be seen within the capacity plan included at **Appendix E**. When considering the short wait time and staggering of arrivals and departures across each school peak hour, is considered to provide sufficient on-site space for vehicle pick-up/drop-off management.
- 6.26 Details of the drop-off strategy is included within the School Travel Plan to ensure parents and pupils understand the way in which they should drop-off and pick-up, in the event they use a private car to reach the Site (which will be discouraged).

Junction Modelling

- 6.27 Following pre-application feedback received from LBRuT, junction modelling in the form of ARCADY, PICADY and LINSIG modelling has been undertaken to assess the local highway network and the developments' impact on opening year (520 pupils) and in the full future year scenario (1,000 pupils). The modelling studies undertaken are as follows:
- PICADY assessment of the existing south access to the Site from Kneller Road;
 - PICADY assessment of the B361 Kneller Road priority junction to the west of the south Site access;
 - PICADY assessment of the proposed re-opening of the access onto Whitton Dene from the Site;
 - ARCADY assessment of the B361 Kneller Road/Nelson Road mini-roundabout;
 - LINSIG analysis of the following wider network junctions:
 - A310 Cross Deep/A305 Heath Road;
 - A305 York Street/A310 London Road;
 - A310 London Road/B361 Whitton Road;
 - B361 Whitton Road/A361 Chertsey Road
 - B361 Whitton Road/Rugby Road

- A316 Chertsey Road/St. Margaret's Road; and,
- A316 Chertsey Road/London Road.

6.28 These assessments, as requested by LBRuT, assess the baseline scenario of 2022 when surveys had been undertaken, as well as opening year (2023) with the anticipated opening year pupil numbers (520 pupils 100 staff), and the future year scenario (1,000 pupils and 170 staff), which is anticipated to be no sooner than 2029. These opening and future year scenarios also incorporate TEMPRO growth factors of 1.0095 for 2023 and 1.0631 for 2029.

Highway Network Surveys

6.29 In order to undertake the modelling assessments outlined above, Automatic Traffic Count surveys (ATC's) and Junction Turning Count surveys (JTC's), including queue lengths have been undertaken.

6.30 Locally to the Site, ATC's were installed on Kneller Road to the south and west of the Site, as well as on Whitton Dene. These surveys covered a weeklong period during school term time, between 25th June 2022 and 1st July 2022, to establish information such as traffic volume, classification of vehicles and vehicle speeds.

6.31 In addition to ATC's, JTC surveys are undertaken for the junction between Kneller Road/Warren Road to the south and Kneller Road to the west, as well as for the junction between Kneller Road and Whitton Dene and the junction between Kneller Road and Nelson Road, both of which are to the west of the Site. These surveys were undertaken on the 26th June 2022 between the hours of 07:00-10:00 and 15:00-19:00 to cover the typical network peak periods and the times in which arrival and departure activity will occur at the school. The scope of the local ATC and JTC surveys is indicated in **Figure 6.7** below, and a copy of the full ATC and JTC survey data is included at **Appendix L**.

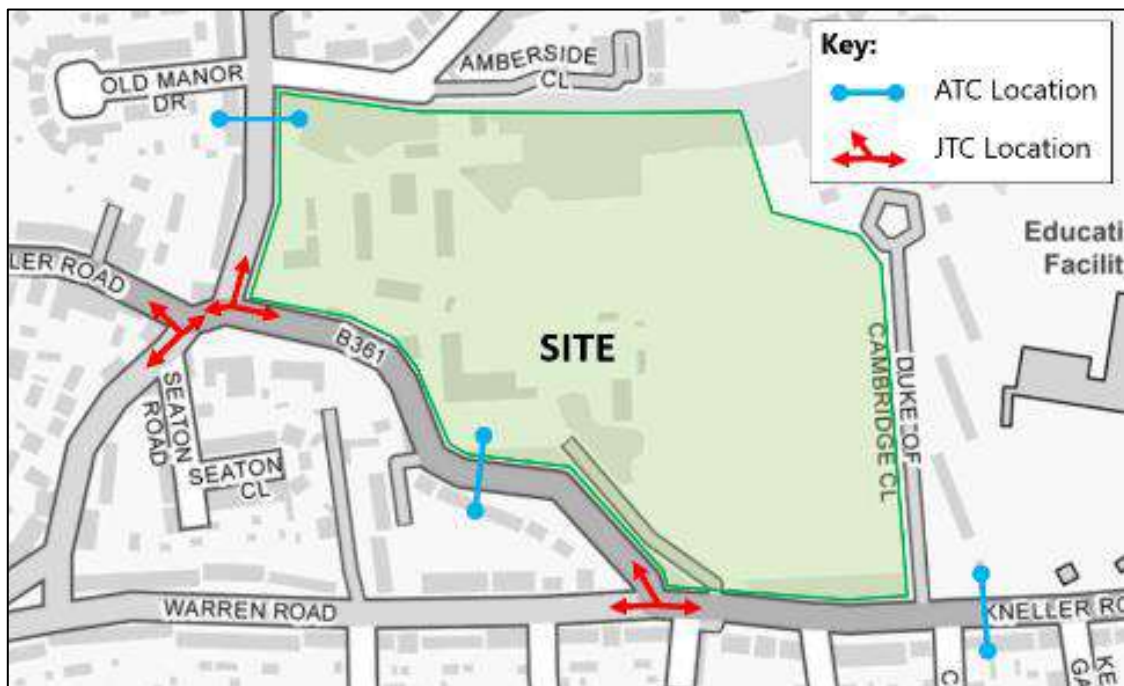


Figure 6.7: ATC and JTC Survey Locations Plan

6.32 In addition to the above, ATC surveys have been undertaken between 15th July 2022 and the 22nd July 2022, on the A316 Chertsey Road, west of the Whitton Road Roundabout junction (ATC 1), on the A316 The Avenue, east of the St Margaret’s Roundabout junction (ATC 2), and on the A310 London Road, south of Twickenham Station (ATC 3). **Figure 6.8** presents the location of these surveys.

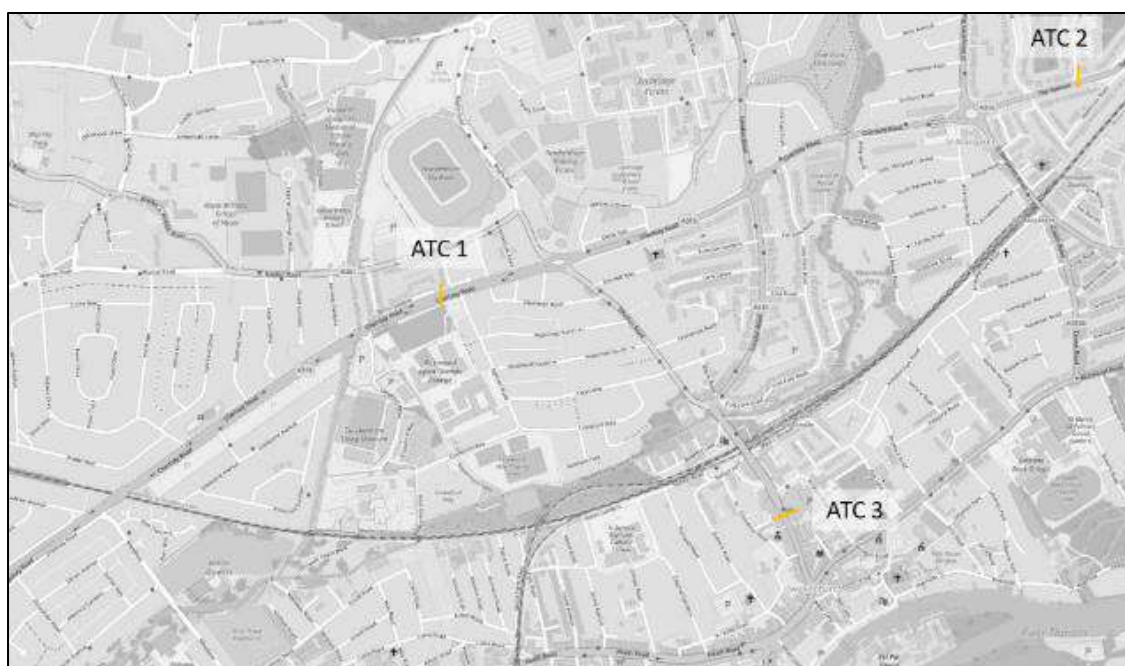


Figure 6.8: ATC Survey Locations

6.33 In addition, JTC surveys were undertaken on the 14th July 2022 between the hours of 07:00-10:00 and 14:00-19:00 as shown within **Figure 6.9** and summarised below.

- JTC 1 – A310 Cross Deep/Heath Road
- JTC 2 – A310 London Road/A305 King Street
- JTC 3 – A310 London Road/B361 Whitton Road
- JTC 4 – A316 Chertsey Road/B361 Whitton Road
- JTC 5 – B361 Whitton Road/Rugby Road
- JTC 6 – A316 Chertsey Road/St Margaret’s Road
- JTC 7 – A316 Chertsey Road/London Road

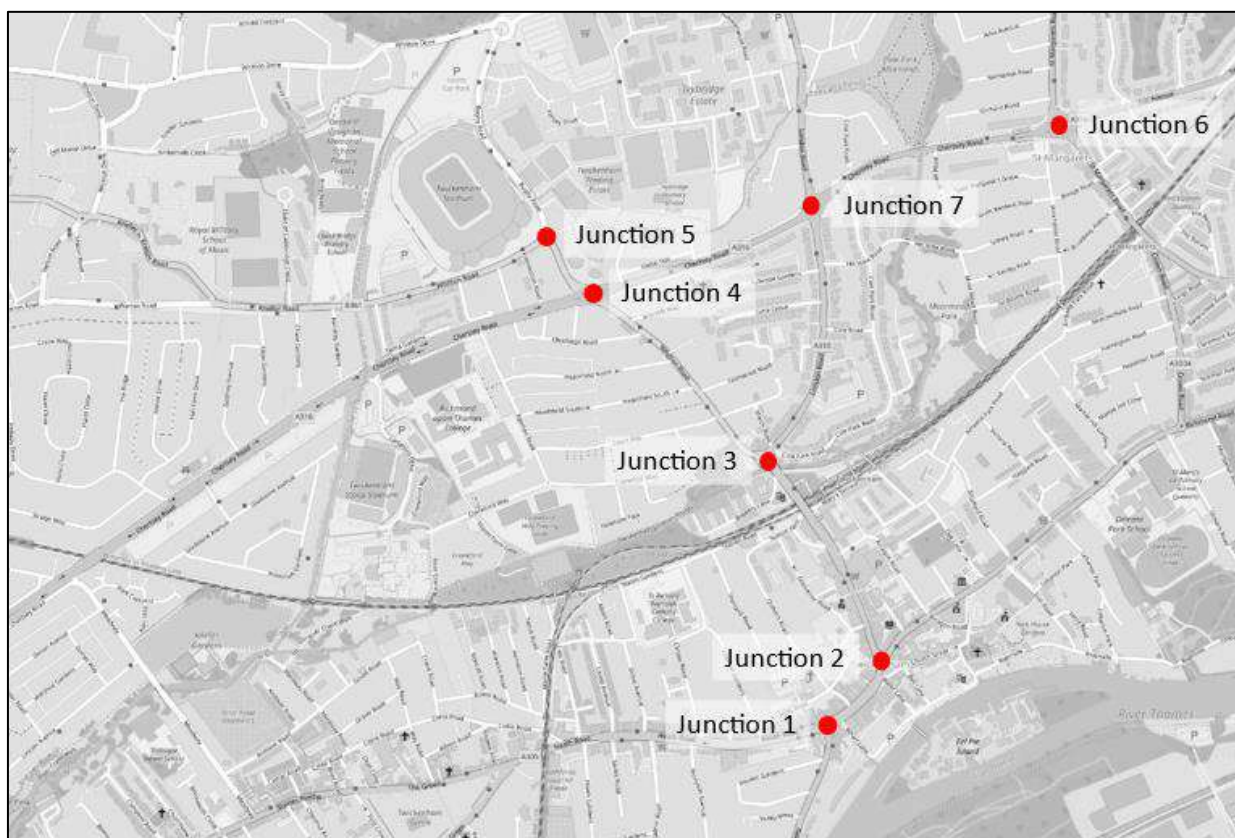


Figure 6.9: Junction Turning Count Locations

Summary of Junction Modelling Results

6.34 The junction modelling undertaken as requested by LBRuT has been undertaken in two phases as follows.

Phase 1 – PICADY and ARCADY Modelling Assessments (Priority Junctions)

- 6.35 The first phase of modelling relates to the local highway network which surrounds the site, as proposed by the Applicant at pre-application discussions which were informed by a Transport Scoping Report. This comprises the four junctions identified in paragraph 6.27 above and which include priority junctions modelled using the PICADY and ARCADY programs.
- 6.36 To model the local priority-controlled junctions, the development traffic as set out in Section 5 for each relevant scenario has been applied to the existing network traffic, with the addition of traffic growth for the assessed future years. The junction assessments therefore consider the following scenarios:
- 2022 Base Traffic (as surveyed);
 - 2023 Base Traffic + Growth;
 - 2023 Base Traffic + Growth + Development;
 - 2029 Base Traffic + Growth; and,
 - 2029 Base Traffic + Growth + Development.
- 6.37 The base models have been validated against queue lengths which were observed as part of the traffic surveys.
- 6.38 The modelling results demonstrate that for the three junctions below, all the scenarios assessed operate with limited or no material variation in capacity. As can be seen from the modelling results at **Appendix M**, the recorded levels of service are retained at an 'A' or 'B' rating, indicating no issue with capacity.
- PICADY assessment of the B361 Kneller Road priority junction to the west of the south Site access;
 - PICADY assessment of the proposed re-opening of the access onto Whitton Dene from the Site; and,
 - ARCADY assessment of the B361 Kneller Road/Nelson Road mini-roundabout.
- 6.39 The only assessment which sees a material variance in capacity and level of service is that of the south access to the Site on Kneller Road. This access is currently not in use but would become the main point of entry/exit for vehicle activity associated with the school. **Table 6.2** provides a summary of the PICADY modelling results for this junction.

Table 6.2: PICADY Assessment Summary of Southern Site Access*

Junction Arm	2022 Surveyed		2023 Base + Growth		2023 Base + Growth + Dev		2029 Base + Growth		2029 Base + Growth + Dev	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
School AM Peak (08:00-09:00)										
Site Access to Kneller Road (B-AC)	0.00	0.00	0.00	0.00	0.48	1.0	0.00	0.00	0.86	6.0
Kneller Road to Site Access (C-AB)	0.00	0.00	0.00	0.00	0.20	0.5	0.00	0.00	0.36	0.9
Average Delay (s /veh)	0.00		0.00		13.66		0.00		36.97	
School PM Peak (16:00-17:00)										
Site Access to Kneller Road (B-AC)	0.00	0.00	0.00	0.00	0.36	0.6	0.00	0.00	0.60	1.7
Kneller Road to Site Access (C-AB)	0.00	0.00	0.00	0.00	0.15	0.4	0.00	0.00	0.26	0.7
Average Delay (s /veh)	0.00		0.00		11.15		0.00		16.62	

**Note that the queue (Q) is in passenger car unit (PCU) and RFC denotes 'Ratio of Flow to Capacity'.*

6.40 The results of the junction assessment as summarised in Table 6.2 indicate that the main Site access junction on Kneller Road will operate within capacity in all scenarios considered despite an increase in the Ratio of Flow to Capacity (RFC) and queuing (Q). It can therefore be concluded that the retained access in its existing state will be sufficient to accommodate the proposed development in addition to a gradual increase of background traffic from the opening year up to a future year under the 1,000-pupil scenario.

6.41 It is pertinent to note that the highest RFC of 0.86 and queue of 6 PCU would only be reached in the 2029 future year scenario with background traffic growth and assuming the school reaches 1,000 pupils. Even then, this would occur on the internal access road of the Site access within the development, rather than on the public highway. Therefore, any impacts arising with regards to queuing and delay would not materially affect Kneller Road itself and the operation of the highway, but rather be contained within the Site.

6.42 Based on the above, the proposals are not considered to present a materially detrimental or severe impact upon the capacity of the local highway network, and the Site access junction (and other local priority junctions assessed) do not therefore require any highway improvements or mitigation.

Phase 2 – LINSIG Modelling Assessments (Signalised Junctions)

- 6.43 Phase 2 of the junction assessment work comprises LINSIG modelling of the wider strategic highway network and junctions which are signal controlled, as also outlined within paragraph 6.27 above. Whilst the phase 2 modelling was not included in the original Transport Scoping Report, this element of junction assessment work was subsequently requested by LBRuT.
- 6.44 The Applicant has agreed to include the additional junction assessments for phase 2 in principle but also subject to agreement with TfL who are the traffic signal authority for London and would therefore need to audit and validate any modelling assessments. It has been agreed between the Applicant and TfL that the Model Auditing Process (MAP) will be progressed, and a separate supplementary submission made specifically for this exercise. It is intended that the audit process would be concluded with TfL prior to determination of the planning application.
- 6.45 The approach to providing the phase 2 modelling assessments as a supplementary submission has been taken to ensure the planning application is not withheld and can be submitted and determined in good time prior to the school's planned opening in September 2023. It also considers receipt of pre-application feedback from LBRuT on the 25th of August 2022 and the anticipated timescales following discussions with TfL to ensure that as the traffic signal authority, they can sufficiently resource and conclude the auditing process, which has not been possible prior to submission of the planning application. In this respect, the Applicant would welcome on-going discussions with LBRuT and TfL to conclude the phase 2 (and phase 1) junction assessments to enable the effects of the proposed development to be fully understood and mitigated should that prove necessary and appropriate.

7 SUSTAINABLE TRANSPORT MEASURES AND MITIGATION

7.1 The following measures are proposed at the Site in order to mitigate any traffic and transport impacts associated within the proposed development.

Staff and Pupil Travel Plans

7.2 Staff and pupils at the School will be encouraged to travel by sustainable modes through the implementation of a School Travel Plan and a Staff Travel Plan. Draft versions of both Travel Plans have been prepared by Caneparo Associates and are included as separate documents as part of the planning application.

7.3 The Travel Plans have been prepared in accordance with TfL's guidance concerning new development in London and in recognition of the STARS accreditation scheme for schools.

Aims and Objectives

7.4 The primary objective of the Travel Plans will be to set out long-term strategies to facilitate and encourage modes of travel to the Site by means other than the private car, which reflects current policy. It will also seek to promote a shift from travel by public transport to Site operated transport and active modes such as walking and cycling.

7.5 The Travel Plan strategies allow for adaptability to ensure relevance over the long term as changing travel habits occur. The Travel Plans will use a combination of incentives, improved facilities, and initiatives in order to change individual's attitudes to more sustainable travel modes.

Measures and Initiatives

7.6 The initiatives and measures that form part of the Travel Plans will be a mixture of 'hard' and 'soft' measures.

7.7 The 'hard' measures include the provision of facilities such as safe and secure cycle parking, showers/lockers, and changing rooms. The 'soft' measures include initiatives such as cycle training courses and providing information on school bus services, the implementation of staff car sharing and pupil lift schemes, and local walking and cycling routes.

7.8 The Travel Plans will be finalised and agreed prior to the occupation of the development.

Delivery, Servicing and Waste Management Plan

- 7.9 In order to ensure that the impact of servicing is minimised, the Applicant will implement a Delivery, Servicing and Waste Management Plan (DSWMP). A Draft DSWMP has been submitted with the planning application.
- 7.10 The purpose of the DSWMP is to mitigate the potential impacts of servicing activity associated with the development. The key aims and objectives of the DSWMP are:
- To minimise disruption to the local and strategic highway network.
 - To ensure that the servicing area is continuously and effectively managed to ensure safe access and egress as well as safe manoeuvres within the on-site servicing space.
 - To manage deliveries effectively to avoid peaking of deliveries and departures that may have a detrimental impact on the local highway network.
 - To ensure that waste can be collected in an efficient manner, to ensure that vehicle dwell times are reduced.
 - To ensure that bins are available for collection in advance of collection, to assist with collection operatives.

Outline Framework Demolition, Construction Management and Logistics Plan

- 7.11 As part of the planning application submission an Outline Framework Demolition, Construction Management and Logistics Plan (CMLP) has been prepared. The CMLP outlines the construction logistics of the development and mitigating measures to actively manage the construction vehicles on the local highway network.
- 7.12 The CMLP seeks to provide a robust construction strategy that will minimise the potential for disruption to local residents, businesses, local schools, members of the public and visitors to the Site as well as other users of the adjacent highway network.
- 7.13 The construction project will be registered with the Considerate Constructors Scheme in order to minimise any negative impact that construction activity may have on the local area. It will also be a requirement for Contractors to be registered with the Freight Operator Recognition Scheme (FORS) and the Construction Logistics Community Safety (CLOCS) initiative.

- 7.14 All aspects of the CMLP are preliminary and will be finalised with the Council by way of a planning Condition or legal agreement prior to commencement of the development, by which time a contractor will have been appointed to provide the necessary input.

Highway Improvements

- 7.15 The Applicant is willing to agree a series of highway improvements with LBRuT as considered reasonable and necessary to make the development acceptable in planning terms. The following potential improvements are the result of the work undertaken to inform the design of the development and in assessing its impacts. It is anticipated that this will include the following works:

- Widening of the existing dropped kerb crossover at the Whitton Dene access to be re-opened. This will include a dropped kerb crossover with tactile paving.
- Improved pedestrian management on Kneller Road at the western pedestrian access. The existing vehicle crossover will remain to provide emergency access to the Site.
- Potential for surface treatment and dropped kerb provisions at the existing south access to the Site on Kneller Road.
- Potential for implementation of signalised crossing over Kneller Road to the south of the Site, to provide a controlled crossing opportunity for pupils who arrive from the south.

- 7.16 The above highway improvements will be discussed and agreed with LBRuT and TfL prior to determination of the planning application.

School Bus and TfL Bus Mitigation

- 7.17 The school will operate nine bus services, as outlined within this TA, which will provide the opportunity for pupils to travel to school by means other than private car and public transport. This approach has been taken to ensure that not only does the school operate in a sustainable manner, promoting the use of non-car modes to pupils and parents, but also to ensure that the schools' impacts upon the local highway and public transport network are limited as much as possible.

- 7.18 Further to the implementation of nine bus routes, the Applicant is also in discussion with TfL Buses and will continue discussions to ensure that the local bus network is not unduly affected by the implementation of the school and additional passenger loading. The Applicant is willing, as necessary, and appropriate, to consider a financial contribution by way of a legal agreement towards improvements to local bus services during the weekday peak hours commensurate with the scale and nature of any potential effects of the proposed development,

Community Use

- 7.19 A significant and tangible benefit of the proposals is the delivery of well-maintained green sports pitches, internal sports facilities, and an indoor swimming pool. These spaces and facilities will be for use by the school during typical school hours in term time, but otherwise available for use by the local community as per the agreed terms of use between the school and LBRuT.
- 7.20 The community will also benefit from the revitalisation of what is currently a vacant and dilapidated Site, with improved greening and landscaping throughout, maintenance of all boundary treatments and the enhancement of the Kneller Hall building itself. In combination with the opening of parts of the site and facilities to the public and local community outside of the school's hours of operation, there will be benefits to active travel, health and fitness and general wellbeing. All these benefits feed into the previously identified Healthy Streets indicators (see Figure 4.6) and will be available to all users of the school and Site for a variety of purposes and secured in perpetuity.

8 SUMMARY AND CONCLUSION

Summary

- 8.1 This Transport Assessment ('TA') has been prepared by Caneparo Associates on behalf of Dukes Education Group Ltd (the 'Applicant') in support of an application for the proposed redevelopment of Kneller Hall, Twickenham ('the Site'), within the London Borough of Richmond upon Thames (LBRuT).
- 8.2 The Site comprises the Grade II listed Kneller Hall, various ancillary buildings, open space, playing fields and services area, which was previously occupied by the Royal Military Music School for residential accommodation. The proposed development is for the following:
- "The demolition of existing modern buildings on the site and the conversion of Kneller Hall and other ancillary buildings associated with the Royal Military Music School to a day school (use Class F1), together with the construction of associated new purpose-built buildings including teaching space, indoor sports facilities and sporting pavilion, and other ancillary works including landscaping, access and energy centre."*
- 8.3 The Site is located within Twickenham and is within a 20-minute walk of Twickenham Station, Whitton Station and Hounslow Station. A Healthy Streets Assessment was undertaken and reviewed the walking and cycling routes to key destinations in the surrounding area and it was found that the surrounding environment is generally positive with respect to active modes, however some minor improvement works could be undertaken on the various routes that would improve the surrounding infrastructure for pedestrians and cyclists.
- 8.4 The proposed development will provide 40 car parking spaces (4 disabled spaces) on-site for use by staff, as well as 3 disabled parking spaces on-site for use by visitors, to be located at the front of the Site accessible from the drop-off area. Pupils will be expected and advised to not travel to school by private car should it require parking, as no on-site parking is provided for pupils.
- 8.5 Cycle parking will be provided in accordance with London Plan standards, with cycle stores located across the Site in suitable locations near the staff entrance and close to teaching blocks. Short-stay cycle parking will be provided for users within the pedestrian and cyclist courtyard entrance to the west of Kneller Hall.

- 8.6 The trip generation assessment looked at the year 1 scenario of 520 pupils and 100 staff, and the future year scenario of 1,000 pupils and 170 staff. The future year assessment recognised that during the busiest peak hour (AM peak 08:00-09:00), 150 trips will be by train, 146 by public bus, 246 by school bus and 206 two-way trips will be by private car.
- 8.7 As such, the necessary mitigation for public bus operations will be discussed and agreed with TfL Buses prior to determination of the application. The Site proposed a suitable drop-off area to enable the management of all private car movements during peak hours so as to ensure no vehicles back onto the local highway network. The Site will also implement an additional 6 school bus routes to provide alternatives to travelling by public transport and private car to reach the Site.
- 8.8 To assess whether or not the development will impact the local highway network from a traffic impact perspective, ARCADY and PICADY modelling of the local highway network around the Site has been undertaken, which, as included within Section 6, does not result in a materially detrimental or severe impact. A second phase of LINSIG modelling for the wider strategic network and signalised junctions will follow within a supplementary submission prior to determination of the planning application and as part of an on-going auditing process with TfL as the traffic signal authority for London.
- 8.9 All servicing and waste collection will take place on-site from the staff access onto Whitton Dene. The servicing demand of the Site is not considered to be high, with circa 5 deliveries per day anticipated.
- 8.10 The implementation of staff and pupil Travel Plans will serve to promote sustainable travel to the development and reduce any impact on the highway through implementing a set of measures to further encourage travel to / from the Site by active modes of travel. Submitted alongside this TA are draft Staff and Pupil Travel Plan documents, outlining the proposed measures and initiatives to be implemented at the School.
- 8.11 The School will also implement a Delivery and Servicing Plan and a Construction Logistics Plan to manage servicing and construction vehicle activity respectively. Draft versions of each document have been submitted alongside this TA, with final versions to be subject to planning conditions.

Conclusion

8.12 In conclusion, through the implementation of on-site travel planning and mitigation, the proposed development will not have a detrimental impact on the highway or local transport network, and is in accordance with relevant adopted national, regional and local policy guidance.

8.13 It therefore meets the test of the NPPF and paragraph 111, which states that:

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

8.14 In light of this, the proposed development is considered to be acceptable and should be supported on transport grounds.

Appendix A

LEGEND

- PLANNING APPLICATION RED LINE
- METROPOLITAN OPEN LAND (MOL) DEMARKATION LINE

FENCE TYPES

- EXISTING BOUNDARY TREATMENT TO BE RETAINED AND MADE GOOD.
- 3M HIGH TIMBER ACOUSTIC FENCE
- 3M HIGH WELD MESH FENCE TO ALL WEATHER HOCKEY PITCH
- 1.8M HIGH SECURE TIMBER ENCLOSURE TO CYCLE AND REFUSE STORES.

HARD LANDSCAPE

- TARMAC
- PERMEABLE PAVING
- RESIN BOUND GRAVEL
- ROUGH GRANITE SETT
- ALL WEATHER PITCH

SOFT LANDSCAPE

- EXISTING TREE (CATEGORY A)
- EXISTING TREE (CATEGORY B)
- EXISTING TREE (CATEGORY C)
- FLOWERING LAWN
- AMENITY GRASS
- WILDFLOWER MEADOW
- EXISTING ACID GRASSLAND TO BE ENHANCED
- INFILTRATION BASIN
- PROPOSED PARKLAND TREE (64NO. ADDED)
- PROPOSED ORNAMENTAL TREE
- EXISTING TREE (32NO. REMOVED)

- LANDSCAPE BUFFER WITH NATIVE SAPLING TREE SPECIES:
- HAWTHORN
 - DOGWOOD
 - WILD CHERRY
 - SILVER BIRCH
 - ROWAN
 - HAZEL
 - CRAB APPLE
 - DOWNY BIRCH
 - GOAT WILLOW



STAGE 3

REVISION	DATE	DESCRIPTION	ARCHITECT	PARTNER
S0 P1	16/08/22	ISSUE FOR REVIEW	CM	CH
S0 P2	17/09/22	ISSUE FOR REVIEW	CM	CH
S0 P3	20/09/22	ISSUE FOR PLANNING	CM	CH

CHECK ALL DIMENSIONS AND VERIFY ON SITE. REPORT ANY ERRORS OR OMISSIONS

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JOB TITLE:
KNELLER HALL

DRAWING TITLE:
LANDSCAPE MASTERPLAN

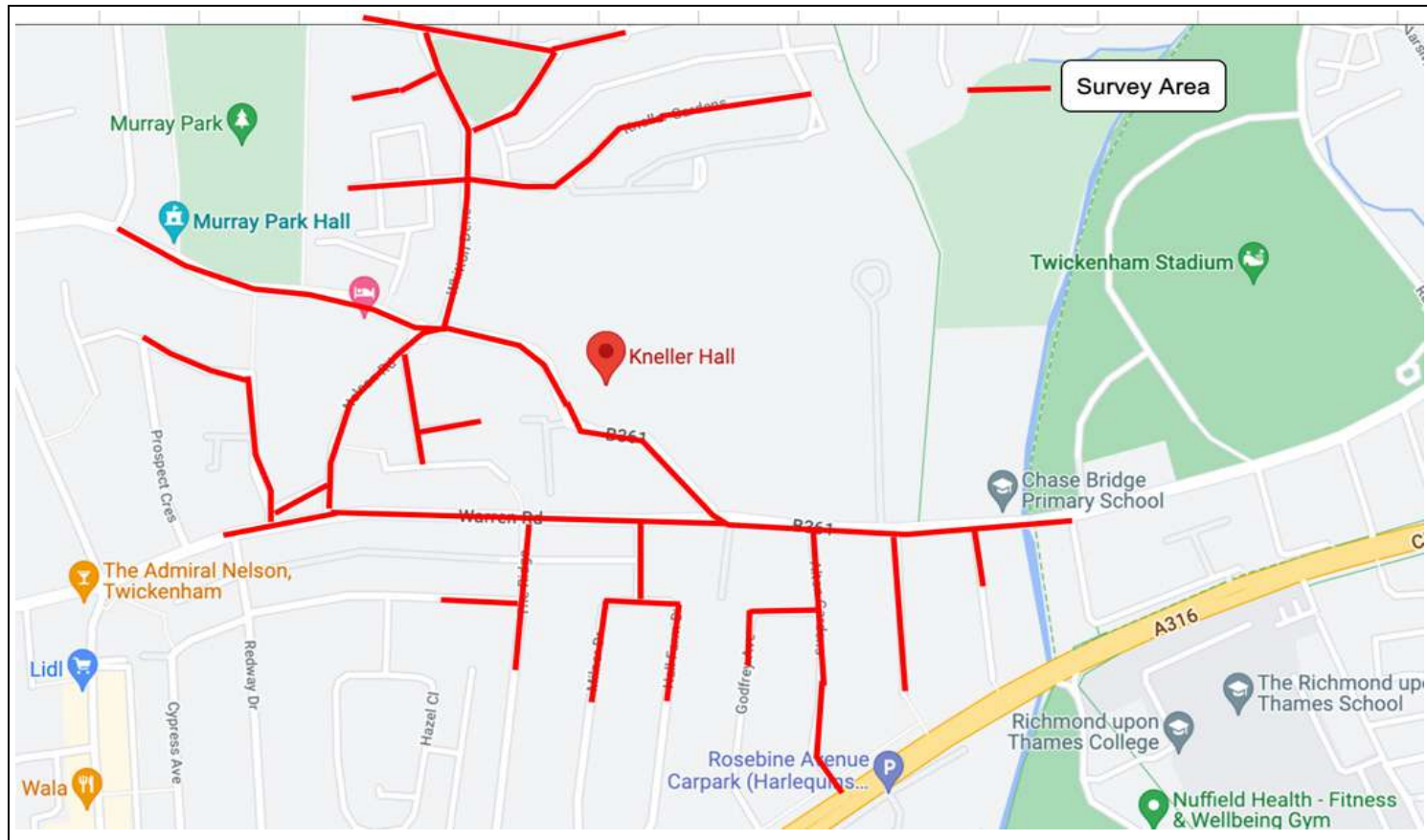
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JOB CODE: 001506	DRAWING NUMBER: ADP-XX-XX-DR-L-1900
REVISION: S0 P3	

This line should measure 100mm along x and y axis when printed

Appendix B



Job ID	Project Name	Survey Type	Survey Dates	Survey Days	Survey Timings	Weather AM	Weather Inter Peak	Weather PM
IW0032	Kneller Hall, Twickenham	Parking Beats	16/03/2022	Wednesday	Beat once at 0730, 0800, 0830, 0900, 1200, 1530,	Rain	Rain	Rain
			17/03/2022	Thursday	1600, 1630, 1700, 1730, 1800 and 1830hrs on each day	Sunny	Sunny	Sunny





Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked												
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	07:30
All Streets	Bus Stand	19	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	Bus Stop	130.7	20	4	4	5	5	4	4	5	4	4	4	4	4	16
	Disabled Bay	49.7	8	1	1	1	4	2	0	0	0	2	0	0	1	7
	Double Yellow Lines	1093	172	16	12	13	11	14	13	14	19	17	15	15	15	156
	Drop Kerb	1704.4	169	0	0	0	0	0	0	0	0	0	0	0	1	169
	Drop Kerb / White Line	16.2	3	0	0	0	0	0	1	0	0	0	0	0	0	3
	Electric Vehicles Only	15.6	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	Keep Clear	7.7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	Narrow	195.2	34	2	3	0	0	1	1	1	1	1	1	1	0	32
	Pedestrian Crossing	153.2	3	1	1	1	1	1	1	1	1	1	1	1	1	2
	Permit Holders Only	74.2	13	3	3	9	10	4	2	4	3	2	2	1	2	10
	Resident Permit Holders Only	2762.5	488	366	355	367	358	334	344	346	359	364	371	364	374	122
	Road Works	82.3	16	0	0	0	0	0	0	0	1	1	1	1	1	16
	School Keep Clear	25.4	5	0	0	0	0	0	0	0	0	0	0	0	0	5
	Shared Users	23.5	4	0	3	3	3	4	0	1	0	0	0	0	0	4
Single Yellow Lines	2198.8	321	62	60	57	59	61	62	69	61	61	62	71	70	259	
Single Yellow Lines / White Line	13.3	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
Zigzag Lines	74.7	12	0	0	0	0	0	0	0	0	0	0	0	0	12	
All Streets (Total) - Wednesday		8639.4	1277	455	442	456	451	425	428	441	449	453	457	457	469	822

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked												
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday		
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	07:30
All Streets	Bus Stand	19	3	0	0	0	1	0	0	0	0	0	0	0	0	3
	Bus Stop	130.7	20	5	4	5	5	5	5	5	4	4	4	5	4	15
	Disabled Bay	49.7	8	2	1	1	1	2	2	2	2	1	1	1	1	6
	Double Yellow Lines	1093	172	17	12	13	15	14	10	11	13	15	19	16	13	155
	Drop Kerb	1704.4	169	0	0	0	0	0	0	0	0	0	0	0	0	169
	Drop Kerb / White Line	16.2	3	0	0	2	0	0	0	0	0	0	0	0	0	3
	Electric Vehicles Only	15.6	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	Keep Clear	7.7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	Narrow	195.2	34	1	1	1	1	1	1	1	1	1	1	1	1	33
	Pedestrian Crossing	153.2	3	1	1	1	1	1	1	1	1	1	1	1	1	2
	Permit Holders Only	74.2	13	3	2	5	7	4	4	3	3	5	5	3	3	10
	Resident Permit Holders Only	2762.5	488	363	347	366	356	334	338	340	339	346	351	353	366	125
	Road Works	82.3	16	1	1	1	1	1	1	1	1	1	1	2	2	15
	School Keep Clear	25.4	5	0	0	0	0	0	0	0	0	0	0	0	0	5
	Shared Users	23.5	4	0	0	2	3	3	0	1	0	0	0	0	0	4
Single Yellow Lines	2198.8	321	59	53	54	49	55	61	60	65	68	75	70	71	262	
Single Yellow Lines / White Line	13.3	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
Zigzag Lines	74.7	12	0	0	0	0	0	0	0	0	0	0	0	0	12	
All Streets (Total) - Thursday		8639.4	1277	452	422	451	440	420	423	425	429	442	458	452	462	825

No. of Empty Spaces											Occu					
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30
3	3	3	3	3	3	3	3	3	3	3	0%	0%	0%	0%	0%	0%
16	15	15	16	16	15	16	16	16	16	16	20%	20%	25%	25%	20%	20%
7	7	4	6	8	8	8	6	8	8	7	13%	13%	13%	50%	25%	0%
160	159	161	158	159	158	153	155	157	157	157	9%	7%	8%	6%	8%	8%
169	169	169	169	169	169	169	169	169	169	168	0%	0%	0%	0%	0%	0%
3	3	3	3	2	3	3	3	3	3	3	0%	0%	0%	0%	0%	33%
3	3	3	3	3	3	3	3	3	3	3	0%	0%	0%	0%	0%	0%
1	1	1	1	1	1	1	1	1	1	1	0%	0%	0%	0%	0%	0%
31	34	34	33	33	33	33	33	33	34	34	6%	9%	0%	0%	3%	3%
2	2	2	2	2	2	2	2	2	2	2	33%	33%	33%	33%	33%	33%
10	4	3	9	11	9	10	11	11	12	11	23%	23%	69%	77%	31%	15%
133	121	130	154	144	142	129	124	117	124	114	75%	73%	75%	73%	68%	70%
16	16	16	16	16	16	15	15	15	15	15	0%	0%	0%	0%	0%	0%
5	5	5	5	5	5	5	5	5	5	5	0%	0%	0%	0%	0%	0%
1	1	1	0	4	3	4	4	4	4	4	0%	75%	75%	75%	100%	0%
261	264	262	260	259	252	260	260	259	250	251	19%	19%	18%	18%	19%	19%
2	2	2	2	2	2	2	2	2	2	2	0%	0%	0%	0%	0%	0%
12	12	12	12	12	12	12	12	12	12	12	0%	0%	0%	0%	0%	0%
835	821	826	852	849	836	828	824	820	820	808	36%	35%	36%	35%	33%	34%

No. of Empty Spaces											Occu					
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30
3	3	2	3	3	3	3	3	3	3	3	0%	0%	0%	33%	0%	0%
16	15	15	15	15	15	16	16	16	15	16	25%	20%	25%	25%	25%	25%
7	7	7	6	6	6	6	7	7	7	7	25%	13%	13%	13%	25%	25%
160	159	157	158	162	161	159	157	153	156	159	10%	7%	8%	9%	8%	6%
169	169	169	169	169	169	169	169	169	169	169	0%	0%	0%	0%	0%	0%
3	1	3	3	3	3	3	3	3	3	3	0%	0%	67%	0%	0%	0%
3	3	3	3	3	3	3	3	3	3	3	0%	0%	0%	0%	0%	0%
1	1	1	1	1	1	1	1	1	1	1	0%	0%	0%	0%	0%	0%
33	33	33	33	33	33	33	33	33	33	33	3%	3%	3%	3%	3%	3%
2	2	2	2	2	2	2	2	2	2	2	33%	33%	33%	33%	33%	33%
11	8	6	9	9	10	10	8	8	10	10	23%	15%	38%	54%	31%	31%
141	122	132	154	150	148	149	142	137	135	122	74%	71%	75%	73%	68%	69%
15	15	15	15	15	15	15	15	15	14	14	6%	6%	6%	6%	6%	6%
5	5	5	5	5	5	5	5	5	5	5	0%	0%	0%	0%	0%	0%
4	2	1	1	4	3	4	4	4	4	4	0%	0%	50%	75%	75%	0%
268	267	272	266	260	261	256	253	246	251	250	18%	17%	17%	15%	17%	19%
2	2	2	2	2	2	2	2	2	2	2	0%	0%	0%	0%	0%	0%
12	12	12	12	12	12	12	12	12	12	12	0%	0%	0%	0%	0%	0%
855	826	837	857	854	852	848	835	819	825	815	35%	33%	35%	34%	33%	33%

Survey Dates: 16/03/2022 and 17/03/2022
 Survey Days: Wednesday and Thursday

Occupancy %					
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
16:00	16:30	17:00	17:30	18:00	18:30
0%	0%	0%	0%	0%	0%
25%	20%	20%	20%	20%	20%
0%	0%	25%	0%	0%	13%
8%	11%	10%	9%	9%	9%
0%	0%	0%	0%	0%	1%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
3%	3%	3%	3%	0%	0%
33%	33%	33%	33%	33%	33%
31%	23%	15%	15%	8%	15%
71%	74%	75%	76%	75%	77%
0%	6%	6%	6%	6%	6%
0%	0%	0%	0%	0%	0%
25%	0%	0%	0%	0%	0%
21%	19%	19%	19%	22%	22%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
35%	35%	35%	36%	36%	37%

Occupancy %					
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
16:00	16:30	17:00	17:30	18:00	18:30
0%	0%	0%	0%	0%	0%
25%	20%	20%	20%	25%	20%
25%	25%	13%	13%	13%	13%
6%	8%	9%	11%	9%	8%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
3%	3%	3%	3%	3%	3%
33%	33%	33%	33%	33%	33%
23%	23%	38%	38%	23%	23%
70%	69%	71%	72%	72%	75%
6%	6%	6%	6%	13%	13%
0%	0%	0%	0%	0%	0%
25%	0%	0%	0%	0%	0%
19%	20%	21%	23%	22%	22%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
33%	34%	35%	36%	35%	36%



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Alton Gardens	Double Yellow Lines	11.6	1	0	0	0	0	0	0	0	0	0
	Drop Kerb	124.7	9	0	0	0	0	1	0	0	0	2
	Electric Vehicles Only	15.6	3	0	0	0	0	0	1	0	0	0
	Pedestrian Crossing	4.9	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	288.1	50	44	43	45	47	44	40	42	39	39
	Single Yellow Lines	83.9	15	3	4	3	3	5	3	4	4	5
Total - Alton Gardens - Wednesday		528.8	78	47	47	48	50	50	44	46	46	46

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Chase Gardens	Disabled Bay	6.5	1	1	1	1	1	0	0	1	1	1
	Double Yellow Lines	12.2	0	0	0	0	0	0	0	0	0	0
	Drop Kerb	102.2	6	0	0	0	0	2	1	0	0	0
	Pedestrian Crossing	4.4	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	207.3	39	33	30	34	33	33	34	36	37	37
	Single Yellow Lines	15.5	2	0	0	0	0	0	0	0	0	0
Total - Chase Gardens - Wednesday		348.1	48	34	31	35	34	35	35	37	38	38

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Crane Way	Drop Kerb	44.5	8	0	0	1	0	0	0	0	0	0
	Pedestrian Crossing	4.7	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	87.9	11	15	13	14	14	12	17	18	18	18
	Single Yellow Lines	23.6	2	0	0	0	0	0	0	0	0	0
Total - Crane Way - Wednesday		160.7	21	15	13	15	14	12	17	18	18	18

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Godfrey Avenue	Disabled Bay	6	1	1	1	1	1	1	1	1	1	1
	Drop Kerb	48.2	2	0	0	0	1	1	0	0	0	0
	Resident Permit Holders Only	130.3	23	17	17	21	21	20	17	18	17	17
	Single Yellow Lines	42.3	6	2	1	1	1	1	1	2	2	2
Total - Godfrey Avenue - Wednesday		226.8	32	20	19	23	24	23	19	21	20	20

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	1	1	1	1	1	1	1	1	1	1
1	0	1	0	9	9	9	9	8	9	9	7	8	9
0	0	0	0	3	3	3	3	3	2	3	3	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	43	37	41	6	7	5	3	6	10	8	11	8	7
5	4	4	4	12	11	12	12	10	12	11	10	10	11
48	47	42	45	31	31	30	28	28	34	32	32	30	31

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	0	0	0	0	1	1	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	6	6	6	6	4	5	6	6	6	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	32	31	29	6	9	5	6	6	5	3	2	1	7
0	0	0	0	2	2	2	2	2	2	2	2	2	2
39	33	32	30	14	17	13	14	13	13	11	10	9	15

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	8	8	7	8	8	8	8	8	8	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	17	17	0	0	0	0	0	0	0	0	0	0
1	0	0	0	2	2	2	2	2	2	2	2	1	2
19	19	17	17	10	10	9	10	10	10	10	10	9	10

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	2	2	2	1	1	2	2	2	2	2
15	13	14	16	6	6	2	2	3	6	5	6	8	10
1	1	1	1	4	5	5	5	5	5	4	4	5	5
17	15	16	18	12	13	9	8	9	13	11	12	15	17

Survey Date:
Survey Day:

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
1	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8	9	0%	0%	0%	0%	11%	0%	0%	22%	11%	0%	11%
3	3	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
13	9	88%	86%	90%	94%	88%	80%	84%	78%	84%	86%	74%
11	11	20%	27%	20%	20%	33%	20%	27%	33%	33%	27%	27%
36	33	60%	60%	62%	64%	64%	56%	59%	59%	62%	60%	54%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
0	0	100%	100%	100%	100%	0%	0%	100%	100%	100%	100%	100%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	6	0%	0%	0%	0%	33%	17%	0%	0%	0%	0%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8	10	85%	77%	87%	85%	85%	87%	92%	95%	97%	82%	79%
2	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
16	18	44%	40%	45%	44%	45%	45%	47%	49%	50%	42%	41%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
8	8	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	136%	118%	127%	127%	109%	155%	164%	164%	164%	173%	155%
2	2	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%
10	10	71%	62%	71%	67%	57%	81%	86%	86%	90%	90%	81%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
0	0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2	2	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%
9	7	74%	74%	91%	91%	87%	74%	78%	74%	65%	57%	61%
5	5	33%	17%	17%	17%	17%	17%	33%	33%	17%	17%	17%
16	14	63%	59%	72%	75%	72%	59%	66%	63%	53%	47%	50%

16/03/2022
Wednesday

Wednesday
18:30
0%
0%
0%
0%
82%
27%
58%

Wednesday
18:30
100%
0%
0%
0%
74%
0%
38%

Wednesday
18:30
0%
0%
155%
0%
81%

Wednesday
18:30
100%
0%
70%
17%
56%

16/03/2022
Wednesday

Wednesday
18:30

Wednesday
18:30
14%
0%
70%
0%
23%

Wednesday
18:30
0%
0%
0%
13%
0%
8%

Wednesday
18:30
100%
4%
0%
0%
0%
79%
25%
36%

Wednesday
18:30
0%

16/03/2022
Wednesday

Wednesday
18:30
0%
0%
14%
0%
20%
74%
0%
0%
35%
0%
26%

Wednesday
18:30
0%
133%
0%
62%

Wednesday
18:30
0%
0%
0%
100%
0%
133%
64%
54%

Wednesday
18:30
0%



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Nelson Road (Side Road)	Keep Clear	7.7	1	0	0	0	0	0	0	0	0	0
	Pedestrian Crossing	3.8	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	55.3	10	7	8	9	8	8	9	11	10	10
	Single Yellow Lines	45.2	7	3	3	3	3	4	4	4	4	4
Total - Nelson Road (Side Road) - Wednesday		121.4	19	10	11	12	11	12	13	15	14	14

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Old Manor Drive	Drop Kerb	43.2	5	2	2	1	0	0	1	1	0	0
	Narrow	66.1	10	2	3	0	0	1	1	1	1	1
	Pedestrian Crossing	2.7	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	84.8	14	10	10	11	11	11	12	11	15	15
	Single Yellow Lines	79.9	14	2	1	2	2	2	1	1	1	1
Total - Old Manor Drive - Wednesday		276.7	43	16	16	14	13	14	15	14	17	17

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Prospect Crescent	Disabled Bay	6.3	1	0	0	0	0	0	0	0	0	0
	Drop Kerb	77.8	8	0	0	0	0	0	0	0	0	2
	Pedestrian Crossing	9.3	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	374.6	69	40	35	36	34	33	33	32	38	38
	Single Yellow Lines	57.5	7	0	0	0	1	0	0	0	0	0
Total - Prospect Crescent - Wednesday		525.5	85	40	35	36	35	33	33	32	40	40

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Seaton Close	Disabled Bay	6	1	1	1	1	1	1	1	1	1	1
	Narrow	52.2	10	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	55.4	10	8	8	8	6	7	6	7	6	6
	Single Yellow Lines	19.7	3	0	0	0	1	2	2	2	2	2
Total - Seaton Close - Wednesday		133.3	24	9	9	9	8	10	9	10	9	9

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	7	8	8	3	2	1	2	2	1	0	0	2	3
4	3	4	4	4	4	4	4	3	3	3	3	3	4
12	10	12	12	9	8	7	8	7	6	5	5	7	9

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	2	2	2	3	3	4	5	5	4	4	5	5	3
1	1	0	0	8	7	10	10	9	9	9	9	9	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	17	16	4	4	3	3	3	2	3	0	0	0
1	1	2	1	12	13	12	12	12	13	13	13	13	13
18	21	21	19	27	27	29	30	29	28	29	27	27	25

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	1	1	1	1	1	1	1	1	1	1
3	0	0	0	8	8	8	8	8	8	8	6	5	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	41	40	39	29	34	33	35	36	36	37	31	33	28
0	0	0	0	7	7	7	6	7	7	7	7	7	7
39	41	40	39	45	50	49	50	52	52	53	45	46	44

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	10	10	10	10	10	10	10	10	10	10
7	7	7	7	2	2	2	4	3	4	3	4	3	3
1	1	2	2	3	3	3	2	1	1	1	1	2	2
9	9	10	10	15	15	15	16	14	15	14	15	15	15

Survey Date:
Survey Day:

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
1	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	2	70%	80%	90%	80%	80%	90%	110%	100%	80%	70%	80%
3	3	43%	43%	43%	43%	57%	57%	57%	57%	57%	43%	57%
7	7	53%	58%	63%	58%	63%	68%	79%	74%	63%	53%	63%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
3	3	40%	40%	20%	0%	0%	20%	20%	0%	0%	40%	40%
10	10	20%	30%	0%	0%	10%	10%	10%	10%	10%	10%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	71%	71%	79%	79%	79%	86%	79%	107%	114%	121%	121%
12	13	14%	7%	14%	14%	14%	7%	7%	7%	7%	7%	14%
25	26	37%	37%	33%	30%	33%	35%	33%	40%	42%	49%	49%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
1	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8	8	0%	0%	0%	0%	0%	0%	0%	25%	38%	0%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
29	30	58%	51%	52%	49%	48%	48%	46%	55%	52%	59%	58%
7	7	0%	0%	0%	14%	0%	0%	0%	0%	0%	0%	0%
45	46	47%	41%	42%	41%	39%	39%	38%	47%	46%	48%	47%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
0	0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
10	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	3	80%	80%	80%	60%	70%	60%	70%	60%	70%	70%	70%
1	1	0%	0%	0%	33%	67%	67%	67%	67%	33%	33%	67%
14	14	38%	38%	38%	33%	42%	38%	42%	38%	38%	38%	42%

16/03/2022
Wednesday

Wednesday
18:30
0%
0%
80%
57%
63%

Wednesday
18:30
40%
0%
0%
114%
7%
44%

Wednesday
18:30
0%
0%
0%
57%
0%
46%

Wednesday
18:30
100%
0%
70%
67%
42%



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Seaton Road	Double Yellow Lines	11.5	2	0	0	0	0	0	0	0	0	0
	Drop Kerb	27.2	4	0	0	0	0	2	1	1	0	0
	Pedestrian Crossing	5	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	62	10	10	11	11	11	10	10	9	10	10
	Road Works	82.3	16	0	0	0	0	0	0	0	0	1
	Single Yellow Lines	15.5	1	0	0	0	0	0	0	0	1	0
Total - Seaton Road - Wednesday		203.5	33	10	11	11	11	12	11	11	11	11

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
The Ridge	Drop Kerb	59	7	0	0	0	0	0	0	1	1	1
	Pedestrian Crossing	5.3	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	114.4	20	14	14	13	13	12	10	11	12	12
	Single Yellow Lines	80.3	8	0	0	0	0	0	0	0	0	0
Total - The Ridge - Wednesday		259	35	14	14	13	13	12	10	12	13	13

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Warren Road	Bus Stop	38.4	6	0	0	0	0	0	0	0	0	0
	Double Yellow Lines	87.6	15	0	0	0	1	0	0	0	0	0
	Drop Kerb	149	13	0	0	0	0	0	0	1	0	0
	Pedestrian Crossing	6.4	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	227.3	42	17	16	19	18	18	18	17	20	20
	Single Yellow Lines	325.3	50	2	2	2	5	1	1	2	1	1
	Single Yellow Lines / White Line	13.3	2	0	0	0	0	0	0	0	0	0
Total - Warren Road - Wednesday		847.3	128	19	18	21	24	19	19	20	21	21

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	2	2	2	2	2	2	2	2	2	2
1	1	1	1	4	4	4	4	2	3	3	4	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	11	11	11	0	0	0	0	0	0	1	0	0	0
1	1	1	1	16	16	16	16	16	16	16	15	15	15
0	0	0	0	1	1	1	1	1	1	0	1	1	1
13	13	13	13	23	23	23	23	21	22	22	22	21	21

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	7	7	7	7	7	7	6	6	7	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	11	11	6	6	7	7	8	10	9	8	8	8
0	0	1	0	8	8	8	8	8	8	8	8	8	8
12	12	12	11	21	21	22	22	23	25	23	22	23	23

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	6	6	6	6	6	6	6	6	6	6
0	0	0	0	15	15	15	14	15	15	15	15	15	15
0	0	0	0	13	13	13	13	13	13	12	13	13	13
0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	22	23	23	25	26	23	24	24	24	25	22	23	20
2	1	3	4	48	48	48	45	49	49	48	49	48	49
0	0	0	0	2	2	2	2	2	2	2	2	2	2
21	23	26	27	109	110	107	104	109	109	108	107	107	105

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30

Survey Date:
Survey Day:

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
2	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	3	0%	0%	0%	0%	50%	25%	25%	0%	25%	25%	25%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	100%	110%	110%	110%	100%	100%	90%	100%	110%	110%	110%
15	15	0%	0%	0%	0%	0%	0%	0%	6%	6%	6%	6%
1	1	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
21	21	30%	33%	33%	33%	36%	33%	33%	33%	39%	39%	39%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
7	7	0%	0%	0%	0%	0%	0%	14%	14%	0%	0%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
9	9	70%	70%	65%	65%	60%	50%	55%	60%	60%	60%	55%
7	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%
23	24	40%	40%	37%	37%	34%	29%	34%	37%	34%	34%	34%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
6	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
15	15	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%
13	13	0%	0%	0%	0%	0%	0%	8%	0%	0%	0%	0%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
19	19	40%	38%	45%	43%	43%	43%	40%	48%	45%	52%	55%
47	46	4%	4%	4%	10%	2%	2%	4%	2%	4%	2%	6%
2	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
102	101	15%	14%	16%	19%	15%	15%	16%	16%	16%	18%	20%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00

16/03/2022
Wednesday

Wednesday
18:30

Wednesday
18:30
0%
25%
0%
110%
6%
0%
39%

Wednesday
18:30
0%
0%
55%
0%
31%

Wednesday
18:30
0%
0%
0%
0%
55%
8%
0%
21%

Wednesday
18:30



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Whitton Dene	Bus Stand	19	3	0	0	0	0	0	0	0	0	0
	Bus Stop	32.9	5	0	0	0	0	0	0	0	0	0
	Disabled Bay	12.2	2	1	1	1	1	1	1	1	1	1
	Double Yellow Lines	270.6	35	0	0	0	0	0	0	0	0	0
	Drop Kerb	161	12	3	2	2	2	2	2	1	1	2
	Drop Kerb / White Line	5.5	1	0	0	0	0	0	0	0	0	0
	Pedestrian Crossing	29.3	1	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	250.2	46	35	35	33	35	30	36	37	39	39
Single Yellow Lines	426.2	74	9	7	4	6	6	6	5	5	5	
Total - Whitton Dene - Wednesday		1206.9	179	48	45	40	44	39	44	44	47	

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Whitton Manor Road	Double Yellow Lines	2.8	0	0	0	0	0	0	0	0	0	0
	Drop Kerb	69.9	8	1	0	0	0	0	1	1	1	1
	Pedestrian Crossing	6.7	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	80.2	12	11	11	11	10	8	10	9	11	11
	Single Yellow Lines	39.3	5	0	0	0	0	0	0	0	0	0
Total - Whitton Manor Road - Wednesday		198.9	25	12	11	11	10	8	11	10	12	

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	3	3	3	3	3	3	3	3	3	3
0	0	0	0	5	5	5	5	5	5	5	5	5	5
1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	0	0	35	35	35	35	35	35	35	35	35	35
2	2	2	3	9	10	10	10	10	11	11	10	10	10
0	0	0	0	1	1	1	1	1	1	1	1	1	1
0	0	0	0	1	1	1	1	1	1	1	1	1	1
38	36	38	38	11	11	13	11	16	10	9	7	8	10
5	6	5	4	65	67	70	68	68	68	69	69	69	68
46	45	46	46	131	134	139	135	140	135	135	132	133	134

				No. of Empty Spaces									
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	7	8	8	8	8	7	7	7	7	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	13	13	1	1	1	2	4	2	3	1	0	0
0	0	1	0	5	5	5	5	5	5	5	5	5	5
13	14	15	14	13	14	14	15	17	14	15	13	12	12

Survey Date:

Survey Day:

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
3	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1	1	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
35	35	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10	9	25%	17%	17%	17%	17%	8%	8%	17%	17%	17%	17%
1	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8	8	76%	76%	72%	76%	65%	78%	80%	85%	83%	78%	83%
69	70	12%	9%	5%	8%	8%	8%	7%	7%	7%	8%	7%
133	133	27%	25%	22%	25%	22%	25%	25%	26%	26%	25%	26%

		Occupancy %										
Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	Wednesday
18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30	18:00
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
7	7	13%	0%	0%	0%	0%	13%	13%	13%	13%	13%	13%
0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	92%	92%	92%	83%	67%	83%	75%	92%	100%	108%	108%
4	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%
11	12	48%	44%	44%	40%	32%	44%	40%	48%	52%	56%	60%

16/03/2022
Wednesday

Wednesday
18:30
0%
0%
50%
0%
25%
0%
0%
83%
5%
26%

Wednesday
18:30
0%
13%
0%
108%
0%
56%



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Alton Gardens	Double Yellow Lines	11.6	1	0	0	0	0	0	0	0	0	0
	Drop Kerb	124.7	9	0	0	0	0	0	0	0	0	0
	Electric Vehicles Only	15.6	3	0	0	2	0	0	0	0	0	0
	Pedestrian Crossing	4.9	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	288.1	50	41	39	45	45	38	36	38	35	35
	Single Yellow Lines	83.9	15	4	4	4	4	4	4	4	4	4
Total - Alton Gardens - Thursday		528.8	78	45	43	51	49	42	40	42	39	39

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Chase Gardens	Disabled Bay	6.5	1	1	1	1	1	1	1	1	1	1
	Double Yellow Lines	12.2	0	0	0	0	0	0	0	0	0	0
	Drop Kerb	102.2	6	0	0	1	0	1	0	0	0	0
	Pedestrian Crossing	4.4	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	207.3	39	36	35	37	35	35	32	32	30	30
	Single Yellow Lines	15.5	2	0	0	0	0	0	0	0	0	0
Total - Chase Gardens - Thursday		348.1	48	37	36	39	36	37	33	33	31	31

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Crane Way	Drop Kerb	44.5	8	0	0	0	0	0	1	0	0	0
	Pedestrian Crossing	4.7	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	87.9	11	15	14	13	13	11	14	16	16	16
	Single Yellow Lines	23.6	2	0	0	0	0	0	0	0	0	0
Total - Crane Way - Thursday		160.7	21	15	14	13	13	11	15	16	16	16

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Godfrey Avenue	Disabled Bay	6	1	1	1	1	1	1	1	1	1	1
	Drop Kerb	48.2	2	0	0	0	1	1	0	0	0	0
	Resident Permit Holders Only	130.3	23	16	18	22	16	18	16	17	14	14
	Single Yellow Lines	42.3	6	1	1	2	1	1	1	1	1	1
Total - Godfrey Avenue - Thursday		226.8	32	18	20	25	19	21	18	19	16	16

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
37	34	35	36	82%	78%	90%	90%	76%	72%	76%	70%	74%	68%
3	3	3	3	27%	27%	27%	27%	27%	27%	27%	27%	20%	20%
40	37	38	39	58%	55%	65%	63%	54%	51%	54%	50%	51%	47%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	17%	0%	17%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
31	30	27	30	92%	90%	95%	90%	90%	82%	82%	77%	79%	77%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
32	31	28	31	47%	46%	50%	46%	47%	42%	42%	40%	41%	40%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
16	17	16	17	136%	127%	118%	118%	100%	127%	145%	145%	145%	155%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
16	17	16	17	71%	67%	62%	62%	52%	71%	76%	76%	76%	81%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
0	0	0	0	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%
16	17	17	17	70%	78%	96%	70%	78%	70%	74%	61%	70%	74%
1	1	1	1	17%	17%	33%	17%	17%	17%	17%	17%	17%	17%
18	19	19	19	56%	63%	78%	59%	66%	56%	59%	50%	56%	59%

Survey Date: 17/03/2022

Survey Day: Thursday

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
0%	0%
0%	0%
70%	72%
20%	20%
49%	50%

Thursday	Thursday
18:00	18:30
100%	100%
0%	0%
0%	0%
0%	0%
69%	77%
0%	0%
36%	40%

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
145%	155%
0%	0%
76%	81%

Thursday	Thursday
18:00	18:30
100%	100%
0%	0%
74%	74%
17%	17%
59%	59%



Project ID and Name: IW0032 Kneller Hall, Twickenham

Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Hall Farm Drive	Drop Kerb	113.2	14	1	0	0	0	0	0	0	0	1
	Pedestrian Crossing	8.3	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	135.9	23	15	14	15	14	12	11	10	12	12
	Single Yellow Lines	73.9	6	0	0	0	0	0	0	0	0	0
Total - Hall Farm Drive - Thursday		331.3	43	16	14	15	14	12	11	10	13	

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Kendrey Gardens	Double Yellow Lines	17.1	2	0	0	0	0	0	0	0	0	0
	Drop Kerb	11	2	0	0	0	0	0	0	0	0	0
	Pedestrian Crossing	4.9	0	0	0	0	0	0	0	0	0	0
	Permit Holders Only	44.3	8	3	2	5	5	2	3	2	3	3
	Single Yellow Lines	1.1	0	0	0	0	0	0	0	0	0	0
Total - Kendrey Gardens - Thursday		78.4	12	3	2	5	5	2	3	2	3	

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Kneller Gardens	Double Yellow Lines	11.7	1	2	1	1	1	1	1	1	1	1
	Drop Kerb	275.6	25	2	1	2	3	2	1	1	2	2
	Drop Kerb / White Line	5.7	1	0	0	0	0	0	0	0	0	0
	Narrow	76.9	14	0	0	0	0	0	0	0	0	0
	Pedestrian Crossing	7.8	0	1	1	1	1	1	1	1	1	1
	Resident Permit Holders Only	163.5	28	23	20	23	25	19	19	18	20	20
	Single Yellow Lines	153.2	4	1	1	1	1	2	1	1	1	1
Total - Kneller Gardens - Thursday		694.4	73	29	24	28	31	25	23	22	25	

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
	Bus Stop	30.8	4	0	0	0	0	0	0	0	0	0
	Disabled Bay	12.7	2	1	0	1	1	1	1	1	0	0

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	0	0	0	7%	0%	0%	0%	0%	0%	0%	7%	7%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11	12	12	13	65%	61%	65%	61%	52%	48%	43%	52%	48%	52%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	12	12	13	37%	18%	19%	18%	15%	14%	13%	17%	15%	15%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	4	2	2	38%	25%	63%	63%	25%	38%	25%	38%	25%	50%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	4	2	2	25%	17%	42%	42%	17%	25%	17%	25%	17%	33%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	200%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2	3	3	2	8%	4%	8%	12%	8%	4%	4%	8%	8%	12%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1	1	1	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20	24	23	27	82%	71%	82%	89%	68%	68%	64%	71%	71%	86%
1	2	1	1	25%	25%	25%	25%	50%	25%	25%	25%	25%	50%
25	31	29	32	40%	33%	38%	42%	34%	32%	30%	34%	34%	42%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	1	0	50%	0%	50%	50%	50%	50%	50%	0%	0%	0%

Survey Date: 17/03/2022

Survey Day: Thursday

Thursday	Thursday
18:00	18:30

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
52%	57%
0%	0%
15%	17%

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
0%	0%
25%	25%
0%	0%
17%	17%

Thursday	Thursday
18:00	18:30
100%	100%
12%	8%
0%	0%
0%	0%
0%	0%
82%	96%
25%	25%
40%	44%

Thursday	Thursday
18:00	18:30
0%	0%
50%	0%

Survey Date: 17/03/2022

Survey Day: Thursday

Thursday	Thursday
18:00	18:30
0%	0%
14%	11%
0%	0%
20%	20%
65%	65%
0%	0%
0%	0%
38%	42%
0%	0%
25%	25%

Thursday	Thursday
18:00	18:30
0%	0%
133%	133%
0%	0%
62%	62%

Wednesday	Wednesday
Thursday	Thursday
0%	0%
0%	0%
0%	0%
0%	0%
0%	0%
133%	133%
55%	55%
46%	46%

Thursday	Thursday
18:00	18:30
100%	100%
0%	0%



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30
Nelson Road (Side Road)	Pedestrian Crossing	3.8	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	55.3	10	8	8	7	7	9	7	7	9
	Single Yellow Lines	45.2	7	2	2	2	1	4	3	2	3
Total - Nelson Road (Side Road) - Thursday		121.4	19	10	10	9	8	13	11	10	13

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30
Old Manor Drive	Drop Kerb	43.2	5	2	0	0	0	1	1	1	1
	Narrow	66.1	10	0	0	0	0	0	1	1	1
	Pedestrian Crossing	2.7	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	84.8	14	14	13	14	15	12	12	12	10
	Single Yellow Lines	79.9	14	2	1	2	1	1	1	1	1
Total - Old Manor Drive - Thursday		276.7	43	18	14	16	16	14	15	15	13

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30
Prospect Crescent	Disabled Bay	6.3	1	0	0	0	0	0	0	0	0
	Drop Kerb	77.8	8	0	0	0	1	0	1	0	0
	Pedestrian Crossing	9.3	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	374.6	69	37	34	33	35	35	39	37	39
	Single Yellow Lines	57.5	7	0	0	0	0	0	0	0	0
Total - Prospect Crescent - Thursday		525.5	85	37	34	33	36	35	40	37	39

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30
Seaton Close	Disabled Bay	6	1	1	1	1	1	1	1	1	1
	Narrow	52.2	10	1	1	1	1	1	0	0	0
	Resident Permit Holders Only	55.4	10	7	6	6	6	7	9	9	9
	Single Yellow Lines	19.7	3	2	2	1	1	2	2	2	2
Total - Seaton Close - Thursday		133.3	24	11	10	9	9	11	12	12	12

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	8	8	9	80%	80%	70%	70%	90%	70%	70%	90%	60%	80%
3	3	3	3	29%	29%	29%	14%	57%	43%	29%	43%	43%	43%
10	12	12	13	53%	53%	47%	42%	68%	58%	53%	68%	53%	63%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	40%	0%	0%	0%	20%	20%	20%	20%	20%	20%
1	1	0	0	0%	0%	0%	0%	0%	10%	10%	10%	10%	10%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
13	15	15	17	100%	93%	100%	107%	86%	86%	86%	71%	93%	107%
1	1	1	1	14%	7%	14%	7%	7%	7%	7%	7%	7%	7%
16	18	17	19	42%	33%	37%	37%	33%	35%	35%	30%	37%	42%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	1	0	0	0%	0%	0%	13%	0%	13%	0%	0%	0%	13%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
38	38	41	43	54%	49%	48%	51%	51%	57%	54%	57%	55%	55%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
38	39	41	43	44%	40%	39%	42%	41%	47%	44%	46%	45%	46%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
0	0	1	1	10%	10%	10%	10%	10%	0%	0%	0%	0%	0%
8	8	9	9	70%	60%	60%	60%	70%	90%	90%	90%	80%	80%
2	2	2	2	67%	67%	33%	33%	67%	67%	67%	67%	67%	67%
11	11	13	13	46%	42%	38%	38%	46%	50%	50%	50%	46%	46%

Survey Date: 17/03/2022

Survey Day: Thursday

Thursday	Thursday
18:00	18:30
0%	0%
80%	90%
43%	43%
63%	68%

Thursday	Thursday
18:00	18:30
20%	20%
0%	0%
0%	0%
107%	121%
7%	7%
40%	44%

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
0%	0%
59%	62%
0%	0%
48%	51%

Thursday	Thursday
18:00	18:30
100%	100%
10%	10%
90%	90%
67%	67%
54%	54%



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Seaton Road	Double Yellow Lines	11.5	2	0	0	0	0	0	0	0	0	0
	Drop Kerb	27.2	4	2	1	1	1	1	0	0	0	0
	Pedestrian Crossing	5	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	62	10	10	8	8	8	9	10	10	10	10
	Road Works	82.3	16	1	1	1	1	1	1	1	1	1
	Single Yellow Lines	15.5	1	1	0	0	0	0	0	0	0	1
Total - Seaton Road - Thursday		203.5	33	14	10	10	10	11	11	11	11	12

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
The Ridge	Drop Kerb	59	7	0	0	0	0	1	0	0	0	0
	Pedestrian Crossing	5.3	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	114.4	20	12	11	11	9	11	12	11	11	11
	Single Yellow Lines	80.3	8	0	0	0	0	0	0	0	0	0
Total - The Ridge - Thursday		259	35	12	11	11	9	12	12	11	11	11

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Warren Road	Bus Stop	38.4	6	0	0	0	0	0	0	0	0	0
	Double Yellow Lines	87.6	15	0	0	0	0	1	0	0	0	0
	Drop Kerb	149	13	0	0	0	0	1	0	0	0	0
	Pedestrian Crossing	6.4	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	227.3	42	22	21	23	20	18	16	17	18	18
	Single Yellow Lines	325.3	50	3	4	4	2	4	4	3	4	4
	Single Yellow Lines / White Line	13.3	2	0	0	0	0	0	0	0	0	0
Total - Warren Road - Thursday		847.3	128	25	25	27	22	24	20	20	22	22

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked							
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	50%	25%	25%	25%	25%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10	11	11	11	100%	80%	80%	80%	90%	100%	100%	100%	100%	110%
1	1	2	2	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
0	0	0	0	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%
11	12	13	13	42%	30%	30%	30%	33%	33%	33%	36%	33%	36%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
1	1	1	1	0%	0%	0%	0%	14%	0%	0%	0%	14%	14%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10	9	9	8	60%	55%	55%	45%	55%	60%	55%	55%	50%	45%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11	10	10	9	34%	31%	31%	26%	34%	34%	31%	31%	31%	29%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	7%	0%	0%	0%	0%	0%
0	0	1	0	0%	0%	0%	0%	8%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
18	19	21	21	52%	50%	55%	48%	43%	38%	40%	43%	43%	45%
4	5	4	3	6%	8%	8%	4%	8%	8%	6%	8%	8%	10%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
22	24	26	24	20%	20%	21%	17%	19%	16%	16%	17%	17%	19%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30

Survey Date: 17/03/2022

Survey Day: Thursday

Thursday	Thursday
18:00	18:30

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
0%	0%
110%	110%
13%	13%
0%	0%
39%	39%

Thursday	Thursday
18:00	18:30
14%	14%
0%	0%
45%	40%
0%	0%
29%	26%

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
8%	0%
0%	0%
50%	50%
8%	6%
0%	0%
20%	19%

Thursday	Thursday
18:00	18:30



Project ID and Name: IW0032 Kneller Hall, Twickenham
 Survey Type: Parking Beats

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Whitton Dene	Bus Stand	19	3	0	0	0	0	0	0	0	0	0
	Bus Stop	32.9	5	0	0	0	1	0	0	0	0	0
	Disabled Bay	12.2	2	1	1	1	1	1	1	1	1	1
	Double Yellow Lines	270.6	35	0	0	0	0	0	0	0	0	0
	Drop Kerb	161	12	4	3	4	4	0	2	3	4	4
	Drop Kerb / White Line	5.5	1	0	0	0	0	0	0	0	0	0
	Pedestrian Crossing	29.3	1	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	250.2	46	39	35	33	35	35	38	37	37	37
Single Yellow Lines	426.2	74	6	4	4	5	4	6	7	8	8	
Total - Whitton Dene - Thursday		1206.9	179	50	43	42	46	40	47	48	50	50

Street Name	Parking Restriction	Length (mts)	Parking Capacity	No. of Vehicles Parked								
				Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	
				07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	
Whitton Manor Road	Double Yellow Lines	2.8	0	0	0	0	0	0	0	0	0	0
	Drop Kerb	69.9	8	1	1	1	1	2	1	1	1	1
	Pedestrian Crossing	6.7	0	0	0	0	0	0	0	0	0	0
	Resident Permit Holders Only	80.2	12	11	12	12	12	10	10	11	10	10
	Single Yellow Lines	39.3	5	0	0	0	0	0	1	1	1	1
Total - Whitton Manor Road - Thursday		198.9	25	12	13	13	13	12	12	13	12	12

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%
1	1	1	1	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	3	3	3	33%	25%	33%	33%	0%	17%	25%	33%	25%	25%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
35	37	39	38	85%	76%	72%	76%	76%	83%	80%	80%	76%	80%
7	8	6	5	8%	5%	5%	7%	5%	8%	9%	11%	9%	11%
46	49	49	47	28%	24%	23%	26%	22%	26%	27%	28%	26%	27%

				Occupancy %									
Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday	Thursday
17:00	17:30	18:00	18:30	07:30	08:00	08:30	09:00	12:00	15:30	16:00	16:30	17:00	17:30
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1	2	1	1	13%	13%	13%	13%	25%	13%	13%	13%	13%	25%
0	0	0	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10	9	9	9	92%	100%	100%	100%	83%	83%	92%	83%	83%	75%
1	0	0	0	0%	0%	0%	0%	0%	20%	20%	20%	20%	0%
12	11	10	10	48%	52%	52%	52%	48%	48%	52%	48%	48%	44%

Survey Date: 17/03/2022

Survey Day: Thursday

Thursday	Thursday
18:00	18:30
0%	0%
0%	0%
50%	50%
0%	0%
25%	25%
0%	0%
0%	0%
85%	83%
8%	7%
27%	26%

Thursday	Thursday
18:00	18:30
0%	0%
13%	13%
0%	0%
75%	75%
0%	0%
40%	40%

Appendix C



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

B	Updated Base Plan and Swept Path Analysis	JS	DB	23.09.22
A	Notes & dimensions added.	KB	DB	13.09.22
Rev	Details	Drawn	Checked	Date

REVISION HISTORY

Status:	<input type="checkbox"/> Preliminary	<input type="checkbox"/> For Approval	<input type="checkbox"/> For Construction
	<input checked="" type="checkbox"/> For Information	<input type="checkbox"/> For Tender	<input type="checkbox"/> As Built

Client:

Dukes Education Group Limited

Project:

Kneller Hall
Twickenham

Drawing Title:

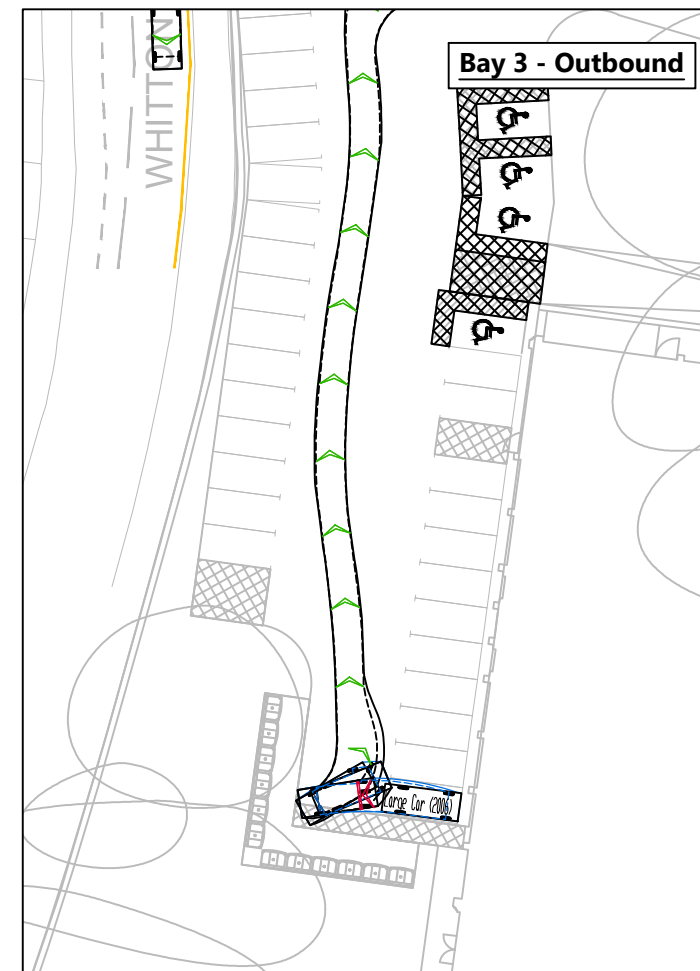
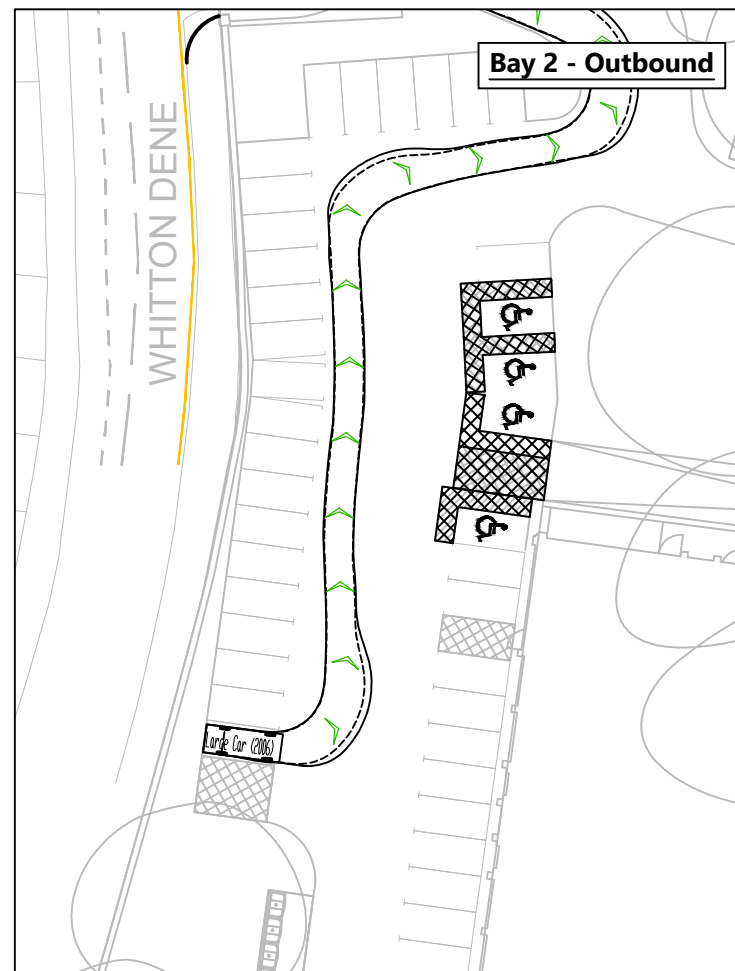
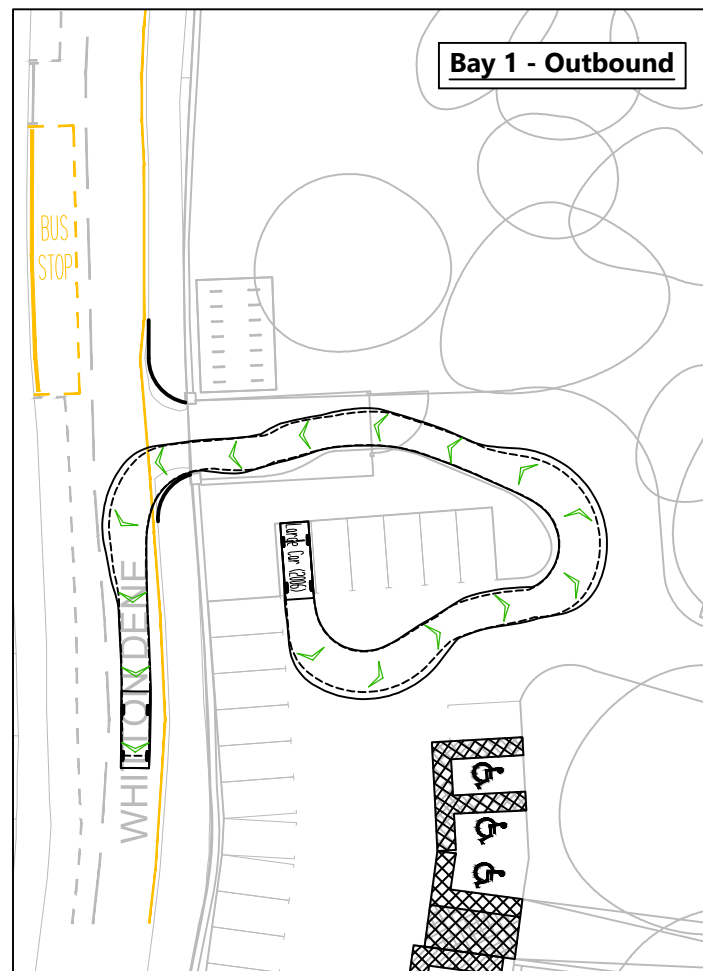
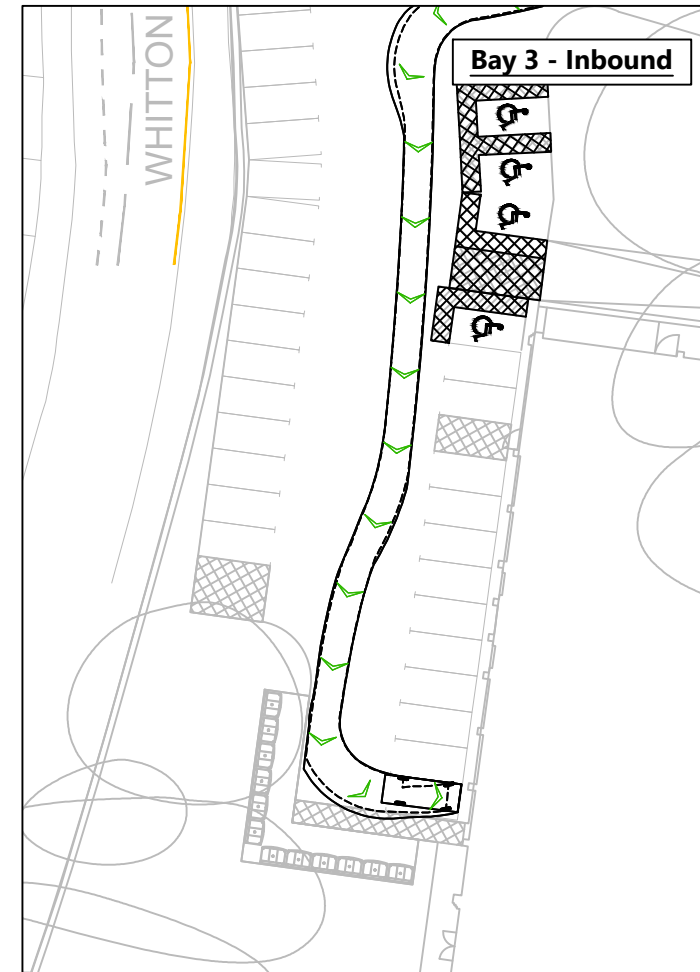
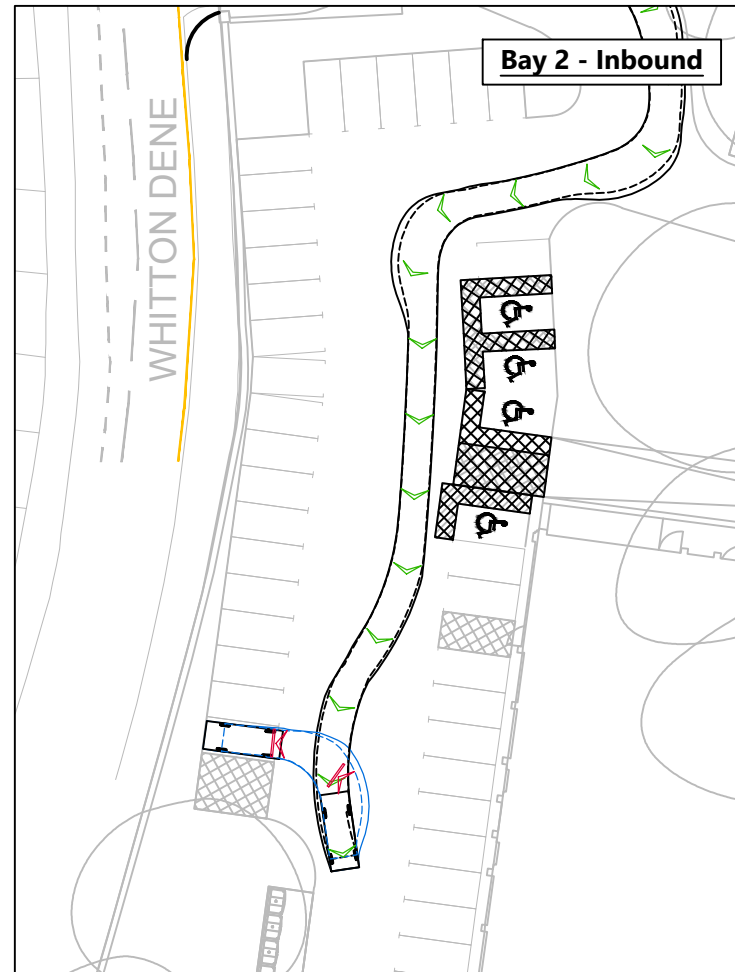
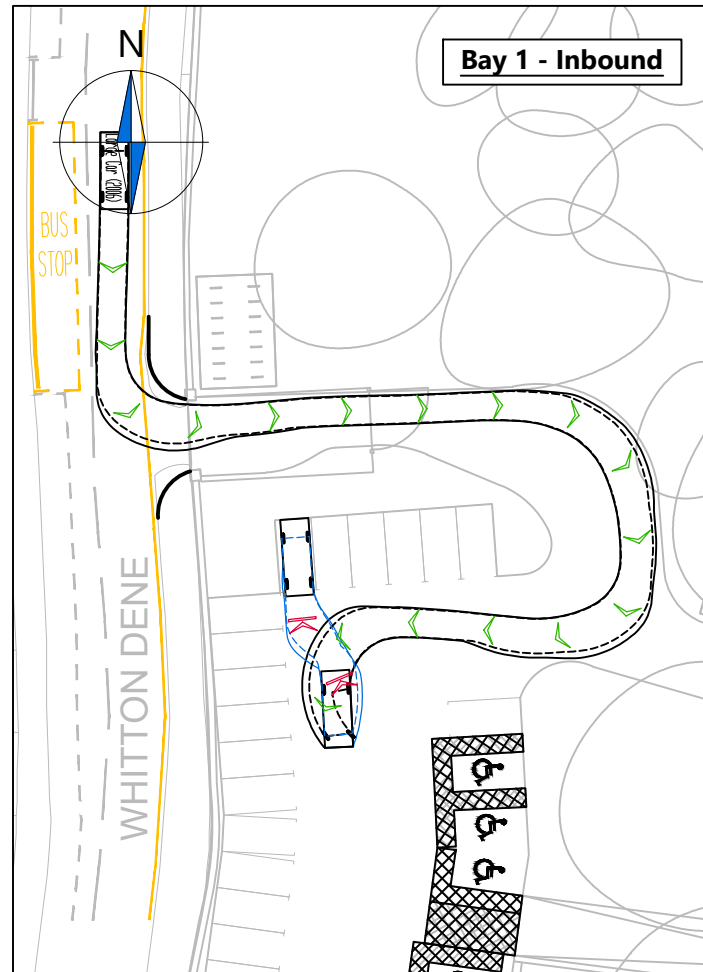
Staff Car Park Plan

Scale: 1:500 Size: A3

Drawn by: KB Checked by: DB Date: 02.09.2022

CANEPARO ASSOCIATES
 Transport Planning & Highway Design
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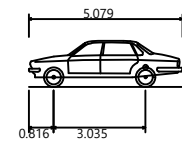
Scheme Ref:	Drawing No:	Sheet :	Rev:
4543	012	1 of 2	B



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

Large Car



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m

FORWARD MOVEMENTS ARE SHOWN IN BLACK (design speed - 5kph)

REVERSE MOVEMENTS ARE SHOWN IN BLUE (design speed - 2.5kph)

B	Updated Base Plan and Swept Path Analysis	JS	DB	23.09.22
A	Notes & dimensions added.	KB	DB	13.09.22
Rev	Details	REVISION HISTORY		Date
		Drawn	Checked	

Status: Preliminary For Approval For Construction
 For Information For Tender As Built

Client: **Dukes Education Group Limited**

Project: **Kneller Hall Twickenham**

Drawing Title: **Swept Path Analysis Staff Car Park Large Car**

Scale: 1:500 Size: A3

Drawn by: KB Checked by: DB Date: 02.09.2022

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Scheme Ref:	Drawing No:	Sheet :	Rev:
4543	012	2 of 2	B

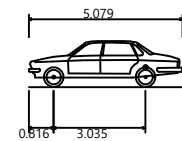
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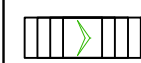
NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

Large Car



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



FORWARD MOVEMENTS ARE SHOWN IN BLACK (*design speed - 5kph*)



REVERSE MOVEMENTS ARE SHOWN IN BLUE (*design speed - 2.5kph*)

Key:

Pick Up/Drop Off Area

B	Updated base plan and swept path analysis	JS	DB	22.02.22
A	Drop off bays highlighted.	KB	DB	13.09.22
Rev	Details	Drawn	Checked	Date

REVISION HISTORY

Status: Preliminary For Approval For Construction
 For Information For Tender As Built

Client:

Dukes Education Group Limited

Project:

Kneller Hall
Twickenham

Drawing Title:

Swept Path Analysis
Proposed Drop-off Area
Large Car

Scale:

1:500

Size:

A3

Drawn by:

KB

Checked by:

DB

Date:

05.09.2022



Transport Planning & Highway Design

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Scheme Ref:

4543

Drawing No:

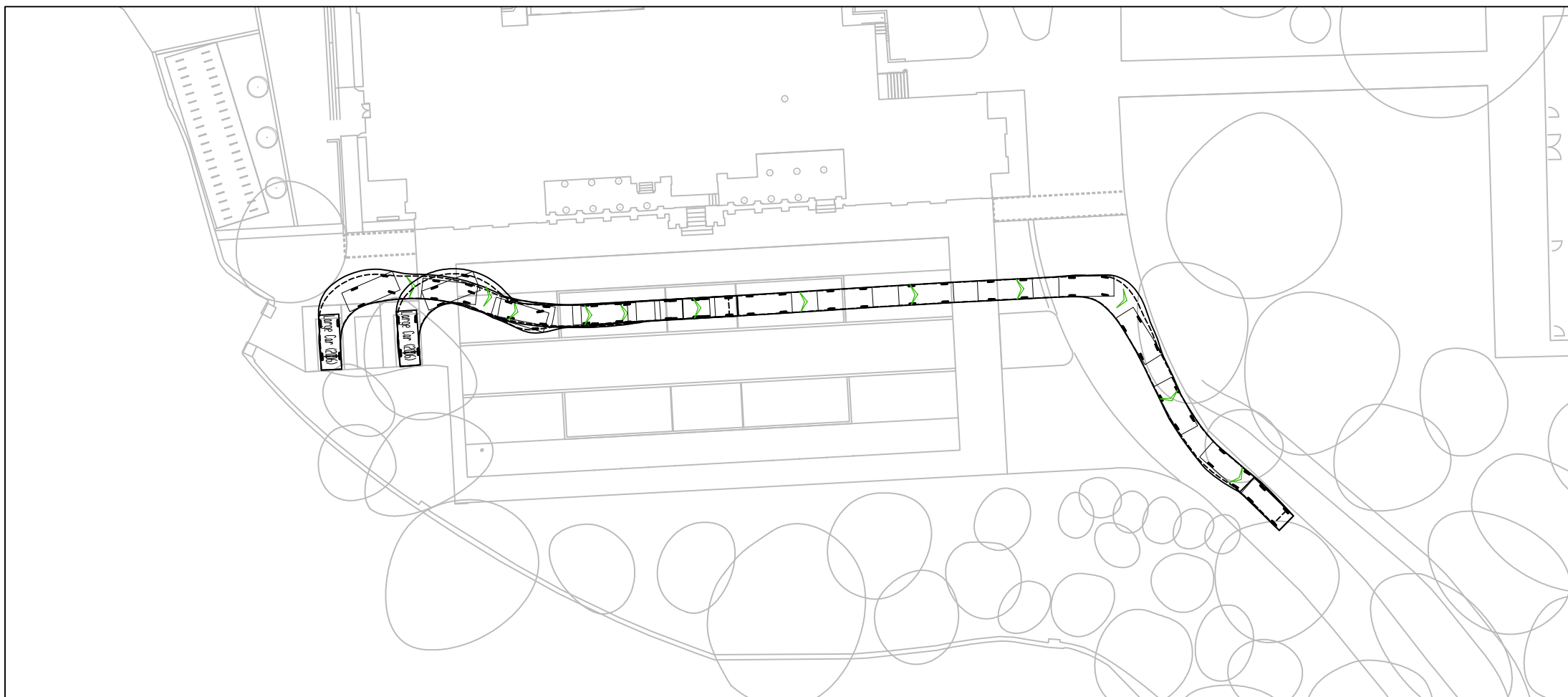
TR006

Sheet :

1 of 2

Rev:

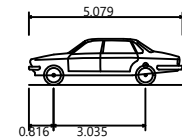
B



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

Large Car



Large Car (2006)	5.079m
Overall Length	1.872m
Overall Width	1.525m
Overall Body Height	0.310m
Min Body Ground Clearance	1.831m
Max Track Width	4.00s
Lock to lock time	5.900m
Kerb to Kerb Turning Radius	

 FORWARD MOVEMENTS ARE SHOWN IN BLACK (*design speed - 5kph*)

 REVERSE MOVEMENTS ARE SHOWN IN BLUE (*design speed - 2.5kph*)

B	Updated base plan and swept path analysis	JS	DB	22.02.22
A	Drop off bays highlighted.	KB	DB	13.09.22
Rev	Details	REVISION HISTORY		Date
		Drawn	Checked	

Status: Preliminary For Approval For Construction
 For Information For Tender As Built

Client:
Dukes Education Group Limited

Project:
**Kneller Hall
 Twickenham**

Drawing Title:
**Swept Path Analysis
 Proposed Drop-off Area -
 Disabled Bays
 Large Car**

Scale: **1:500** Size: **A3**

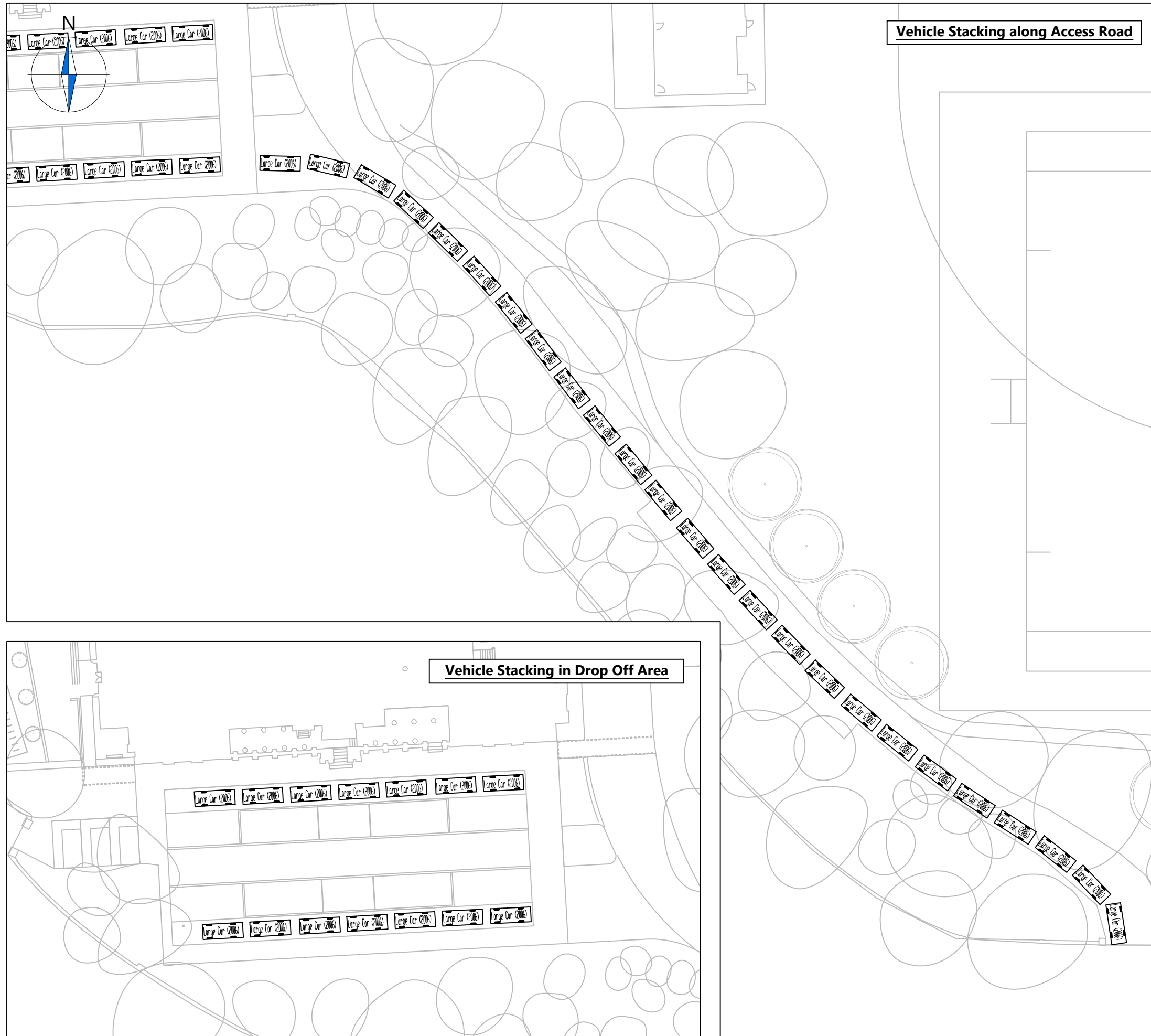
Drawn by: **KB** Checked by: **DB** Date: **05.09.2022**



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Scheme Ref: 4543	Drawing No: TR006	Sheet: 2 of 2	Rev: B
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Appendix E



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

Key:

Pick Up/Drop Off Area

Access Road Capacity: 25 vehicles
 Pick Up/Drop Off Area Capacity: 14 vehicles

Total Capacity: 39 vehicles

A	Updated Base Plan	JS	DB	23.09.22
Rev	Details	REVISION HISTORY		Drawn Checked Date
Status:	<input type="checkbox"/> Preliminary	<input type="checkbox"/> For Approval	<input type="checkbox"/> For Construction	
	<input checked="" type="checkbox"/> For Information	<input type="checkbox"/> For Tender	<input type="checkbox"/> As Built	

Client:
Dukes Education Group Limited

Project:
**Kneller Hall
 Twickenham**

Drawing Title:
**Pick Up/Drop Off Area & Access
 Road Capacity**

Scale: **1:500** Size: **A3**

Drawn by: **KB** Checked by: **DB** Date: **14.09.2022**

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Scheme Ref: 4543	Drawing No: 013	Sheet: 1 of 1	Rev: A
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Appendix F



Radnor House
— TWICKENHAM —
celebrating every individual

Travelling *to Radnor House*



Coach



Train



Bus



Getting to Radnor House Twickenham is easy, with a wide range of transport options.

Radnor House is well served by public transport, with buses stopping either directly outside the school on Cross Deep, or on Heath Rd which is a five minute walk away. Trains run regularly to Twickenham and Strawberry Hill stations, which are a 10 minute or a 8 minute walk respectively.




Coach Routes


Private for Radnor Pupils

Radnor House also runs three coaches which are operated for Radnor House pupils by Gallagher's Travels. The coach routes can vary slightly each year depending on the home location of the children travelling. There is a termly charge for this service. The coaches depart from Radnor House at 17:00 each day, allowing pupils to participate fully in our co-curricular programme. Example timetables are below:


ROUTE A Ealing

1	Pick up	Corner of Blondin Avenue and Northfields Avenue, W5 4UL	Return	18:15
2	Pick up	Corner of The Avenue and Blandford Rd, W4 1HB	Return	17:55
3	Pick up	Bus Terminus on South Parade, W4 1JU	Return	17:50
4	Pick up	Chiswick High Rd and Dukes Avenue, W4 4PU	Return	17:45
5	Pick up	Junction of Sutton Court Rd and Elmwood Rd, W4 3EJ	Return	17:40
6	Pick up	Junction of Kew Rd and Walpole Avenue, TW9 2AS	Return	17:25
	The coach arrives at Radnor House at 08:15 (traffic permitting) and departure time is 17:00			

ROUTE B Chelsea

1	Pick up	07:10	Loading Bay by bus stop F on Fulham Rd – outside HSBC bank, SW6 2DF
2	Pick up	07:15	Junction of Chiddingtton Street and New King's Rd (Stop W), SW6 3TQ
3	Pick up	07:25	Junction of Rigault Rd and Fulham High Street, SW6 4NF
4	Pick up	07:30	Junction of Erpingham Rd and Lower Richmond Rd (Stop K), SW15 1BE
5	Pick up	07:37	Junction of Glebe Rd and Church Rd, SW13 9EH
6	Pick up	07:55	Corner of Lower Mortlake Rd and Stanmore Gardens, TW9 2DU
	The coach arrives at Radnor House at 08:15 (traffic permitting) and departure time is 17:00		

ROUTE C Wimbledon

1	Pick up	07:10	Junction of Pirbright Rd and Wimbledon Park Rd, SW18 5NB
2	Pick up	07:25	Parkwood Rd, SW19 7AQ
3	Pick up	07:40	Corner of Shortlands Rd and Cross Rd, KT2 6HG
4	Pick up	07:55	Sandy Lane Bus Stop, TW10 7EN
5	Pick up	08:05	Ormond Rd, TW10 6TH
	The coach arrives at Radnor House at 08:15 (traffic permitting) and departure time is 17:00		

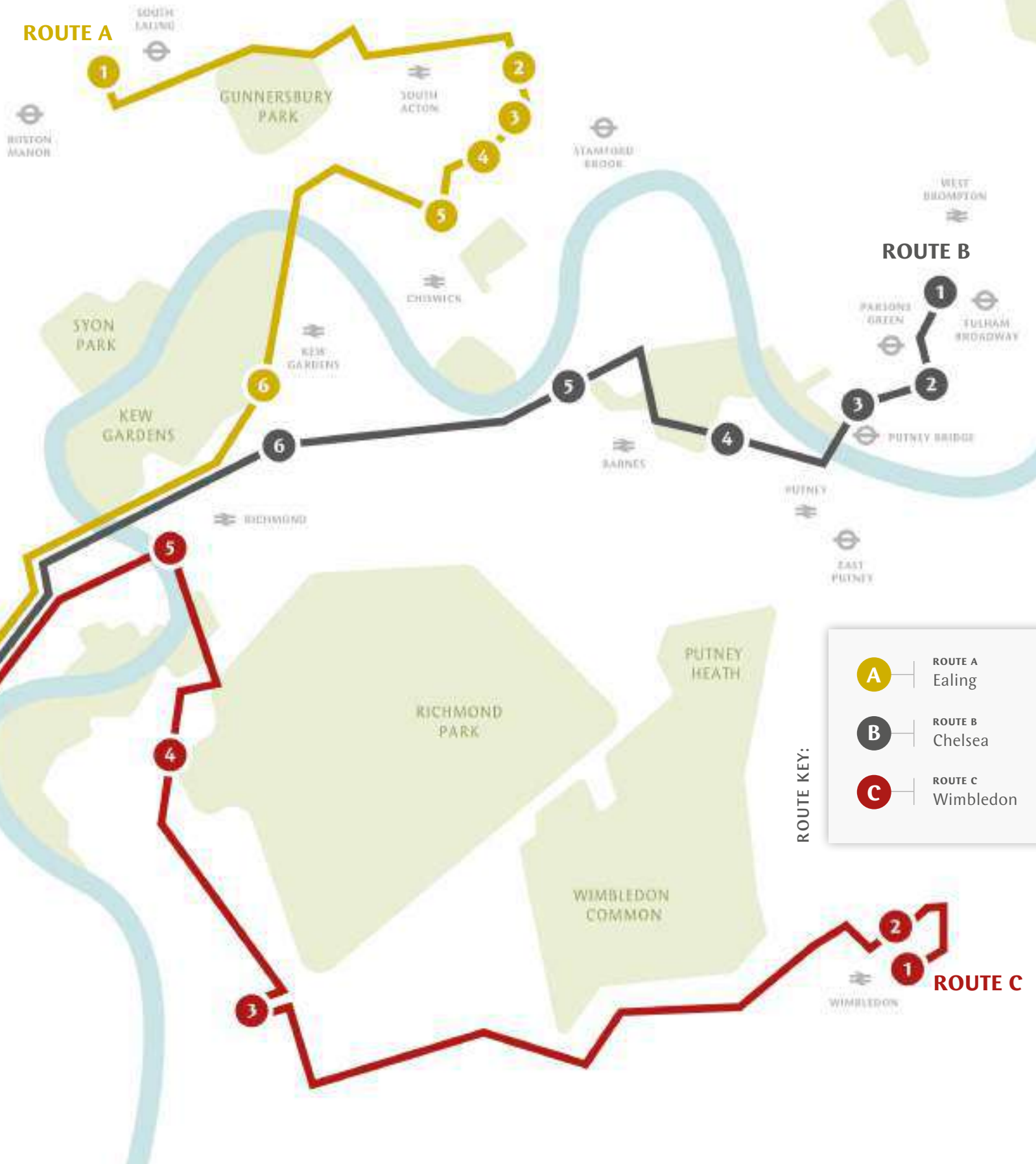
ROUTE A

Return 18:10
Return 18:00
Return 17:50
Return 17:45
Return 17:35
Return 17:20

Return 18:15
Return 18:00

Return 17:40
Return 17:35

Return 17:25



ROUTE B

ROUTE C

ROUTE KEY:

- A** | ROUTE A
Ealing
- B** | ROUTE B
Chelsea
- C** | ROUTE C
Wimbledon



Local bus services run regularly to and from Twickenham. Routes 33 and R68 stop directly outside Radnor House and routes R70, 290, 490, 110, 267, 281, H22 stop on Heath Rd, only a five minute walk away.

The tables below give an indication of the travel times to Radnor House from various stops along these routes.

**Note below times are subject to change; please check the TFL or City Mapper websites. Timings correct at time of production.*

Approx walk between stop and school

POPE'S GROTTTO = 1 min

HEATH RD = 5 mins

Route R70

Manor Rd to Hampton

Runs every 10 Minutes (07:00-19:00)

- 32mins** Nurserylands
- 26 mins** Hampton Lane
- 18 min** Percy Rd
- END** Heath Rd

Route 290

Staines to Twickenham

Check TFL or City Mapper websites for times

- 27 mins** Sunbury Cross
- 12 mins** Twickenham Health Centre
- 6 mins** Sixth Cross Rd
- END** Heath Rd

Route 490

Heathrow to Richmond

Runs every 12-13 Minutes (07:00-19:00)

- 34 mins** Hatton Cross
- 24 mins** Feltham Station
- 16 mins** Hounslow Rd
- END** Heath Rd

Use the TFL Oyster app to top up and track travel and spend



Route R68

Kew to Hampton

Check TFL or City Mapper websites for times

- 27 mins** Kew Retail Park
- 19 mins** Manor Circus
- 15 mins** Richmond Station
- END** Pope's Grotto
- 9 mins** Broad Street
- 18 mins** Uxbridge Rd
- 27 mins** Hampton Court

Route 33

Hammersmith - Fulwell

Runs every 7-10 Minutes (06:00-19:00)

- 37 mins** Hammersmith
- 26 mins** Barnes Station
- 18 mins** East Sheen
- END** Pope's Grotto
- 1 mins** Strawberry Vale
- 2 mins** Southfield Gardens
- 5mins** Teddington Library
- 9 mins** Fulwell

Route 110

West Middlesex - Hounslow

Check TFL or City Mapper websites for times

- 14 mins** West Middlesex Hospital
- 10 mins** Isleworth Library
- 6 mins** Chertsey Rd
- 3 mins** Twickenham Street
- END** Pope's Grotto
- 9 mins** Willow Way
- 13 mins** Cheyne Avenue
- 19 mins** Nelson Rd
- 25 mins** School Rd



Use the City Mapper App to plan your route and for live travel timings and updates

Route 267

Hammersmith to Fulwell

Runs every 10-13 Minutes (07:00-21:00)

- 31 mins** Chiswick Rd
- 25 mins** Kew Bridge
- 21 mins** Brentford County Court
- 11 mins** Teesdale Gardens
- END** Heath Rd

Route 281

Tolworth to Hounslow

Runs every 7-12 Minutes (06:00-22:00)

- 34 mins** Surbiton Station
- 25 mins** Kingston Station
- 20 mins** Hampton Wick
- 14 mins** Teddington Lock
- END** Heath Rd

Route H22

Hounslow to Richmond

Check TFL or City Mapper websites for times

- 24 mins** Hounslow Bus Station
- 14 mins** Whitton High St
- 9 mins** Willow Way
- 5 mins** Meadway
- END** Heath Rd



Trains run regularly to Twickenham every 10 minute or a 10 minute walk away.

An example of just a few of the routes below, along with recommended registration at 8:30am.

**Note below times are subject to change; please check the TFL or City Mapper websites. Timings correct at time of production.*

Approx walk between station and school

STRAWBERRY HILL = 8 mins

TWICKENHAM = 10 mins

Wimbledon to Strawberry Hill

Duration 25 Minutes

- 07:43** Wimbledon
- 07:46** Raynes Park
- 07:49** New Malden
- 07:52** Norbiton
- 07:59** Kingston
- 08:01** Hampton Wick
- 08:05** Teddington
- 08:08** Strawberry Hill
- 08:16** Radnor House

Wandsworth Town to Twickenham

Duration 18 Minutes

- 07:45** Wandsworth
- 07:49** Putney
- 07:52** Barnes
- 07:54** Mortlake
- 07:56** North Sheen
- 07:59** Richmond
- 08:01** St Margarets
- 08:03** Twickenham
- 08:13** Radnor House

Chiswick to Twickenham

Duration 23 Minutes

- 07:43** Chiswick
- 07:31** Brentford
- 07:34** Brentford
- 07:37** Brentford
- 07:42** Brentford
- 07:48** Brentford
- 07:51** Brentford
- 08:01** Brentford

Chiswick to Twickenham

Duration 33 Minutes

- 07:43** Chiswick
- 07:46** Brentford
- 07:49** Brentford
- 08:05** Brentford
- 08:07** Brentford
- 08:09** Brentford
- 08:12** Brentford
- 08:14** Brentford
- 08:16** Brentford

Clapham Junction to Twickenham

Duration 12 Minutes

- 07:46** Clapham Junction
- 07:54** Clapham Junction
- 07:58** Clapham Junction
- 08:08** Clapham Junction

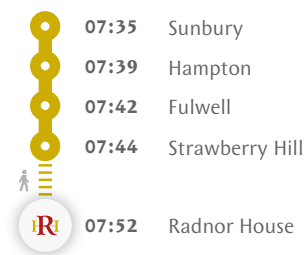
Twickenham and Strawberry Hill stations, which are a 13
walk respectively.

of the train routes that our pupils take to school are shown
recommended departure times that enable arrival for morning

subject to change; please check the TFL or City Mapper websites.
of production.

Sunbury to Strawberry Hill

Duration 9 Minutes



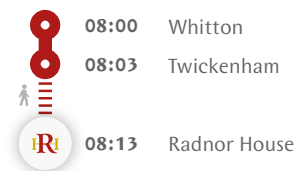
Egham to Twickenham

Duration 19 Minutes



Whitton to Twickenham

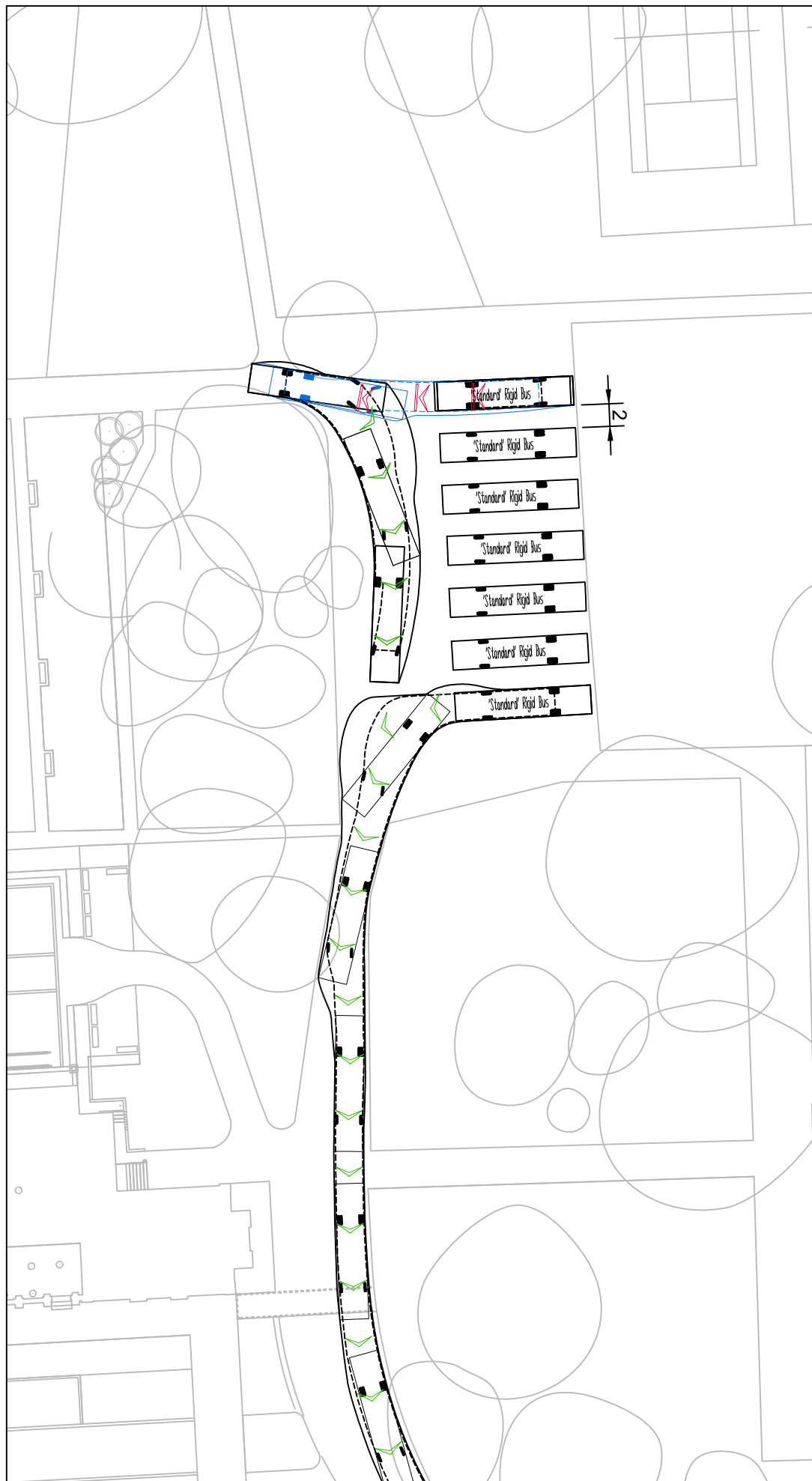
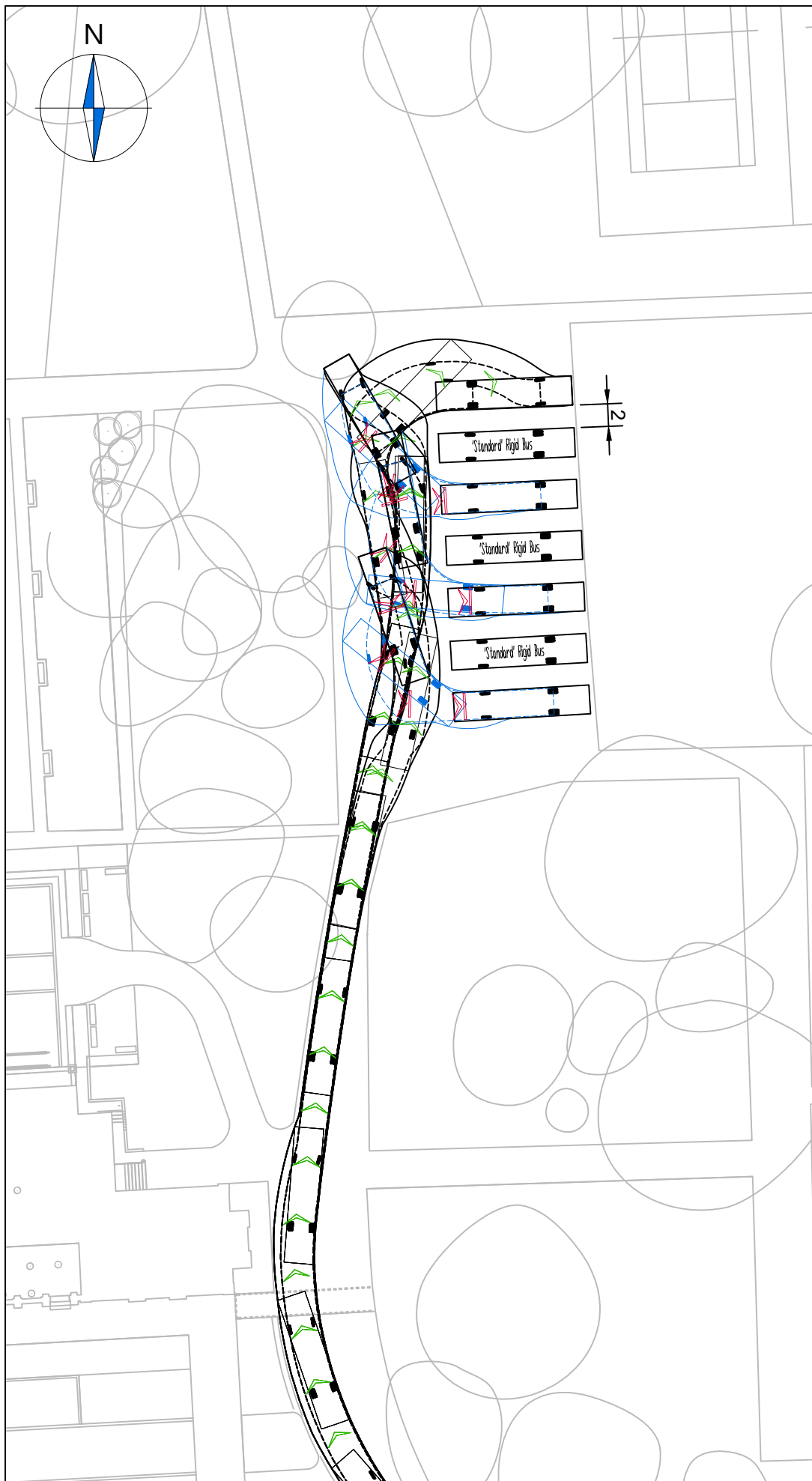
Duration 3 Minutes



For further information, contact
the Admissions Department
by email:
admissions@radnorhouse.org
or call: 020 8891 6264



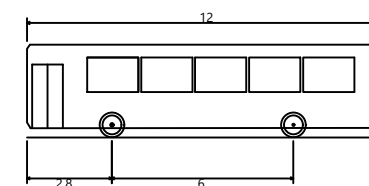
Appendix G



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

Standard Rigid Bus



'Standard' Rigid Bus	12.000m
Overall Length	2.550m
Overall Width	3.069m
Overall Body Height	0.309m
Min Body Ground Clearance	2.350m
Track Width	4.00s
Lock to lock time	10.771m
Wall to Wall Turning Radius	

FORWARD MOVEMENTS ARE SHOWN IN BLACK (design speed - 5kph)

REVERSE MOVEMENTS ARE SHOWN IN BLUE (design speed - 2.5kph)

A	Updated base layout and swept paths	JS	DB	22.09.22
Rev	Details	Drawn	Checked	Date

REVISION HISTORY

Status: Preliminary For Approval For Construction
 For Information For Tender As Built

Client:

Dukes Education Group Limited

Project:

**Kneller Hall
Twickenham**

Drawing Title:

**Swept Path Analysis
Coach Parking**

Scale: **1:500** Size: **A3**

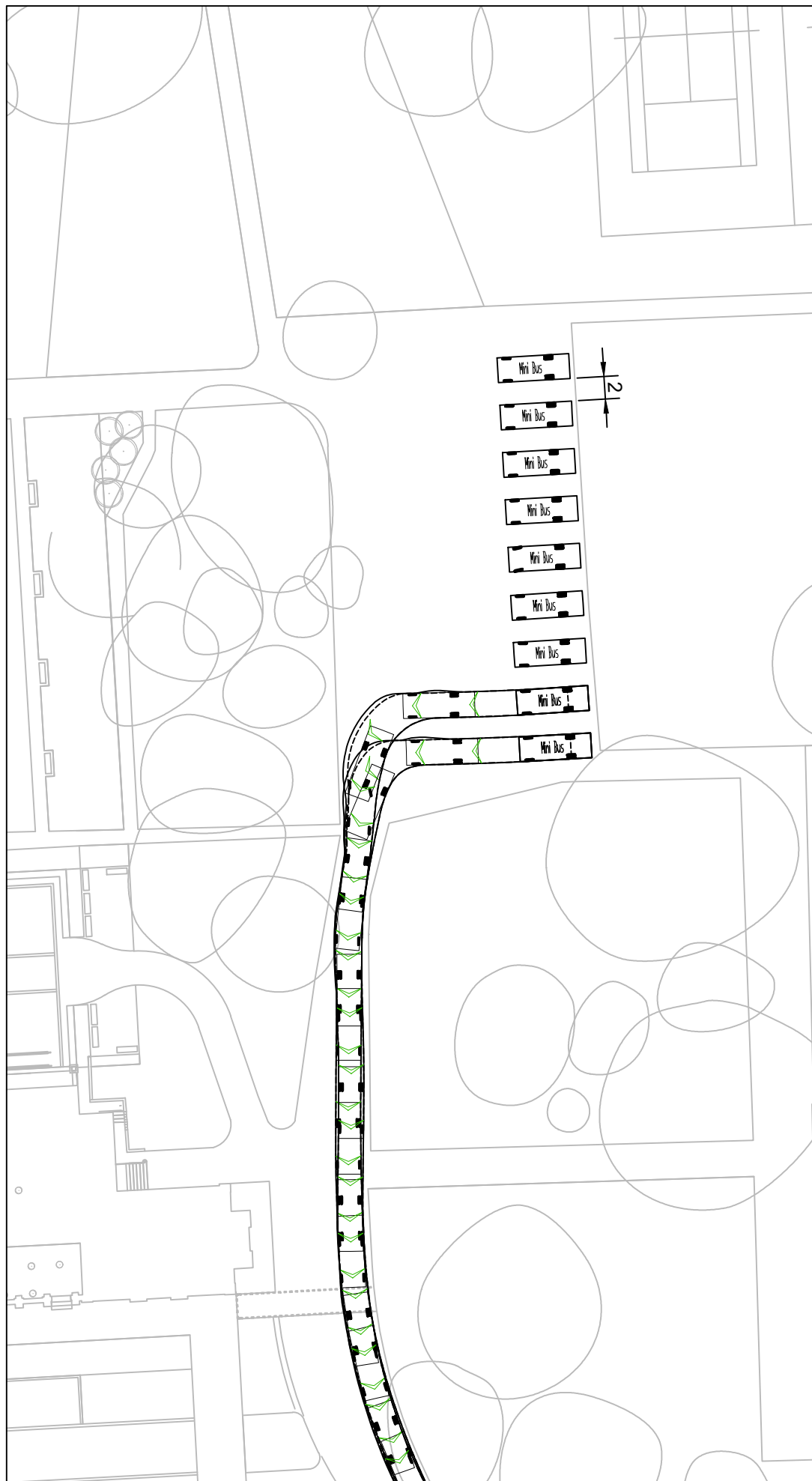
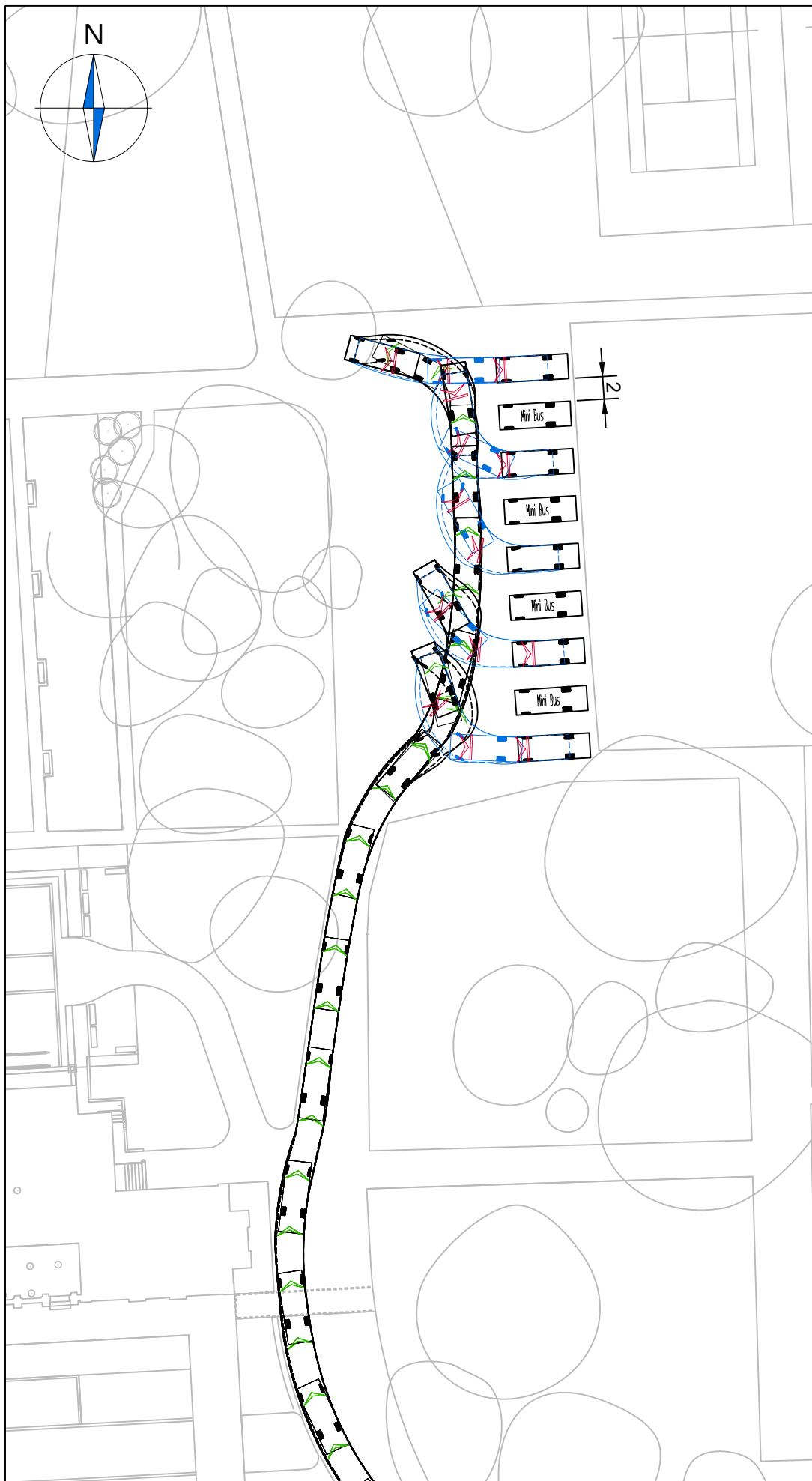
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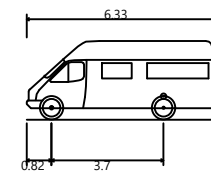
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4543	TR007	1 of 2	A



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

Minibus



Minibus	
Overall Length	6.330m
Overall Width	2.192m
Overall Body Height	2.601m
Min Body Ground Clearance	0.374m
Track Width	2.192m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.450m

FORWARD MOVEMENTS ARE SHOWN IN BLACK (design speed - 5kph)

REVERSE MOVEMENTS ARE SHOWN IN BLUE (design speed - 2.5kph)

A	Updated base layout and swept paths	JS	DB	22.09.22
Rev	Details	Drawn	Checked	Date

REVISION HISTORY

Status: Preliminary For Approval For Construction
 For Information For Tender As Built

Client:

Dukes Education Group Limited

Project:

**Kneller Hall
Twickenham**

Drawing Title:

**Swept Path Analysis
Minibus Parking**

Scale: **1:500** Size: **A3**

Drawn by: **KB** Checked by: **DB** Date: **13.09.22**

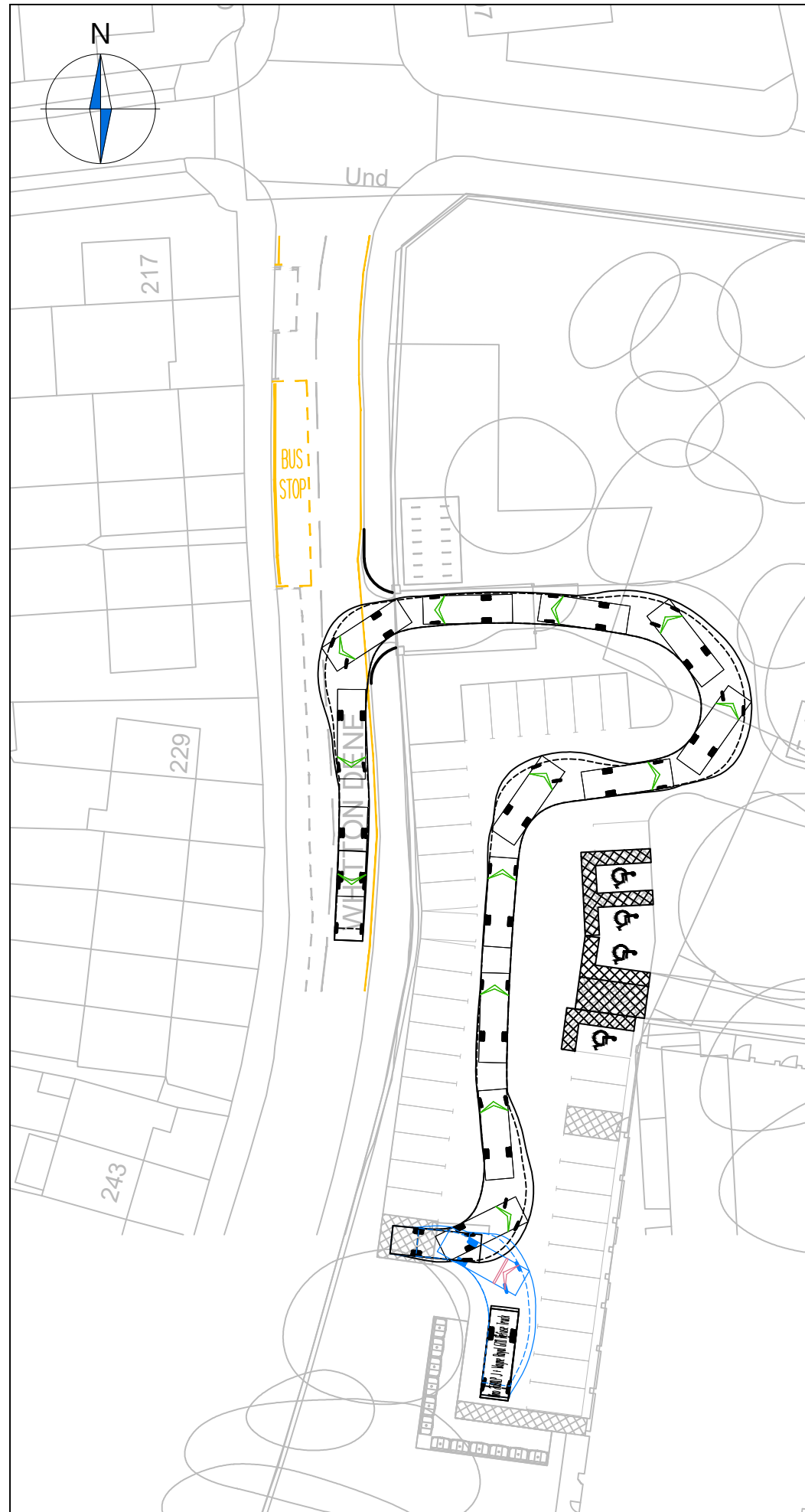
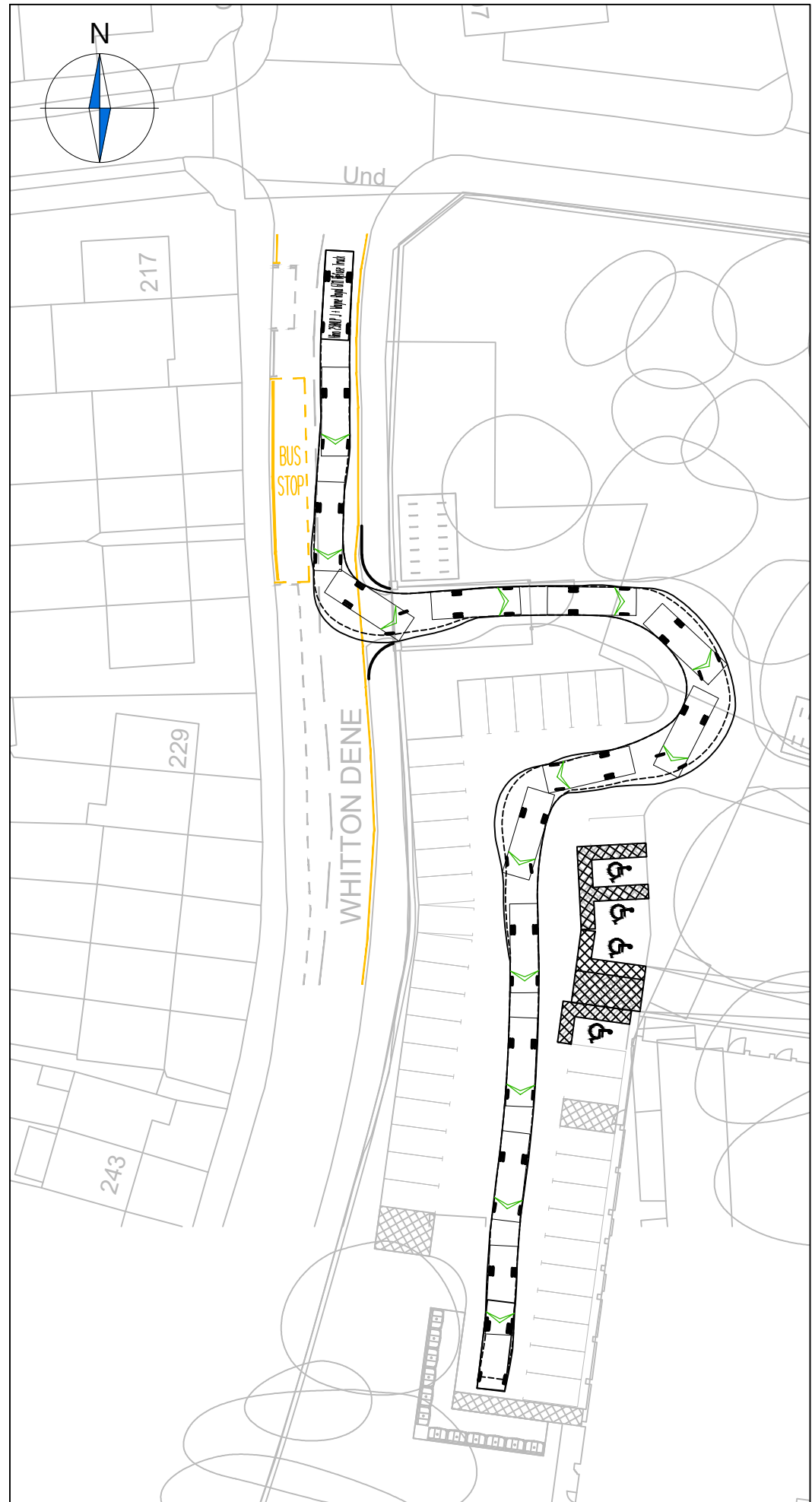


Transport Planning & Highway Design

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Scheme Ref:	Drawing No:	Sheet :	Rev:
4543	TR007	2 of 2	A

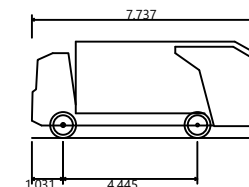
Appendix H



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

Hino 258ALP J + Wayne Royal GT11 Refuse Truck



Hino 258ALP J + Wayne Royal GT11 Refuse Truck	7.737m
Overall Length	2.431m
Overall Width	3.193m
Overall Body Height	0.398m
Min Body Ground Clearance	2.431m
Track Width	6.00s
Lock to lock time	7.300m
Kerb to Kerb Turning Radius	

FORWARD MOVEMENTS ARE SHOWN IN BLACK (design speed - 5kph)

REVERSE MOVEMENTS ARE SHOWN IN BLUE (design speed - 2.5kph)

B	Updated Layout and Swept Path Analysis.	JS	DB	23.09.22
A	Layout updated. Tracking & access amended.	KB	DB	05.09.22

Rev Details **REVISION HISTORY** Drawn Checked Date

Status: Preliminary For Approval For Construction
 For Information For Tender As Built

Client:

Dukes Education Group Limited

Project:

Kneller Hall
Twickenham

Drawing Title:

Swept Path Analysis using a Small
Refuse Vehicle

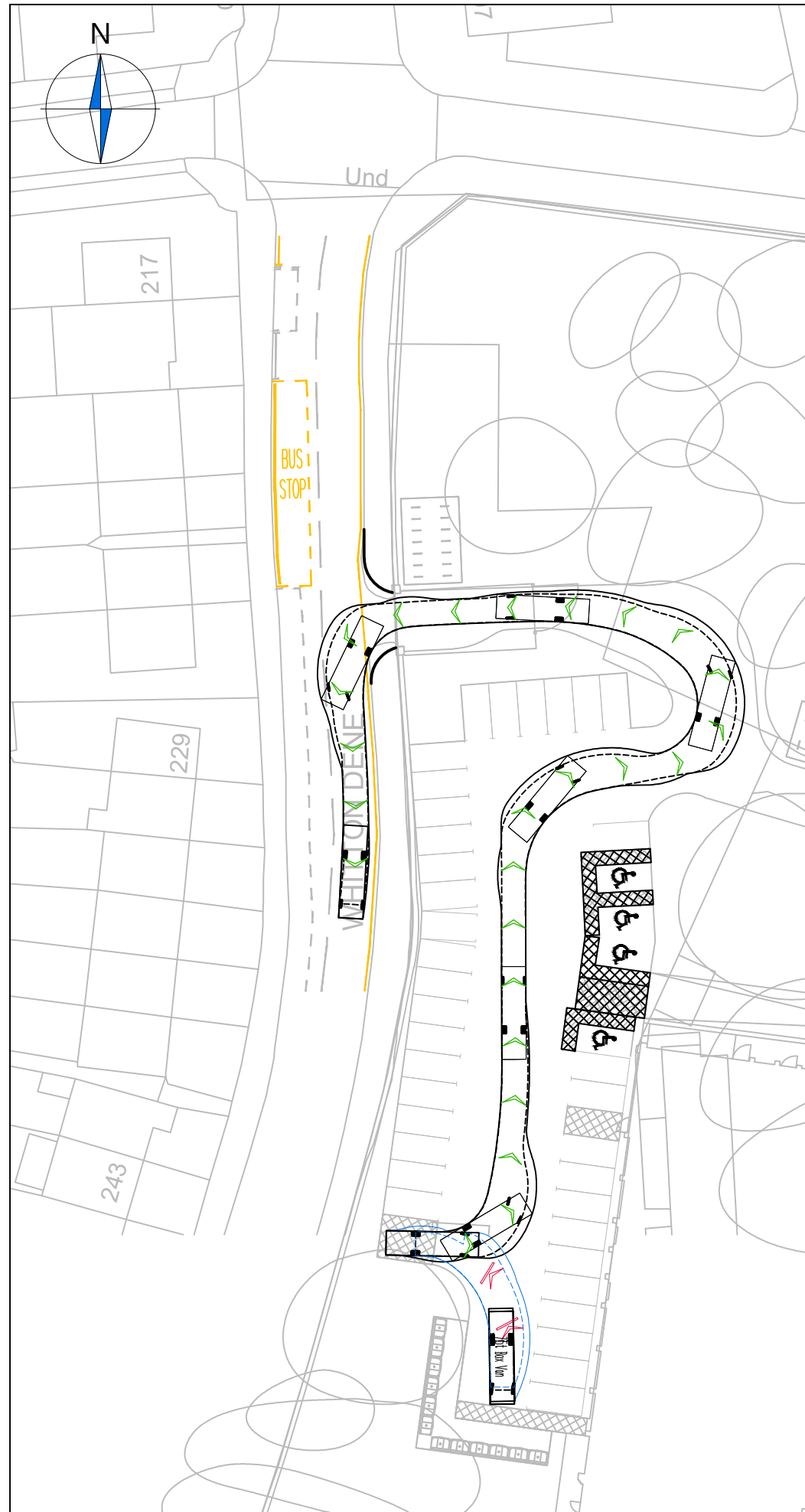
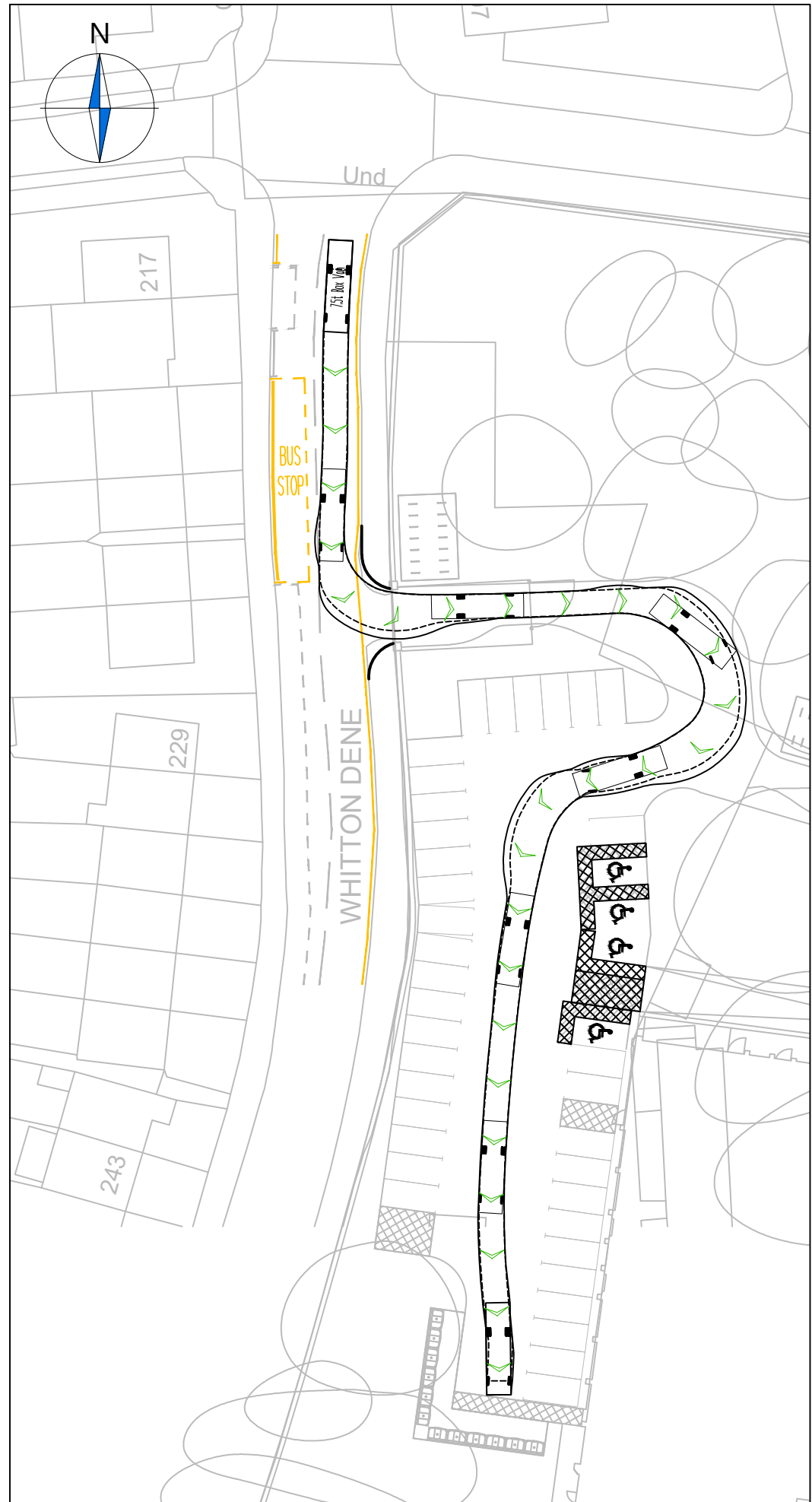
Scale: 1:500 Size: A3

Drawn by: KB Checked by: DB Date: 11.08.2022



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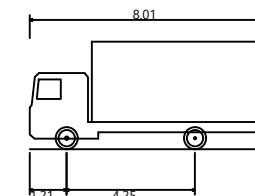
Scheme Ref:	Drawing No:	Sheet :	Rev:
4543	TR005	1 of 2	B



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

7.5t Box Van



7.5t Box Van	8.010m
Overall Length	2.100m
Overall Width	3.556m
Overall Body Height	0.351m
Min Body Ground Clearance	2.064m
Track Width	4.00s
Lock to lock time	7.400m
Kerb to Kerb Turning Radius	

FORWARD MOVEMENTS ARE SHOWN IN BLACK (design speed - 5kph)

REVERSE MOVEMENTS ARE SHOWN IN BLUE (design speed - 2.5kph)

B	Updated Layout and Swept Path Analysis.	JS	DB	23.09.22
A	Layout updated. Tracking & access amended.	KB	DB	05.09.22

Rev Details **REVISION HISTORY** Drawn Checked Date

Status: Preliminary For Approval For Construction
 For Information For Tender As Built

Client:

Dukes Education Group Limited

Project:

**Kneller Hall
Twickenham**

Drawing Title:

**Swept Path Analysis using a
7.5t Box Van**

Scale: **1:500** Size: **A3**

Drawn by: **KB** Checked by: **DB** Date: **05.09.2022**

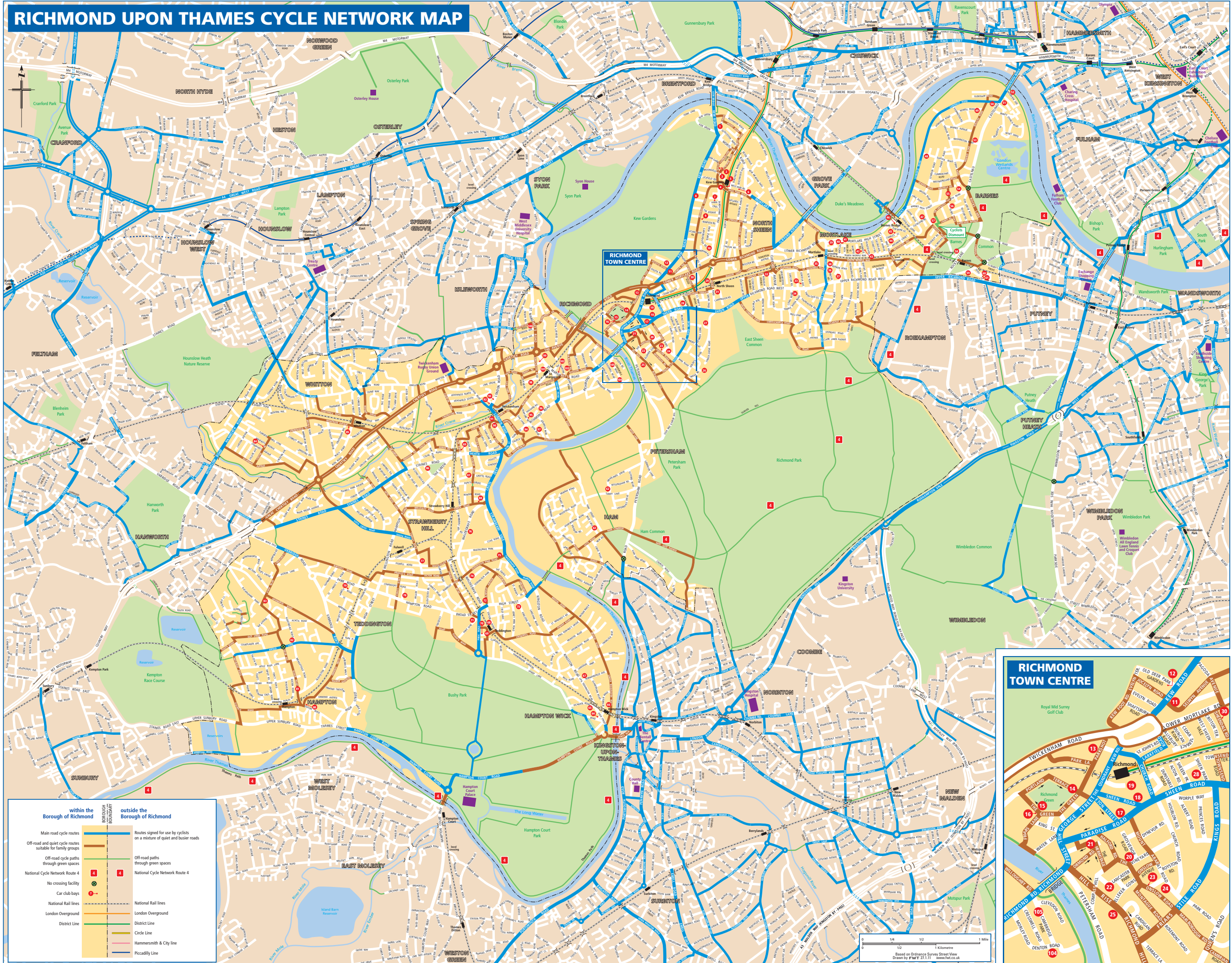


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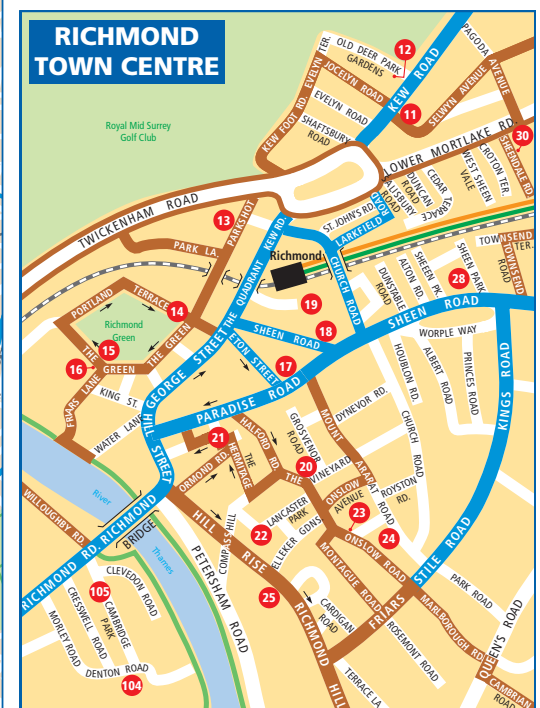
Scheme Ref:	Drawing No:	Sheet :	Rev:
4543	TR005	2 of 2	B

Appendix I

RICHMOND UPON THAMES CYCLE NETWORK MAP

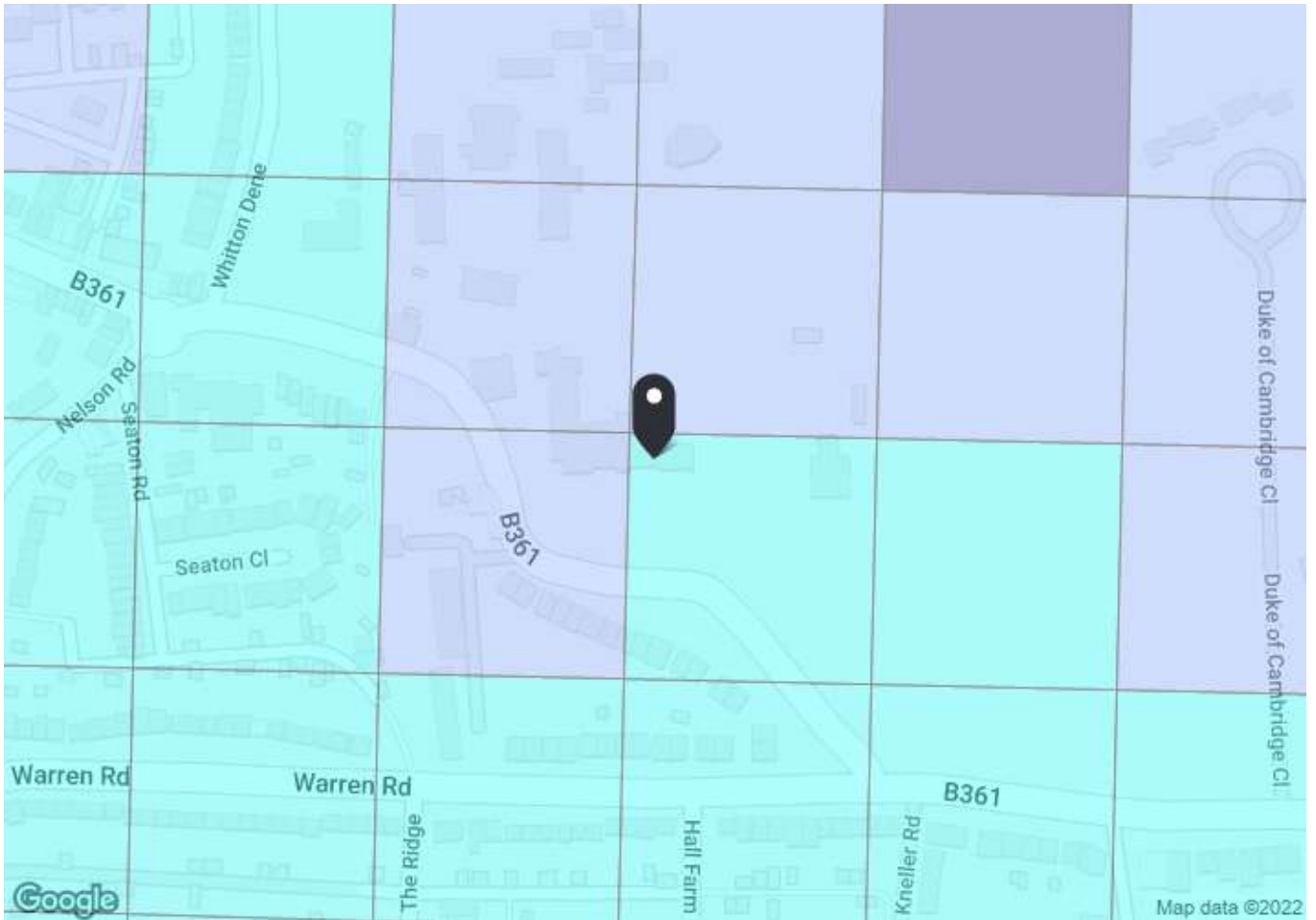


within the Borough of Richmond	outside the Borough of Richmond
Main road cycle routes	Routes signed for use by cyclists on a mixture of quiet and busier roads
Off-road and quiet cycle routes suitable for family groups	Off-road paths through green spaces
Off-road cycle paths through green spaces	Off-road paths through green spaces
National Cycle Network Route 4	National Cycle Network Route 4
No crossing facility	
Car club bays	
National Rail lines	National Rail lines
London Overground	London Overground
District Line	District Line
	Circle Line
	Hammersmith & City line
	Piccadilly Line



Scale: 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900 10000
 Based on Ordnance Survey Street View
 Drawn by FWT 27.1.11 www.fwt.co.uk

Appendix J



PTAL output for Base Year
2

65 Kneller Rd, Twickenham TW2 7DN, UK
Easting: 514707, Northing: 174183

Grid Cell: 49360

Report generated: 09/06/2022

Calculation Parameters

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

Map key - PTAL

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

Map layers

- PTAL (cell size: 100m)

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	KNELLER HALL	481	184.75	1	2.31	32	34.31	0.87	0.5	0.44
Bus	KNELLER HALL	281	184.75	7.5	2.31	6	8.31	3.61	1	3.61
Bus	NELSON ROAD KNELLER ROAD	H22	598.16	5	7.48	8	15.48	1.94	0.5	0.97
Total Grid Cell AI:										5.02

Appendix K

Twickenham Area Personal Injury Collisions 60 months to end of April 2022 (Provisional)



SUMMARY OF COLLISIONS SELECTED

SITE REFERENCE AND DESCRIPTION

GIS AREA B24/25 TWICKENHAMAREA(P)

DATE PERIOD

60MTS TO APR/2022

COLLISION COUNT

62

THE DESCRIPTION OF HOW THE COLLISION OCCURRED AND THE CONTRIBUTORY FACTORS ARE THE REPORTING OFFICER'S OPINION AT THE TIME OF REPORTING AND MAY NOT BE THE RESULT OF EXTENSIVE INVESTIGATION. NOTE THAT SELF-REPORTED COLLISIONS (INTRODUCED IN SEPTEMBER 2016) MAY HAVE LIMITED INFORMATION. DESCRIPTIONS HAVE BEEN AUTOMATICALLY REDACTED TO REMOVE ALL PERSONALLY IDENTIFIABLE INFORMATION, BUT SHOULD YOU RECEIVE ANY IN ERROR PLEASE INFORM THE COLLISIONS DATA TEAM AS SOON AS PRACTICAL. SELF-REPORTED COLLISIONS INTRODUCED IN SEPTEMBER 2016 MAY HAVE LIMITED INFORMATION AND TEND TO BE LOWER IN QUALITY THAN POLICE REPORTS. THE INTRODUCTION OF ONLINE SELF-REPORTING HAS MADE IT EASIER FOR MEMBERS OF THE PUBLIC TO REPORT COLLISIONS TO THE POLICE. THERE HAVE BEEN YEAR ON YEAR INCREASES IN SELF-REPORTS SINCE THIS WAS INTRODUCED. THIS HAS CONTRIBUTED TO AN OVERALL INCREASE IN THE NUMBER OF CASUALTIES REPORTED ON LONDON'S ROADS.

1

01170037096	FRI 12/05/2017 13:07	LIGHT	WHITTON RD J/W LONDON RD			24 NODE 136	515990/173740
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(33 YRS - M - REDA)	SLIGHT	VEH/PILLION PAX			
VEHICLE	001 (000)	OTHER VEH BT - NEG	(34 YRS - M - REDACT)		WAITING - HELD UP	(S TO N) DID NOT IMPACT	JOURNEY P/O WORK JCT APP
V001	B	999 (OTHER - PLEASE SPECIFY BELOW)					

2

01170045384	FRI 23/06/2017 09:40	LIGHT	LONDON RD J/W BREWERY LANE			24 LINK 136-675	516050/173690
SELF-REPORTED	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(60 YRS - M - REDA)	SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - DRV NOT CONTACTED	(60 YRS - M - REDACT)	UNKNOWN S/R	O/TAKING - NON MOVING VEH	(MOVE UNKN) UNKNOWN S/R	JOURNEY P/O WORK UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R

3

01170049572	THU 20/07/2017 15:20	DARK	KNELLER RD J/W ALTON GARDENS	24 LINK 81-107	514910/174040
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY OTHER JUN GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(9 YRS - M - REDA)	SERIOUS PEDESTRIAN	S BOUND	FROM DRIVERS N/SIDE
VEHICLE	001 (000)	CAR BT - NEG	(41 YRS - F - REDACT)	WAITING - HELD UP	(E TO W) SCHOOL - TAKING N/S HIT JCT APP FIRST
C001	A	802 (FAILED TO LOOK PROPERLY)		V001	B
C001	A	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)			405 (FAILED TO LOOK PROPERLY)

4

01170050390	TUE 25/07/2017 14:11	LIGHT	WHITTON RD J/W HOUNSLOW AVENUE	25 LINK 67-734	513840/174780
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY T/STAG JUN GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(48 YRS - M - REDA)	SLIGHT DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NOT REQ	(48 YRS - M - REDACT)	WAITING - HELD UP	(N TO S) BACK HIT FIRST JOURNEY P/O WORK JCT CLEARED
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	WAITING - HELD UP	(N TO S) FRONT HIT FIRST J/P - UNKN JCT CLEARED
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)			

5

01170053538	SUN 13/08/2017 13:37	LIGHT	HIGH ST WHITTON 15M N OF J/W CONSTANCE RD	24 LINK 67-71	514200/173650	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY CROSSROADS AUTH PER	PELICAN OR SIML	CTRL - AUTH PERSON	
CASUALTY	001 (002)	(26 YRS - F - REDA)	SLIGHT PEDESTRIAN	STILL	UNKNOWN/OTHER	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	PARKED	(P TO P) J/P - UNKN O/S HIT JCT MID FIRST	
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ	(53 YRS - M - REDACT)	G/AHEAD - OTHER	(SE TO NE) J/P - UNKN N/S HIT JCT MID FIRST	
V002	B	407 (TOO CLOSE TO CYCLIST, HORSE RIDER OR PEDESTRIAN)		V002	B	509 (DISTRACTION IN VEHICLE)
V001	B	602 (CARELESS, RECKLESS OR IN A HURRY)		V001	A	904 (VEHICLE DOOR OPENED OR CLOSED NEGLIGENTLY)

6

01170065919	SUN 22/10/2017 22:50	DARK	WHITTON RD J/W ERNCROFT WAY	24 LINK 107-136	515720/174020
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY T/STAG JUN GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(32 YRS - M - REDA)	SERIOUS PEDESTRIAN	NE BOUND	FROM DRIVERS N/SIDE
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	G/AHEAD - OTHER	(SE TO NW) J/P - UNKN FRONT HIT JCT APP FIRST
V001	B	306 (EXCEEDING SPEED LIMIT)			

7

01170068545	TUE 07/11/2017 08:56	LIGHT	WHITTON RD 50M W OF J/W RUGBY RD			24 LINK 81-107	515440/174160
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(18 YRS - F - REDA)	SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ	(55 YRS - M - REDACT)	O/TAKING - MOVING VEH		(W TO E) DID NOT IMPACT	COMMUTING
VEHICLE	002 (000)	PED CYCLE BT - N/A	(18 YRS - F - REDACT)	G/AHEAD - OTHER		(W TO E) O/S HIT FIRST	SCHOOL - TAKING
V001	A	407 (TOO CLOSE TO CYCLIST, HORSE RIDER OR PEDESTRIAN)					

8

01170070977	SAT 18/11/2017 10:45	LIGHT	LONDON RD 20M E OF J/W WHITTON RD (TW RAILWAY BRDG)			24 NODE 136	516030/173722
POLICE - AT SCENE	ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (002)	(42 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG	(19 YRS - M - REDACT)	WAITING - HELD UP		(E TO W) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(42 YRS - M - REDACT)	MOVING OFF		(E TO W) BACK HIT FIRST	J/P - UNKN JCT APP
V002	B	107 (TEMPORARY ROAD LAYOUT (EG. CONTRAFLOW))					

9

01170074745	FRI 01/12/2017 17:40	DARK	WARREN RD 21M W OF J/W RIDGE			24 LINK 71-81	514570/174040	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M	
CASUALTY	001 (001)	(73 YRS - F - REDA)	SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT PROVD	(73 YRS - F - REDACT)		SLOWING/STOPPING	(P TO P) O/S HIT FIRST	J/P - UNKN	
VEHICLE	002 (000)	CAR BT - NEG	(56 YRS - M - REDACT)		REVERSING	(N TO S) BACK HIT FIRST	J/P - UNKN	
V002	B	405 (FAILED TO LOOK PROPERLY)						

10

01170080793	SAT 30/12/2017 12:45	LIGHT	LONDON RD 10M S OF J/W BREWARY LANE			24 LINK 136-675	516060/173680	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	PEDN PHASE ATS	CTRL - AUTH PERSON	
CASUALTY	001 (001)	(26 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
CASUALTY	002 (001)	(68 YRS - M - REDA)	SLIGHT	PEDESTRIAN		W BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	MC 51-125CC BT - NEG	(26 YRS - M - REDACT)		MOVING OFF	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT APP	
C002	A	802 (FAILED TO LOOK PROPERLY)			C002	A	804 (WRONG USE OF PEDESTRIAN CROSSING FACILITY)	
C002	A	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)						

11

01180087192	THU 01/02/2018 15:24	LIGHT	HIGH ST WHITTON 3M S OF J/W NELSON RD	24 NODE 71	514190/173940
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	ROUNDABOUT CROSSROADS GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (001)	(64 YRS - F - REDA)	SLIGHT PEDESTRIAN	W BOUND	FROM DRIVERS N/SIDE
VEHICLE	001 (000)	CAR BT - NEG	(38 YRS - F - REDACT)	MOVING OFF	(N TO S) DID NOT IMPACT COMMUTING L/ROUNDABOUT
C001	B	802 (FAILED TO LOOK PROPERLY)			

12

01180100552	SUN 08/04/2018 12:34	LIGHT	COURT WAY J/W WHITTON RD	24 LINK 107-136	515890/173820
POLICE - AT SCENE	ROAD-WET	RAINING	SINGLE CWY T/STAG JUN GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (002)	(27 YRS - M - REDA)	SLIGHT DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NEG	(59 YRS - M - REDACT)	G/AHEAD - OTHER	(NW TO SE) FRONT HIT FIRST J/P - UNKN JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(27 YRS - M - REDACT)	G/AHEAD - OTHER	(S TO NW) O/S HIT FIRST J/P - UNKN JCT APP
V001	A	405 (FAILED TO LOOK PROPERLY)		V002 A	405 (FAILED TO LOOK PROPERLY)

13

01180106391	MON 07/05/2018 18:50	LIGHT	WHITTON RD 200M N OF J/W PARK RD	25 LINK 67-734	513843/174919	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY NO JUN IN 20M N/A	NO XING FACIL IN 50M	NONE IN 50M	
NOT KNOWN HOW COLLISION OCCURRED						
CASUALTY	001 (002)	(35 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NOT REQ	(56 YRS - M - REDACT)	SLOWING/STOPPING	(P TO P) N/S HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	PED CYCLE BT - N/A	(35 YRS - M - REDACT)	G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN
V002	A	409 (SWERVED)		V002 A	410 (LOSS OF CONTROL)	

14

01180113943	TUE 12/06/2018 22:00	DARK	WHITTON RD J/W GRIMWOOD RD	24 LINK 107-136	515870/173880	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY T/STAG JUN GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M	
VEHICLE 1 WAS TRAVELLING OUT OF TWICKENHAM TOWARDS THE A316 WHEN IT HAS SIGNALLED RIGHT AND TURNED INTO GRIMWOOD PLACE, VEHICLE 2 HAS BEEN TRAVELLING TOWARDS TWICKENHAM FROM THE A316. VEHICLE 1 TURNED IN FRONT OF VEHICLE 2 CAUSING VEHICLE 2 TO HIT THE FRONT OF THE VEHICLE.						
CASUALTY	001 (002)	(16 YRS - M - REDA)	SERIOUS	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NEG	(44 YRS - F - REDACT)	TURNING RIGHT	(NE TO E) FRONT HIT FIRST	COMMUTING JCT MID
VEHICLE	002 (000)	M/C <= 50CC BT - NOT REQ	(16 YRS - M - REDACT)	G/AHEAD - OTHER	(SW TO SW) FRONT HIT FIRST	J/P - UNKN JCT MID
V001	A	405 (FAILED TO LOOK PROPERLY)				

15

01180115953	FRI 22/06/2018 08:40	LIGHT	HOUNSLOW RD 20M NW OF J/W NELSON RD	24 NODE 71	514170/174000
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY ROUNDABOUT GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (001)	(24 YRS - M - REDA)	SLIGHT	PEDESTRIAN	STILL STATIONARY NOT CROSSING
VEHICLE	001 (000)	CAR BT - NOT REQ	(34 YRS - M - REDACT)	G/AHEAD - OTHER	(E TO W) COMMUTING N/S HIT FIRST
V001	A	407 (TOO CLOSE TO CYCLIST, HORSE RIDER OR PEDESTRIAN)			

16

01180118334	MON 02/07/2018 22:38	DARK	WHITTON RD J/W HOUNSLOW AVENUE HOUNSLOW MIDDLESEX	25 LINK 67-734	513840/174800
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY OTHER JUN AUTH PER	NO XING FACIL IN 50M	NONE IN 50M
APPARENTLY, AN UNKNOWN VEHICLE HAS COLLIDED WITH A FEMALE CYCLIST ON THE HUMP BACK BRIDGE OVER THE RAILWAY LINES ON WHITTON ROAD J/W HOUNSLOW AVE IN HOUNSLOW. (REDACTED) VEH1 WAS DRIVING ALONG WHITTON ROAD AND AS IT APPROACHED THE BRIDGE, THE DRIVER SAW A CYCLIST OVERTAKE A CAR FROM THE OPPOSITE DIRECTION, AND VEH1 WAS UNABLE TO STOP. (REDACTED)					
CASUALTY	001 (002)	(28 YRS - F - REDA)	SERIOUS	DRIVER/RIDER	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(57 YRS - F - REDACT)	G/AHEAD - OTHER	(S TO N) J/P - UNKN O/S HIT JCT MID FIRST
VEHICLE	002 (000)	PED CYCLE BT - N/A	(28 YRS - F - REDACT)	G/AHEAD - OTHER	(N TO S) J/P - UNKN FRONT HIT JCT MID FIRST
V002	A	405 (FAILED TO LOOK PROPERLY)		V002	B 602 (CARELESS, RECKLESS OR IN A HURRY)
V002	B	507 (RIDER WEARING DARK CLOTHING AT NIGHT)		V001	B 703 (ROAD LAYOUT (EG. BEND, WINDING ROAD, HILL CREST))

17

01180121566	MON 16/07/2018 18:30	LIGHT	PERCY RD J/W HIGH ST WHITTON	24 NODE 67	514190/173540
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY CROSSROADS GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (002)	(18 YRS - M - REDA)	SLIGHT DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NOT REQ	(27 YRS - M - REDACT)	SLOWING/STOPPING	(S TO N) BACK HIT FIRST JOURNEY P/O WORK JCT CLEARED
VEHICLE	002 (000)	MC 51-125CC BT - NOT REQ	(18 YRS - M - REDACT)	SLOWING/STOPPING	(S TO N) FRONT HIT FIRST J/P - UNKN JCT CLEARED
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)		V002 B	605 (LEARNER OR INEXPERIENCED DRIVER)

18

01180126645	SUN 12/08/2018 20:10	LIGHT	WHITTON RD J/W HOUNSLOW AVENUE HOUNSLOW	25 LINK 67-734	513840/174800
POLICE - AT SCENE	ROAD-WET	WEATHER-FINE	SINGLE CWY T/STAG JUN GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
IT WOULD APPEAR FROM SPEAKING TO ALL PARTIES THAT AS THE LORRY AND THE MOPED APPROACHED THE JUNCTION, THE MOPED WAS BEHIND THE LORRY - THE LORRY THEN REVERSED, BUT WAS NOT ABLE TO SEE THE MOPED ON HIS MIRRORS DUE TO THE MOPED BEING IN A BLIND SPOT DIRECTLY BEHIND THE VEHICLE. (REDACTED)					
CASUALTY	001 (002)	(36 YRS - M - REDA)	SERIOUS DRIVER/RIDER		
VEHICLE	001 (000)	OTHER VEH BT - NOT REQ	(30 YRS - M - REDACT)	REVERSING	(S TO N) BACK HIT FIRST JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	MC 51-125CC BT - NOT REQ	(36 YRS - M - REDACT)	WAITING - HELD UP	(N TO S) FRONT HIT FIRST J/P - UNKN JCT APP
V002	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)		V001 B	405 (FAILED TO LOOK PROPERLY)

19

01180141053	TUE 23/10/2018 18:30	DARK	PARK RD HOUNSLOW MIDDLESEX J/W WHITTON RD			25 LINK 67-734	513850/174710
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(18 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(23 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ	(18 YRS - M - REDACT)	G/AHEAD - OTHER		(E TO W) N/S HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ	(23 YRS - F - REDACT)	TURNING RIGHT		(SE TO NE) O/S HIT FIRST	J/P - UNKN E/MAIN RD
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)			V001	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)
V001	A	605 (LEARNER OR INEXPERIENCED DRIVER)			V002	A	605 (LEARNER OR INEXPERIENCED DRIVER)

20

01180142540	WED 31/10/2018 11:14	LIGHT	HIGH ST WHITTON 70M S OF J/W TRANMERE RD			24 LINK 67-71	514190/173740
SELF-REPORTED	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(33 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(33 YRS - F - REDACT)	UNKNOWN S/R		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED	(35 YRS - M - REDACT)	UNKNOWN S/R		(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN

21

01180148221	MON 26/11/2018 16:40	DARK	LONDON RD J/W BREWERY LANE	24 LINK 136-675	516050/173690		
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY PRIV DRIVE	GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M	
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (002)	(27 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ	(54 YRS - M - REDACT)		SLOWING/STOPPING	(E TO W) FRONT HIT FIRST	COMMUTING JCT APP
VEHICLE	002 (000)	MC >500CC BT - NOT REQ	(27 YRS - M - REDACT)		TURNING RIGHT	(W TO E) N/S HIT FIRST	JOURNEY P/O WORK L/MAIN RD
V001	B	405 (FAILED TO LOOK PROPERLY)		V002	B	405 (FAILED TO LOOK PROPERLY)	
V001	B	710 (VEHICLE BLIND SPOT)					

22

01180148449	TUE 27/11/2018 22:32	DARK	WHITTON RD 10M E OF J/W COURT WAY	24 LINK 107-136	515920/173790		
POLICE - AT SCENE	ROAD-WET	WEATHER-FINE	SINGLE CWY SLIP RD	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M	
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(50 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(32 YRS - F - REDA)	SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	TAXI/PHV BT - NOT REQ	(50 YRS - M - REDACT)		G/AHEAD - L-HAND BEND	(SE TO NW) BACK HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(30 YRS - M - REDACT)		G/AHEAD - L-HAND BEND	(SE TO NW) FRONT HIT FIRST	J/P - UNKN JCT APP
V002	A	501 (IMPAIRED BY ALCOHOL)		V002	A	602 (CARELESS, RECKLESS OR IN A HURRY)	

23

01180149866	TUE 04/12/2018 14:44	LIGHT	WHITTON RD J/W CHUDLEIGH RD	24 LINK 107-136	515860/173880
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POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
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APPARENTLY PERSON INJURED 1 WAS A PASSENGER ON THE LOWER DECK ON THE NEARSIDE FRONT SEAT NEXT TO THE AISLE, VEHICLE 1 WAS TRAVELLING SOUTH EAST IN WHITTON ROAD WHEN PERSON INJURED 1 STOOD UP TO PRESS THE BUTTON AS HER STOP AT CHUDLEIGH ROAD WAS APPROACHING. AS PERSON INJURED 1 WAS COLLECTED HER BAGS SHE HAS FALLEN OR TRIPPED INTO THE AISLE ON HER RIGHT SIDE CAUSING INJURY.

CASUALTY	001 (001)	(86 YRS - F - REDA)	SERIOUS	VEH/PILLION PAX	SEATED PASSENGER		
VEHICLE	001 (000)	LONDON BUS BT - NEG	(41 YRS - M - REDACT)		SLOWING/STOPPING	(NW TO SE) DID NOT IMPACT	JOURNEY P/O WORK JCT APP
C001	B	999 (OTHER - PLEASE SPECIFY BELOW)					

24

01190158752	SUN 20/01/2019 22:20	DARK	LONDON RD, 50 METRES SOUTH OF JUNCT WTH WHITTON RD.. NREST CLASSIFIED RD WAS B361	24 LINK 136-675	516067/173694
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POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	PEDN PHASE ATS	NONE IN 50M
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APPARENTLY V001 WAS TRAVELLING NORTH ON LONDON ROAD A310 TOWARDS WHITTON ROAD. V001 HAS DRIVEN INTO THE BARRIERS ON THE CENTRAL RESERVATION. V001 HAS DRIVEN THROUGH THE CENTRAL RESERVATION AND ACROSS THE OTHER SIDE OF THE CARRIAGEWAY. VOO1 HAS DRIVEN ONTO THE PATHWAY INTO THE BUILDING SITE ABOVE THE BR STATION. (REDACTED)

CASUALTY	001 (001)	(75 YRS - M - REDA)	SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	TAXI/PHV BT - NOT PROVD	(75 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	JOURNEY P/O WORK
V001	A	505 (ILLNESS OR DISABILITY, MENTAL OR PHYSICAL)					

25

01190174021	TUE 26/03/2019 07:36	LIGHT	HIGH ST WHITTON, NR JUNCT WTH TRANMERE RD .			24 LINK 67-71	514194/173756
SELF-REPORTED	UNKNOWN S/R	WEATHER-UNKNOWN	UNKNOWN	NO JUN IN 20M		UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(? YRS - M - REDA)	SLIGHT	PEDESTRIAN	UNKNOWN	UNKNOWN/OTHER	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R

26

01190183949	WED 29/05/2019 17:13	LIGHT	WHITTON RD, TWICKENHAM, MIDDLESEX, NR JUNCT WTH HEATHFIELD SOUTH.			24 LINK 107-136	515853/173899
POLICE - AT SCENE	ROAD-DRY	WEATHER-OTHER	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(19 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C <= 50CC BT - NOT REQ	(19 YRS - M - REDACT)		MOVING OFF	(SE TO NW) N/S HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ	(36 YRS - F - REDACT)		MOVING OFF	(W TO NW) FRONT HIT FIRST	COMMUTING E/MAIN RD
V002	A	401 (JUNCTION OVERSHOOT)			V002	A	405 (FAILED TO LOOK PROPERLY)
V002	B	404 (FAILED TO SIGNAL OR MISLEADING SIGNAL)			V001	A	405 (FAILED TO LOOK PROPERLY)

27

01190188323	TUE 18/06/2019 09:30	LIGHT	LONDON RD, TWICKENHAM, MIDDLESEX, 29 METRES SOUTH OF JUNCT WTH BREWERY LANE.			24 LINK 136-675	516070/173682
SELF-REPORTED	ROAD-DRY	WEATHER- FINE	DUAL CWY	NO JUN IN 20M		UNKNOWN S/R	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(85 YRS - M - REDA)	SLIGHT	PEDESTRIAN	NE BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED	(? YRS - M - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN

28

01190195379	FRI 05/07/2019 14:30	LIGHT	PARK AVENUE, 75 METRES WEST OF JUNCT WTH CARRINGTON AVENUE.			25 CELL 513500/174000	513835/174466
SELF-REPORTED	ROAD-DRY	WEATHER- FINE	SINGLE CWY	PRIV DRIVE	GIVEWAY /UNCONT	UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(37 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(37 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) N/S HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)		REVERSING	(N TO S) BACK HIT FIRST	J/P - UNKN JCT APP

29

01190198528 THU 08/08/2019 16:46 LIGHT WARREN RD, NR JUNCT WTH KNELLER RD 24 NODE 81 514793/174055

POLICE - AT SCENE ROAD-DRY WEATHER-FINE SINGLE CWY T/STAG JUN GIVEWAY /UNCONT NO XING FACIL IN 50M NONE IN 50M

APPARENTLY VEHICLE 001 WAS DRIVING UP CLAPHAM HIGH STREET FROM NORTH TO SOUTH THOUGH A GREEN LIGHT, VEHICLE 001 DROVE THROUGH THE JUNCTION AND VEHICLE 002 CAME FROM CLAPHAM MANOR STREET JUMPING THE RED LIGHT AND JOINING CLAPHAM COMMON SOUTH SIDE, AS BOTH VEHICLE 001 AND 002 WENT PAST THE JUNCTION VEHICLE 002 WENT IN FRONT OF 001 INTO THE PATH OF 001 CAUSING VEHICLE 001 TO BREAK AND COLLIDING WITH VEHICLE 002 HITTING THE REAR 002. (REDACTED)

CASUALTY 001 (001) (27 YRS - M - REDA) SERIOUS DRIVER/RIDER

CASUALTY 002 (002) (51 YRS - F - REDA) SLIGHT DRIVER/RIDER

VEHICLE 001 (000) M/C >500CC BT - NOT PROVD (27 YRS - M - REDACT) G/AHEAD - OTHER (E TO W) COMMUTING N/S HIT JCT APP FIRST

VEHICLE 002 (000) CAR BT - NOT REQ (51 YRS - F - REDACT) TURNING RIGHT (E TO NW) JCT APP O/S HIT FIRST

V001 A 405 (FAILED TO LOOK PROPERLY) V001 A 602 (CARELESS, RECKLESS OR IN A HURRY)

V001 B 406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)

30

01190201101 MON 19/08/2019 06:45 LIGHT NELSON RD, NR JUNCT WTH HOUNSLOW RD. 24 NODE 71 514186/173971

SELF-REPORTED ROAD-DRY WEATHER-FINE UNKNOWN ROUNDABOUT UNKNOWN S/R UNKNOWN S/R UNKNOWN S/R

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY 001 (002) (20 YRS - M - REDA) SLIGHT DRIVER/RIDER

VEHICLE 001 (000) CAR BT - DRV NOT CONTACTED (56 YRS - M - REDACT) UNKNOWN S/R UNKNOWN S/R (MOVE UNKN) J/P - UNKN UNKNOWN S/R

VEHICLE 002 (000) PED CYCLE BT - N/A (20 YRS - M - REDACT) UNKNOWN S/R UNKNOWN S/R (MOVE UNKN) J/P - UNKN UNKNOWN S/R

31

01190201692	TUE 27/08/2019 00:09		DARK	WHITTON DENE, NR JUNCT WTH HALL RD.			24 NODE 734	513870/174472
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	M ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M	
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(63 YRS - M - REDA)	SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER			
VEHICLE	001 (000)	PHV - LICENCED BT - NOT REQ	(51 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) BACK HIT FIRST	L/ROUNDABOUT	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(38 YRS - M - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN L/ROUNDABOUT	
V002	A	601 (AGGRESSIVE DRIVING)						

32

01190211912	TUE 15/10/2019 19:13		DARK	WHITTON RD, NR JUNCT WTH PARK RD, HOUNSLOW, MIDDLESEX			25 LINK 67-734	513848/174701
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	STOP SGN	NO XING FACIL IN 50M	NONE IN 50M	
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(26 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ	(25 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) O/S HIT FIRST	JCT APP	
VEHICLE	002 (000)	M/C <= 50CC BT - NOT REQ	(26 YRS - M - REDACT)		O/TAKING - MOVING VEH	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT CLEARED	
V002	A	410 (LOSS OF CONTROL)			V002	A	306 (EXCEEDING SPEED LIMIT)	

33

01190213336	TUE 22/10/2019 08:58	LIGHT	KNELLER RD, NR JUNCT WTH DUKE OF CAMBRIDGE CLOSE.	24 LINK 81-107	514963/174036	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY OTHER JUN GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M	
NOT KNOWN HOW COLLISION OCCURRED						
CASUALTY	001 (002)	(43 YRS - F - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NOT REQ	(41 YRS - F - REDACT)	WAITING - HELD UP	(W TO E) N/S HIT FIRST	SCHOOL - TAKING JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(43 YRS - F - REDACT)	G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	SCHOOL - TAKING JCT APP
V001	B	405 (FAILED TO LOOK PROPERLY)				

34

01190215321	FRI 01/11/2019 00:03	DARK	WHITTON RD, 15 METRES NORTH OF JUNCT WTH STATION RD.	25 LINK 67-734	513844/174935	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY OTHER JUN GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M	
V001 WAS TRAVELING ALONG WHITON ROAD WHEN IT STRUCK TWO PERSONS CAUSING INJURY						
CASUALTY	001 (001)	(31 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
CASUALTY	002 (001)	(23 YRS - M - REDA)	FATAL	PEDESTRIAN	UNKNOWN	UNKNOWN/OTHER
CASUALTY	003 (001)	(16 YRS - M - REDA)	SERIOUS	PEDESTRIAN	UNKNOWN	UNKNOWN/OTHER
CASUALTY	004 (001)	(28 YRS - M - REDA)	SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER	
VEHICLE	001 (000)	CAR BT - NOT REQ	(31 YRS - M - REDACT)	G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	JOURNEY P/O WORK JCT CLEARED
V001	A	903 (EMERGENCY VEHICLE ON A CALL)				

35

01190220773 MON 25/11/2019 16:33 DARK PERCY RD (WHITTON STATION), 30 METRES SOUTH OF JUNCT WTH BRDG WAY. 24 LINK 67-71 514192/173561

POLICE - AT SCENE ROAD-WET RAINING SINGLE CWY NO JUN IN 20M ZEBRA XING NONE IN 50M

PEDESTRIAN STATES THAT HE WAS COMING UP TO THE PEDESTRIAN CROSSING TRAVELLING FROM A WEST DIRECTION HEADING EAST TOWARDS WHITTON STATION. HE HAS NOTICED THAT A VEHICLE HAS STOPPED AT THE CROSSING ON HIS NEAR SIDE OF THE CARRIAGEWAY FROM CARS TRAVELLING NORTH AND LOOKED NORTH TO SEE IF ANY CARS WERE TRAVELLING SOUTH. HE DID NOT SEE ANY CARS SO BEGAN TO CROSS THE ROAD. HE THEN ONLY REMEMBERS BEING HIT BY THE CAR AND ONLY SEEING IT WHEN IT IMMEDIATELY HIT HIM. HE HAS BEEN HIT AND TRAVELLED SEVERAL METRES BEFORE LANDING ON THE FLOOR AND STAYING IN THE SAME POSITION UNTIL EMERGENCY SERVICES ARRIVED. WITNESSES STATE THAT THE VEHICLE WAS TRAVELLING VERY FAST (AT LEAST 30MPH) AND STRUCK THE PEDESTRIAN WHICH MADE A LOUD BANG AND HE ALSO COULD HEAR ANOTHER LOUD BANG WHEN HE HIT THE FLOOR. (REDACTED)

CASUALTY	001 (001)	(55 YRS - M - REDA)	SERIOUS	PEDESTRIAN	SE BOUND	FROM DRIVERS O/SIDE
VEHICLE	001 (000)	CAR BT - NOT REQ	(25 YRS - M - REDACT)	MOVING OFF	(N TO S) O/S HIT FIRST	
V001	A	405 (FAILED TO LOOK PROPERLY)		V001	A	103 (SLIPPERY ROAD (DUE TO WEATHER))

36

01190221130 WED 27/11/2019 13:45 LIGHT CHERTSEY RD, NR JUNCT WTH CHUDLEIGH RD. 24 LINK 68-107 515452/174033

POLICE - AT SCENE ROAD-WET WEATHER-FINE DUAL CWY OTHER JUN AUTO SIG PELICAN OR SIML NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(19 YRS - M - REDA)	SLIGHT	PEDESTRIAN	W BOUND	FROM DRIVERS N/SIDE - MASKED
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NEG	(29 YRS - M - REDACT)	G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
C001	A	801 (CROSSING ROAD MASKED BY STATIONARY OR PARKED VEHICLE)		C001	A	802 (FAILED TO LOOK PROPERLY)

37

01190223943	MON 09/12/2019 14:00	LIGHT	HIGH ST, WHITTON, 73 METRES SOUTH OF JUNCT WTH TRANMERE RD, WHITTON.			24 LINK 67-71	514195/173733
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M		PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(78 YRS - M - REDA)	SLIGHT	PEDESTRIAN	UNKNOWN	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	CAR BT - NEG	(19 YRS - M - REDACT)		REVERSING	(N TO S) BACK HIT FIRST	J/P - UNKN
V001	B	710 (VEHICLE BLIND SPOT)					

38

01200236880	SAT 15/02/2020 22:52	DARK	WHITTON RD , NR JUNCT WTH CHUDLEIGH RD TW1.			24 LINK 107-136	515733/174008
SELF-REPORTED	ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(29 YRS - M - REDA)	SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A	(29 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

39

01200238443	TUE 25/02/2020 18:09	DARK	NELSON RD, NR JUNCT WTH HIGH ST WHITTON.			24 NODE 71	514194/173969
SELF-REPORTED	ROAD-WET	RAINING	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(22 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A	(22 YRS - F - REDACT)	G/AHEAD - R-HAND BEND		(S TO E) N/S HIT FIRST	COMMUTING JCT MID
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	G/AHEAD - OTHER		(N TO S) FRONT HIT FIRST	JCT MID

40

01200248934	SUN 24/05/2020 17:30	LIGHT	KNELLAR RD, NR JUNCT WTH ALTON GARDENS.			24 LINK 81-107	514903/174049
POLICE - AT SCENE	ROAD-DRY	WEATHER- FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	CNTL REFUGE N/O CTRLS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(27 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(19 YRS - F - REDA)	SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	MC 51-125CC BT - NOT REQ	(27 YRS - M - REDACT)	O/TAKING - MOVING VEH		(E TO W) FRONT HIT FIRST	JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(19 YRS - F - REDACT)	G/AHEAD - OTHER		(W TO E) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
V001	A	403 (POOR TURN OR MANOEUVRE)			V001	A	304 (DISOBEYED PEDESTRIAN CROSSING FACILITY)
V001	A	305 (ILLEGAL TURN OR DIRECTION OF TRAVEL)					

41

01200266799	WED 09/09/2020 20:50	DARK	HOUNSLOW RD, NR JUNCT WTH NELSON RD .			24 NODE 71	514187/173986
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	M ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (002)	(26 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	MOVING OFF		(W TO E) DID NOT IMPACT	J/P - UNKN L/ROUNDABOUT
VEHICLE	002 (000)	OTHER VEH BT - NOT REQ	(26 YRS - F - REDACT)	TURNING RIGHT		(E TO N) DID NOT IMPACT	COMMUTING L/ROUNDABOUT
V002	B	603 (NERVOUS, UNCERTAIN OR PANIC)			V001	B	704 (BUILDINGS, ROAD SIGNS, STREET FURNITURE)

42

01200273269	MON 12/10/2020 00:55	DARK	LONDON RD, 5 METRES SOUTH OF JUNCT WTH MARCH RD.			24 NODE 136	516025/173752
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	MULTI JUN	AUTO SIG	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(20 YRS - M - REDA)	SLIGHT	VEH/PILLION PAX	REAR SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - POS	(18 YRS - F - REDACT)	G/AHEAD - R-HAND BEND		(N TO S) FRONT HIT FIRST	J/P - UNKN JCT APP
V001	A	501 (IMPAIRED BY ALCOHOL)			V001	B	509 (DISTRACTION IN VEHICLE)

43

01200282881	SAT 05/12/2020 10:32	LIGHT	WHITTON RD, NR JUNCT WTH ARGYLE AVENUE.	25 LINK 67-734	513848/174738
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY T/STAG JUN GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (001)	(72 YRS - M - REDA)	SLIGHT PEDESTRIAN	UNKNOWN	FROM DRIVERS N/SIDE
VEHICLE	001 (000)	CAR BT - NEG	(47 YRS - F - REDACT)	TURNING RIGHT	(W TO S) JCT MID FRONT HIT FIRST
V001	B	405 (FAILED TO LOOK PROPERLY)		C001 B	802 (FAILED TO LOOK PROPERLY)
V001	B	706 (DAZZLING SUN)		C001 B	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)

44

01200283955	FRI 11/12/2020 07:45	LIGHT	WHITTON DENE RD, NR JUNCT WTH MILLWOOD RD.	25 CELL 514000/174500	514254/174553
POLICE - AT SCENE	ROAD-WET	WEATHER-FINE	SINGLE CWY OTHER JUN GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (001)	(55 YRS - F - REDA)	SLIGHT PEDESTRIAN	W BOUND	FROM DRIVERS O/SIDE - MASKED
VEHICLE	001 (000)	MC 51-125CC BT - NOT REQ	(30 YRS - M - REDACT)	O/TAKING - NON MOVING VEH	(W TO E) COMMUTING FRONT HIT JCT CLEARED FIRST
V001	A	403 (POOR TURN OR MANOEUVRE)		V001 A	405 (FAILED TO LOOK PROPERLY)

45

01200285259	THU 17/12/2020 15:00	LIGHT	WHITTON RD, 50 METRES NORTH OF JUNCT WTH MURRAY AVENUE.			25 LINK 67-734	513857/174659
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(46 YRS - M - REDA)	SLIGHT	VEH/PILLION PAX			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)		PARKED	(P TO P) DID NOT IMPACT	J/P - UNKN
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(39 YRS - M - REDACT)		WAITING - HELD UP	(N TO S) FRONT HIT FIRST	J/P - UNKN
C001	B	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)					

46

01210288058	FRI 08/01/2021 18:50	DARK	HIGH ST WHITTON, NR JUNCT WTH BRDG WAY.			24 LINK 67-71	514186/173643
SELF-REPORTED	ROAD-DRY	WEATHER-FINE	SINGLE CWY	UNKNOWN S/R	UNKNOWN S/R	UNKNOWN S/R	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(29 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(29 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R

47

01210291733	SAT 06/02/2021 11:45	LIGHT	BRDG WAY, NR JUNCT WTH WHITTON HIGH ST.			24 LINK 67-71	514209/173630
POLICE - AT SCENE	ROAD-WET	WEATHER-OTHER	SINGLE CWY	CROSSROADS	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(39 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C >500CC BT - NOT REQ	(39 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) O/S HIT FIRST	JCT MID
VEHICLE	002 (000)	CAR BT - NOT REQ	(27 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	COMMUTING JCT APP
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)			V002	A	405 (FAILED TO LOOK PROPERLY)

48

01210305573	WED 05/05/2021 12:50	LIGHT	WHITTON RD, 01 METRES EAST OF JUNCT WTH TAYBURN AVENUE .			24 LINK 81-107	515322/174114
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	DUAL CWY	OTHER JUN	AUTH PER	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(17 YRS - M - REDA)	SLIGHT	PEDESTRIAN	S BOUND	UNKNOWN/OTHER	
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ	(? YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) O/S HIT FIRST	J/P - UNKN JCT APP
V001	A	710 (VEHICLE BLIND SPOT)					

49

01210316174	MON 28/06/2021 11:29	LIGHT	HIGH ST WHITTON, 30 METRES NORTH OF JUNCT WTH TRANMERE RD.	24 LINK 67-71	514191/173743	
POLICE - AT SCENE	ROAD-WET	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED						
CASUALTY	001 (002)	(33 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NOT REQ	(54 YRS - F - REDACT)	MOVING OFF	(N TO S) FRONT HIT FIRST	
VEHICLE	002 (000)	M/C 51-125CC BT - NOT REQ	(33 YRS - M - REDACT)	O/TAKING - MOVING VEH	(N TO S) N/S HIT FIRST	
V001	A	603 (NERVOUS, UNCERTAIN OR PANIC)		V001	A	403 (POOR TURN OR MANOEUVRE)

50

01210317801	WED 07/07/2021 07:56	LIGHT	LONDON RD, 0 METRES NORTH OF JUNCT WTH LONDON RD.	24 LINK 136-675	516090/173659	
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED						
CASUALTY	001 (002)	(30 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NEG	(64 YRS - M - REDACT)	SLOWING/STOPPING	(N TO S) DID NOT IMPACT	
VEHICLE	002 (000)	PED CYCLE BT - N/A	(30 YRS - M - REDACT)	G/AHEAD - L-HAND BEND	(N TO S) BACK HIT FIRST	COMMUTING
V002	A	405 (FAILED TO LOOK PROPERLY)				

51

01210318816	TUE 13/07/2021 09:50	LIGHT	NELSON RD, NR JUNCT WTH HOUNSLOW RD.			24 NODE 71	514231/173990
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (002)	(38 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ	(38 YRS - F - REDACT)		MOVING OFF	(P TO E) O/S HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	MC 51-125CC BT - NOT REQ	(38 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
V001	A	405 (FAILED TO LOOK PROPERLY)			V002	B	306 (EXCEEDING SPEED LIMIT)

52

01210329280	SUN 05/09/2021 13:43	LIGHT	WHITTON STATION, 52 METRES NORTH OF JUNCT WTH MONTROSE AVENUE.			24 LINK 67-71	514192/173563
SELF-REPORTED	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(? YRS - M - REDA)	SLIGHT	PEDESTRIAN	UNKNOWN	UNKNOWN/OTHER	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN

53

01210331896	SAT 18/09/2021 04:15	DARK	WHITTON RD, NR JUNCT WTH WHITTON RD.	24 LINK 81-107	515402/174140	
SELF-REPORTED	UNKNOWN S/R	WEATHER-UNKNOWN	SINGLE CWY	UNKNOWN S/R	UNKNOWN S/R	
NOT KNOWN HOW COLLISION OCCURRED						
CASUALTY	001 (002)	(28 YRS - M - REDA)	SERIOUS	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	OTHER VEH BT - DRV NOT CONTACTED	(28 YRS - M - REDACT)	G/AHEAD - OTHER	(N TO S) UNKNOWN S/R	COMMUTING UNKNOWN S/R

54

01210342299	SAT 06/11/2021 12:15	LIGHT	CHASE GARDENS, NR JUNCT WTH DUKE OF CAMBRIDGE CLOSE.	24 LINK 81-107	514963/174047		
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (002)	(45 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ	(22 YRS - F - REDACT)	TURNING RIGHT		(E TO N) FRONT HIT FIRST	JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(45 YRS - M - REDACT)	G/AHEAD - OTHER		(W TO E) FRONT HIT FIRST	JCT MID
V001	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)					

55

01210342889	WED 10/11/2021 05:50	DARK	KNELLER RD, NR JUNCT WTH WHITTON DENE.	24 LINK 77-81	514515/174235
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY M ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (002)	(34 YRS - M - REDA)	SLIGHT	DRIVER/RIDER	
VEHICLE	001 (000)	CAR BT - NOT REQ	(62 YRS - F - REDACT)	TURNING RIGHT	(N TO SW) COMMUTING N/S HIT JCT APP
VEHICLE	002 (000)	OTHER VEH BT - NOT REQ	(34 YRS - M - REDACT)	G/AHEAD - OTHER	(W TO E) COMMUTING O/S HIT JCT CLEARED
V001	B	405 (FAILED TO LOOK PROPERLY)		V002 B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)

56

01210345877	SUN 21/11/2021 12:40	LIGHT	WHITTON RD, NR JUNCT WTH ARGYLE AVENUE .	25 LINK 67-734	513842/174754
SELF-REPORTED	UNKNOWN S/R	WEATHER-UNKNOWN	UNKNOWN T/STAG JUN	GIVEWAY /UNCONT	UNKNOWN S/R UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (001)	(53 YRS - UNKNOWN - REDA)	SLIGHT	PEDESTRIAN	UNKNOWN UNKNOWN/OTHER
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	(MOVE UNKN) J/P - UNKN UNKNOWN JCT APP S/R

57

01210346232	FRI 26/11/2021 12:35	LIGHT	PERCY RD, 84 METRES SOUTH OF JUNCT WTH BRDG WAY.	24 LINK 67-71	514194/173571
SELF-REPORTED	ROAD-WET	WEATHER-FINE	SLIP ROAD	NO JUN IN 20M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (001)	(44 YRS - M - REDA)	SLIGHT	DRIVER/RIDER	
VEHICLE	001 (000)	MC 51-125CC BT - DRV NOT CONTACTED	(44 YRS - M - REDACT)	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R JOURNEY P/O WORK
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R J/P - UNKN

58

01210347411	SUN 28/11/2021 18:37	DARK	NELSON RD, NR JUNCT WTH HOUNSLOW RD.	24 NODE 71	514194/173974
SELF-REPORTED	ROAD-DRY	WEATHER-FINE	ROUNDAABOUT	UNKNOWN S/R	GIVEWAY /UNCONT
NOT KNOWN HOW COLLISION OCCURRED					
CASUALTY	001 (001)	(37 YRS - M - REDA)	SLIGHT	DRIVER/RIDER	
VEHICLE	001 (000)	MC 51-125CC BT - DRV NOT CONTACTED	(37 YRS - M - REDACT)	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(38 YRS - UNKNOWN - REDACT)	UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST J/P - UNKN UNKNOWN S/R

59

01210351654	FRI 24/12/2021 10:20	LIGHT	CHUDLEIGH RD, NR JUNCT WTH WHITTON RD.			24 LINK 107-136	515730/174008
POLICE - AT SCENE	ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (002)	(40 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ	(20 YRS - M - REDACT)		TURNING RIGHT	(S TO E) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(40 YRS - F - REDACT)		WAITING - TURN RIGHT	(E TO N) DID NOT IMPACT	J/P - UNKN JCT APP
V001	B	602 (CARELESS, RECKLESS OR IN A HURRY)					

60

01220367234	THU 24/03/2022 17:20	LIGHT	LONDON RD, TWICKENHAM, 10 METRES SOUTH OF JUNCT WTH BREWERY LANE, TWICKENHAM.			24 LINK 136-675	516060/173682
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	DUAL CWY	OTHER JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(85 YRS - F - REDA)	SERIOUS	VEH/PILLION PAX	STANDING PASSENGER		
VEHICLE	001 (000)	LONDON BUS BT - NOT REQ	(48 YRS - M - REDACT)		MOVING OFF	(S TO N) DID NOT IMPACT	JCT APP
V001	B	999 (OTHER - PLEASE SPECIFY BELOW)					

61

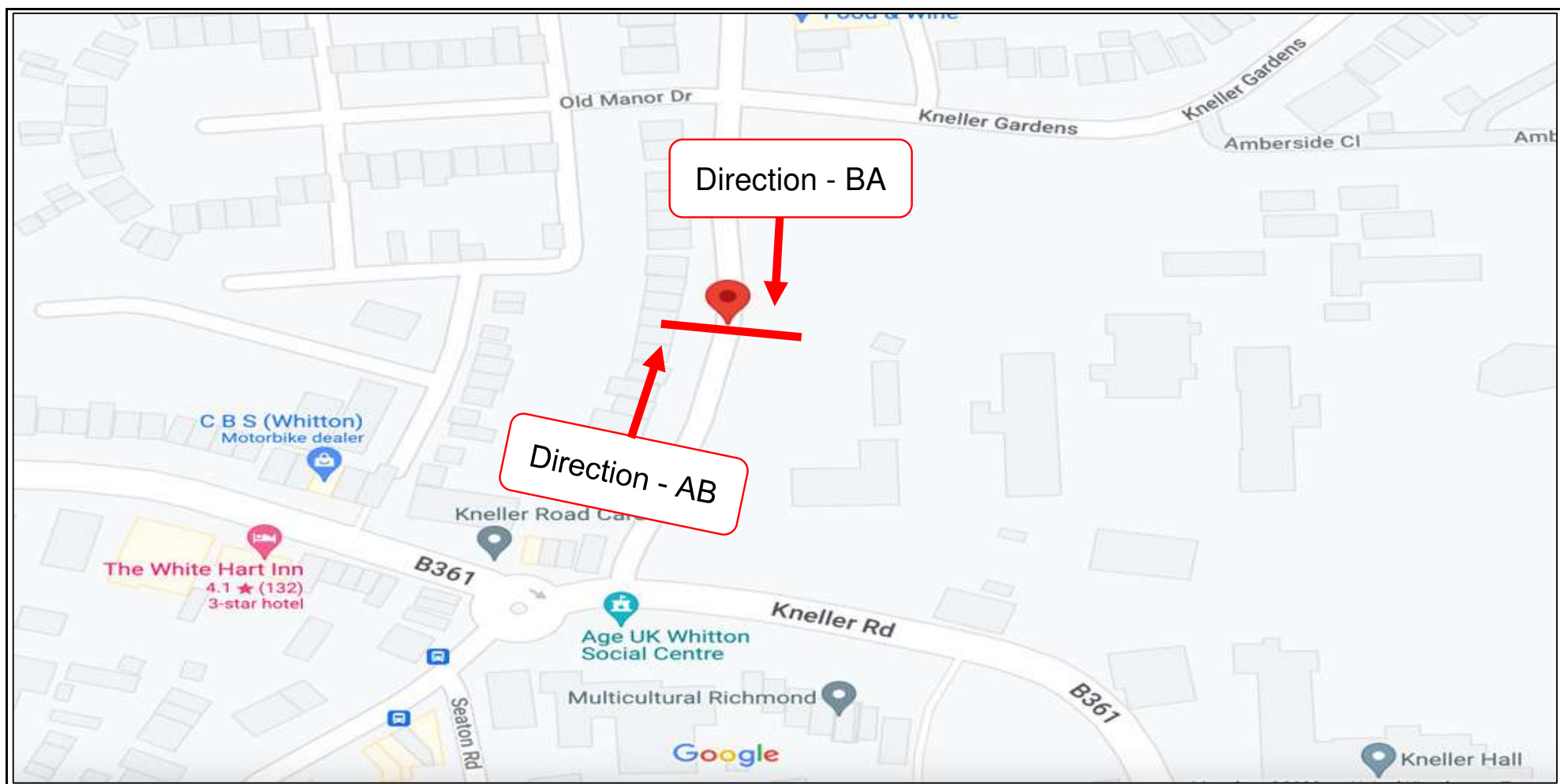
01220370858	THU 14/04/2022 20:42	DARK	HIGH ST WHITTON, 30 METRES SOUTH OF JUNCT WTH TRANMERE RD.			24 LINK 67-71	514198/173718
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (002)	(65 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	LONDON BUS BT - NOT REQ	(65 YRS - M - REDACT)		WAITING - HELD UP	(N TO S) O/S HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	PHV - LICENCED BT - NOT PROVD	(65 YRS - M - REDACT)		MOVING OFF	(N TO S) FRONT HIT FIRST	COMMUTING
V002	B	501 (IMPAIRED BY ALCOHOL)			V002	B	505 (ILLNESS OR DISABILITY, MENTAL OR PHYSICAL)

62

01220373465	FRI 29/04/2022 12:34	LIGHT	WHITTON RD, 3 METRES NORTH OF JUNCT WTH COURT WAY.			24 LINK 107-136	515919/173820
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	STOP SGN	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED							
CASUALTY	001 (001)	(18 YRS - M - REDA)	SLIGHT	PEDESTRIAN	W BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ	(18 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT APP
V001	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)					

Appendix L

Job ID	Project Name	Site Location	Google Coordinates	Survey Dates	Survey Day	Survey Timings
IW0056	Kneller Hall, Twickenham	Whitton Dene	51.456288, -0.352746	25/06/2022 - 01/07/2022	Saturday-Friday	0000-0000hrs on each day





Project ID and Name: IW0056 Kneller Hall, Twickenham
Site No: 1
Location Name: Whitton Dene
Direction: AB (Northbound)

06-22	2027	1735	13	140	4	3	0	0	0	1	0	0	0	86	45	21.3	25.4	0	8	139	604	924	302	42	7	0	1	0	0	0	0	0	0	0	1276
06-00	2121	1818	13	144	6	3	0	0	0	1	0	0	0	89	47	21.4	25.4	0	10	141	622	968	324	46	8	1	1	0	0	0	0	0	0	0	1348
00-00	2242	1922	13	148	8	6	0	0	0	1	0	0	0	96	48	21.4	25.5	0	11	144	647	1030	347	52	9	1	1	0	0	0	0	0	0	0	1440



Project ID and Name: IW0056 Kneller Hall, Twickenham
Site No: 1
Location Name: Whitton Dene
Direction: AB (Northbound)

06-22	2699	2219	17	260	37	11	1	0	0	2	0	0	0	77	75	20.9	24.8	0	31	176	903	1204	333	48	4	0	0	0	0	0	0	0	0	0	0	1589
06-00	2794	2300	18	263	41	13	1	0	0	2	0	0	0	80	76	20.9	24.9	0	32	176	919	1250	360	53	4	0	0	0	0	0	0	0	0	0	0	1667
00-00	2854	2346	18	267	44	16	1	0	0	2	0	0	0	83	77	21	25.2	0	32	176	928	1271	381	61	4	0	1	0	0	0	0	0	0	0	1718	



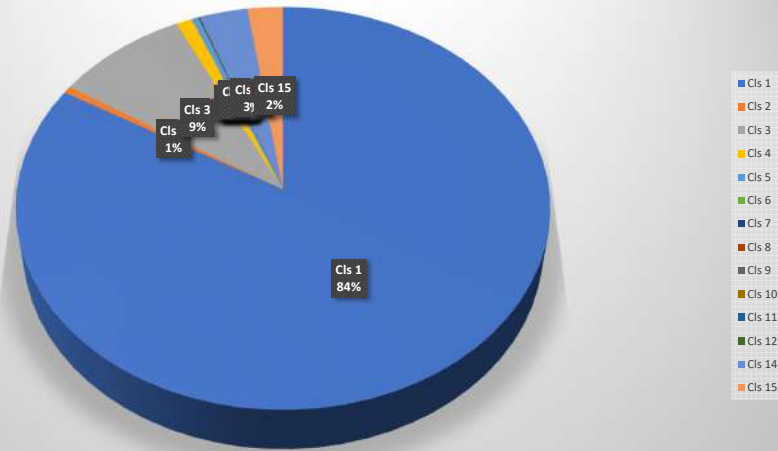
Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 1
 Location Name: Whitton Dene
 Direction: AB (Northbound) + BA (Southbound)

LDV 4937 HDV 541 HDV% 11%

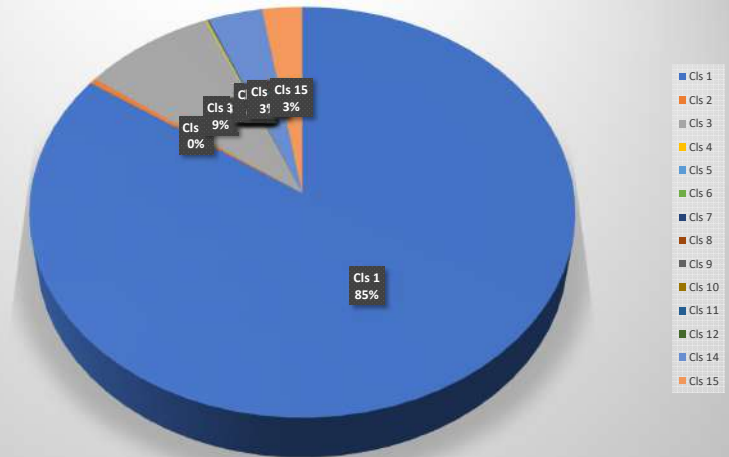
Direction	Total No. of Vehicles	No. of Vehicles exceeding PSL (20mph)	No. of Vehicles exceeding PSL %
Direction AB - Northbound	19855	11929	60%
Direction BA - Southbound	19460	12562	65%

Direction - AB	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15
Total Vehicle Proportion	16576	109	1747	208	88	6	11	3	7	0	0	0	635	465
Vehicle Proportion - %	83.5%	0.5%	8.8%	1.0%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	2.3%
Direction - BA	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15
Total Vehicle Proportion	16472	79	1670	19	10	4	8	0	5	0	1	0	685	507
Vehicle Proportion - %	84.6%	0.4%	8.6%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	2.6%
Average Daily Across Week														
	4721	27	488	32	14	1	3	0	2	0	0	0	189	139

Direction AB - Northbound



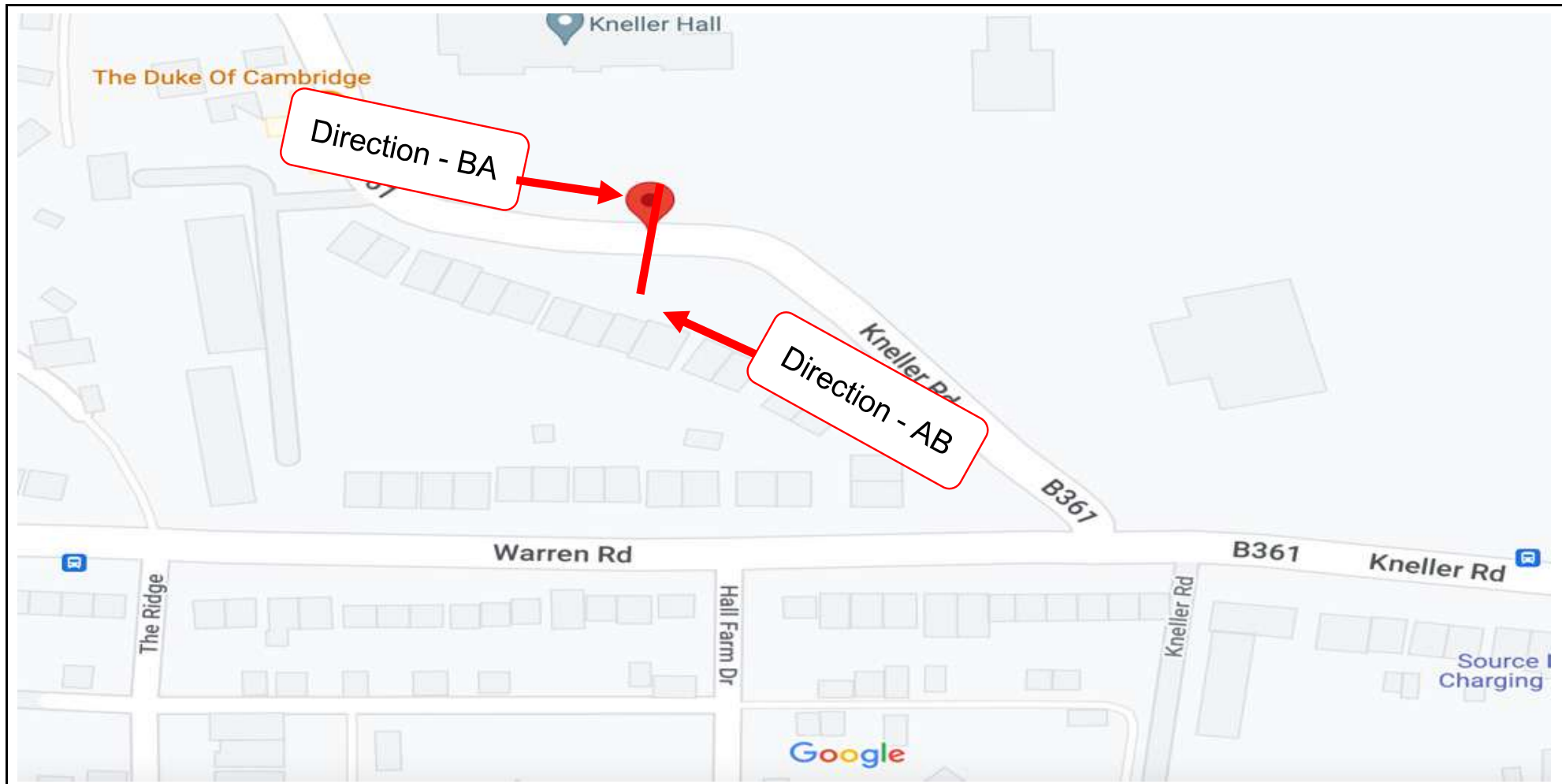
Direction BA - Southbound



Vehicle Classification - VRX

Cls 1	SV	2 axles	Short vehicle car or light Van
Cls 2	SVT	3,4 or 5 axles	Short vehicle towing trailer, caravan, boat, etc
Cls 3	TB2	2 axles	Two-axle truck or bus
Cls 4	TB3	3 axles	Three-axle truck or bus
Cls 5	T4	> 4 axles	Four-axle truck
Cls 6	ART3	3 axles	Three-axle articulated or rigid vehicle and trailer
Cls 7	ART4	4 axles	Four-axle articulated or rigid vehicle and trailer
Cls 8	ART5	5 axles	Five-axle articulated or rigid vehicle and trailer
Cls 9	RT6	>6 axles	Six or more axle articulated or rigid vehicle and trailer
Cls 10	BD	>6 axles	Double or heavy truck and trailer
Cls 11	DRT	>6 axles	Double road train or heavy truck and two trailers
Cls 12	TRT	>6 axles	Triple road train or heavy truck and three or more trailers
Cls 14	M/C	2 axles	Motorcycles
Cls 15	Cycle	2 axles	Bicycles

Job ID	Project Name	Site Location	Google Coordinates	Survey Dates	Survey Day	Survey Timings
IW0056	Kneller Hall, Twickenham	Kneller Road	51.454593, -0.350490	25/06/2022 - 01/07/2022	Saturday-Friday	0000-0000hrs on each day





Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 2
 Location Name: Whitton Dene
 Direction: AB (Northbound)

29 June 2022

Time Period	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Number of vehicles exceeding PSL 20
0000	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	25.9	-	0	0	0	0	1	3	0	0	0	0	0	0	0	0	4		
0015	3	2	0	0	0	0	0	0	0	0	0	0	0	1	0	19.1	-	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1		
0030	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
0045	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23	-	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2		
0100	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
0115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0200	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.8	-	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1		
0215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		
0315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0330	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17.4	-	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0		
0345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0415	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		
0430	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
0445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0500	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
0515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0545	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	18.7	-	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1		
0600	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2		
0615	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	22.3	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		
0630	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		
0645	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	19.5	-	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1		
0700	5	4	0	0	0	0	0	0	0	0	0	0	0	0	1	19.4	-	0	0	1	2	1	1	0	0	0	0	0	0	0	0	2		
0715	8	7	0	0	0	0	0	0	0	0	0	0	0	0	1	16.3	-	0	1	2	3	2	0	0	0	0	0	0	0	0	0	2		
0730	15	11	0	1	0	0	0	0	0	0	0	0	0	1	2	18.9	21.2	0	0	1	9	4	1	0	0	0	0	0	0	0	0	5		
0745	11	8	0	2	0	0	0	0	0	0	0	0	0	0	1	18.5	22.9	0	0	3	4	4	0	0	0	0	0	0	0	0	0	4		
0800	15	13	0	2	0	0	0	0	0	0	0	0	0	0	0	20.1	22.9	0	0	1	5	9	0	0	0	0	0	0	0	0	0	9		
0815	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	16.6	19.3	0	1	3	14	1	0	0	0	0	0	0	0	0	0	1		
0830	24	21	0	0	2	0	0	0	0	0	0	0	0	0	1	17.2	20.9	0	2	3	12	7	0	0	0	0	0	0	0	0	0	7		
0845	17	15	0	1	0	0	0	0	0	0	0	0	0	0	1	18.7	22.1	0	0	3	7	7	0	0	0	0	0	0	0	0	0	7		
0900	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	17.3	19.6	0	0	3	8	1	0	0	0	0	0	0	0	0	0	1		
0915	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	-	0	0	1	4	5	0	0	0	0	0	0	0	0	0	5		
0930	6	5	0	0	0	0	0	0	0	0	0	0	0	0	1	18.9	-	0	0	1	2	2	1	0	0	0	0	0	0	0	0	3		
0945	5	2	0	2	0	0	0	0	0	0	0	0	0	0	0	18	-	0	0	0	4	0	1	0	0	0	0	0	0	0	0	1		
1000	8	6	0	0	0	0	0	0	0	0	0	0	0	0	2	15.4	-	0	2	1	4	1	0	0	0	0	0	0	0	0	0	1		
1015	13	10	0	3	0	0	0	0	0	0	0	0	0	0	0	18.4	22.9	0	0	2	7	3	1	0	0	0	0	0	0	0	0	4		
1030	9	8	0	1	0	0	0	0	0	0	0	0	0	0	0	17.5	-	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0		
1045	11	8	0	1	1	0	0	0	0	0	0	0	0	0	1	20.2	24.7	0	0	1	4	5	1	0	0	0	0	0	0	0	0	6		
1100	13	9	0	4	0	0	0	0	0	0	0	0	0	0	0	18.5	24.4	0	0	3	5	5	0	0	0	0	0	0	0	0	0	5		
1115	10	6	0	3	0	0	0	0	0	0	0	0	0	0	1	17.5	-	0	0	2	6	2	0	0	0	0	0	0	0	0	0	2		
1130	13	9	0	2	1	0	0	0	0	0	0	0	0	1	0	18.3	22.3	0	1	1	6	5	0	0	0	0	0	0	0	0	0	5		
1145	16	14	0	2	0	0	0	0	0	0	0	0	0	0	0	19.4	22.8	0	0	1	8	7	0	0	0	0	0	0	0	0	0	7		
1200	6	4	0	0	1	0	0	0	0	0	0	0	0	0	1	17.4	-	0	0	1	4	1	0	0	0	0	0	0	0	0	0	1		
1215	17	14	0	2	1	0	0	0	0	0	0	0	0	0	0	16.1	20	0	2	3	10	2	0	0	0	0	0	0	0	0	0	2		
1230	15	9	0	4	0	0	0	0	0	0	0	0	0	2	0	20.6	24	0	0	0	5	10	0	0	0	0	0	0	0	0	0	10		
1245	12	10	0	1	0	0	0	0	0	0	0	0	0	0	1	19.9	23.9	0	1	1	3	6	1	0	0	0	0	0	0	0	0	7		
1300	10	9	0	1	0	0	0	0	0	0	0	0	0	0	0	18.4	-	0	0	1	7	2	0	0	0	0	0	0	0	0	0	2		
1315	12	9	0	0	0	0	0	0	0	0	0	0	0	1	2	19.1	24.5	0	1	2	3	6	0	0	0	0	0	0	0	0	0	6		
1330	16	12	0	1	0	0	0	0	0	0	0	0	0	1	2	16.6	22.8	0	1	4	8	3	0	0	0	0	0	0	0	0	0	3		
1345	12	7	0	2	0	0	0	0	0	0	0	0	0	1	2	18.2	22.5	0	0	2	6	4	0	0	0	0	0	0	0	0	0	4		
1400	11	8	0																															



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 2
 Location Name: Whitton Dene
 Direction: AB (Northbound)

01 July 2022

Time Period	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Number of vehicles exceeding PSL 20
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0015	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.7	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
0030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0045	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	16.3	-	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	21.8	-	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	
0115	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.6	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0130	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
0145	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	14.5	-	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0200	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.8	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0215	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.5	-	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
0230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.7	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0330	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.1	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0415	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	25	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
0515	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23	-	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
0530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0545	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11.1	-	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
0600	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0615	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0630	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.9	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0645	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.3	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
0700	7	2	0	3	0	0	0	0	0	0	0	0	0	0	2	16	-	0	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	
0715	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
0730	8	7	0	1	0	0	0	0	0	0	0	0	0	0	0	19.4	-	0	0	2	5	3	0	0	0	0	0	0	0	0	0	0	0	
0745	8	5	0	1	0	0	0	0	0	0	0	0	0	0	2	18.3	-	0	0	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0
0800	16	12	0	4	0	0	0	0	0	0	0	0	0	0	0	19.1	24.5	0	1	0	8	5	2	0	0	0	0	0	0	0	0	0	0	
0815	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	19.7	21.6	0	0	0	6	5	0	0	0	0	0	0	0	0	0	0	0	
0830	9	8	0	1	0	0	0	0	0	0	0	0	0	0	0	17.6	-	0	0	2	5	2	0	0	0	0	0	0	0	0	0	0	0	
0845	31	27	0	3	0	0	0	0	0	0	0	0	0	0	1	17.1	20.5	0	1	8	16	6	0	0	0	0	0	0	0	0	0	0	0	
0900	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	23.3	0	0	3	6	4	0	0	0	0	0	0	0	0	0	0	0	
0915	8	5	0	2	0	0	0	0	0	0	0	0	0	0	1	17.9	-	0	0	3	2	2	1	0	0	0	0	0	0	0	0	0	0	
0930	7	6	0	0	0	0	0	0	0	0	0	0	0	0	1	16.7	-	0	1	3	0	2	1	0	0	0	0	0	0	0	0	0	0	
0945	12	10	0	1	0	0	0	0	0	0	0	0	0	0	0	19.9	23.5	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	
1000	10	7	0	2	0	0	0	0	0	0	0	0	0	1	0	18.2	-	0	0	4	4	1	0	1	0	0	0	0	0	0	0	0	0	
1015	6	4	0	1	0	0	0	0	0	0	0	0	0	0	1	15.4	-	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	
1030	11	8	0	0	0	0	0	0	0	0	0	0	0	3	0	21.6	27.9	0	0	1	4	3	3	0	0	0	0	0	0	0	0	0	0	
1045	13	11	0	1	0	0	0	0	0	0	0	0	0	0	1	17.4	20.7	0	1	2	7	3	0	0	0	0	0	0	0	0	0	0	0	
1100	5	4	0	0	0	0	0	0	0	0	0	0	0	1	0	20.3	-	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	
1115	5	3	0	2	0	0	0	0	0	0	0	0	0	0	0	15.4	-	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	
1130	5	4	0	1	0	0	0	0	0	0	0	0	0	0	0	19.4	-	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	
1145	11	8	0	1	0	0	0	0	0	0	0	0	0	1	1	17.5	23.8	0	2	3	2	4	0	0	0	0	0	0	0	0	0	0	0	
1200	15	14	0	1	0	0	0	0	0	0	0	0	0	0	0	20.4	22.1	0	0	0	4	11	0	0	0	0	0	0	0	0	0	0	0	
1215	8	5	0	1	0	0	0	0	0	0	0	0	0	0	2	16.3	-	0	2	1	1	4	0	0	0	0	0	0	0	0	0	0	0	
1230	9	6	0	2	0	0	0	0	0	0	0	0	0	0	1	18.6	-	0	1	1	2	5	0	0	0	0	0	0	0	0	0	0	0	
1245	12	9	0	2	0	0	0	0	0	0	0	0	0	0	1	16.3	22.4	0	2	3	3	4	0	0	0	0	0	0	0	0	0	0	0	
1300	10	8	0	1	0	0	0	0	0	0	0	0	0	1	0	19.3	-	0	1	1	3	4	1	0	0	0	0	0	0	0	0	0	0	
1315	12	8	0	2	0	0	0	0	0	0	0	0	0	2	0	20.6	23.4	0	0	0	5	7	0	0	0	0	0	0	0	0	0	0	0	
1330	17	10	0	3	0	0	0	0	0	0	0	0	0	1	3	19.1	25	0	3	0	5	7	2											



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 2
 Location Name: Whitton Dene
 Direction: AB (Northbound) + BA (Southbound)

LDV 1260
 HDV 161
 HDV% 13%

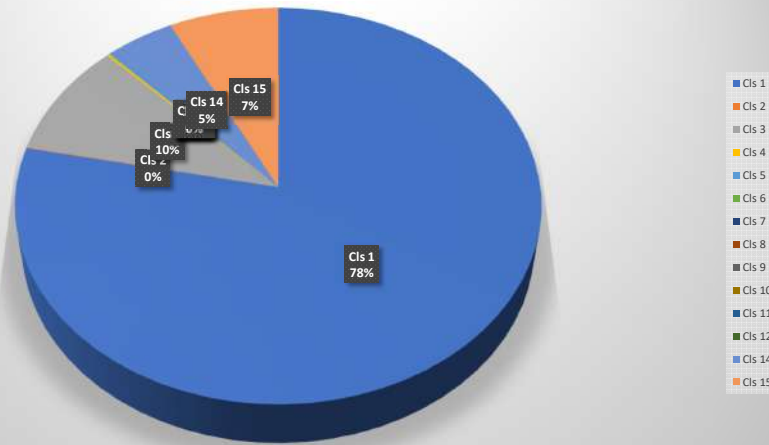
Direction	Total No. of Vehicles	No. of Vehicles exceeding PSL (20mph)	No. of Vehicles exceeding PSL %
Direction AB - Northbound	5152	1891	37%
Direction BA - Southbound	5547	2083	38%

Direction - AB	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15
Total Vehicle Proportion	4031	3	485	9	11	0	0	0	1	0	0	0	232	380
Vehicle Proportion - %	78.2%	0.1%	9.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	7.4%

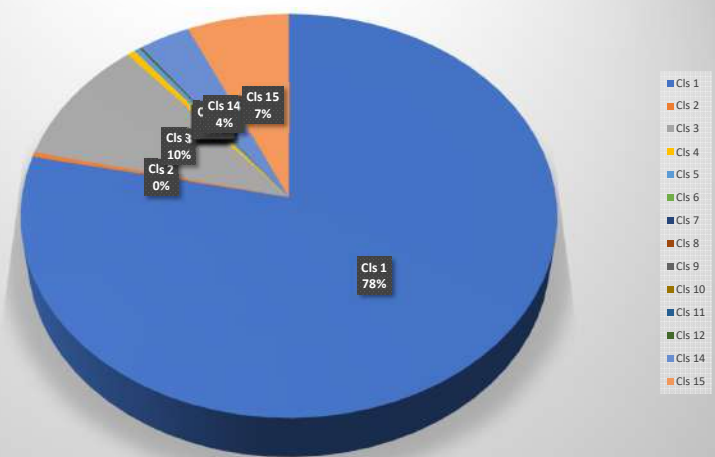
Direction - BA	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15
Total Vehicle Proportion	650	89	561	29	20	3	4	1	1	1	0	0	189	374
Vehicle Proportion - %	4343	21	10.1%	0.5%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	6.7%

Average Daily Across Week
 1196 3 149 5 4 0 1 0 0 0 0 0 0 60 108

Direction AB - Northbound



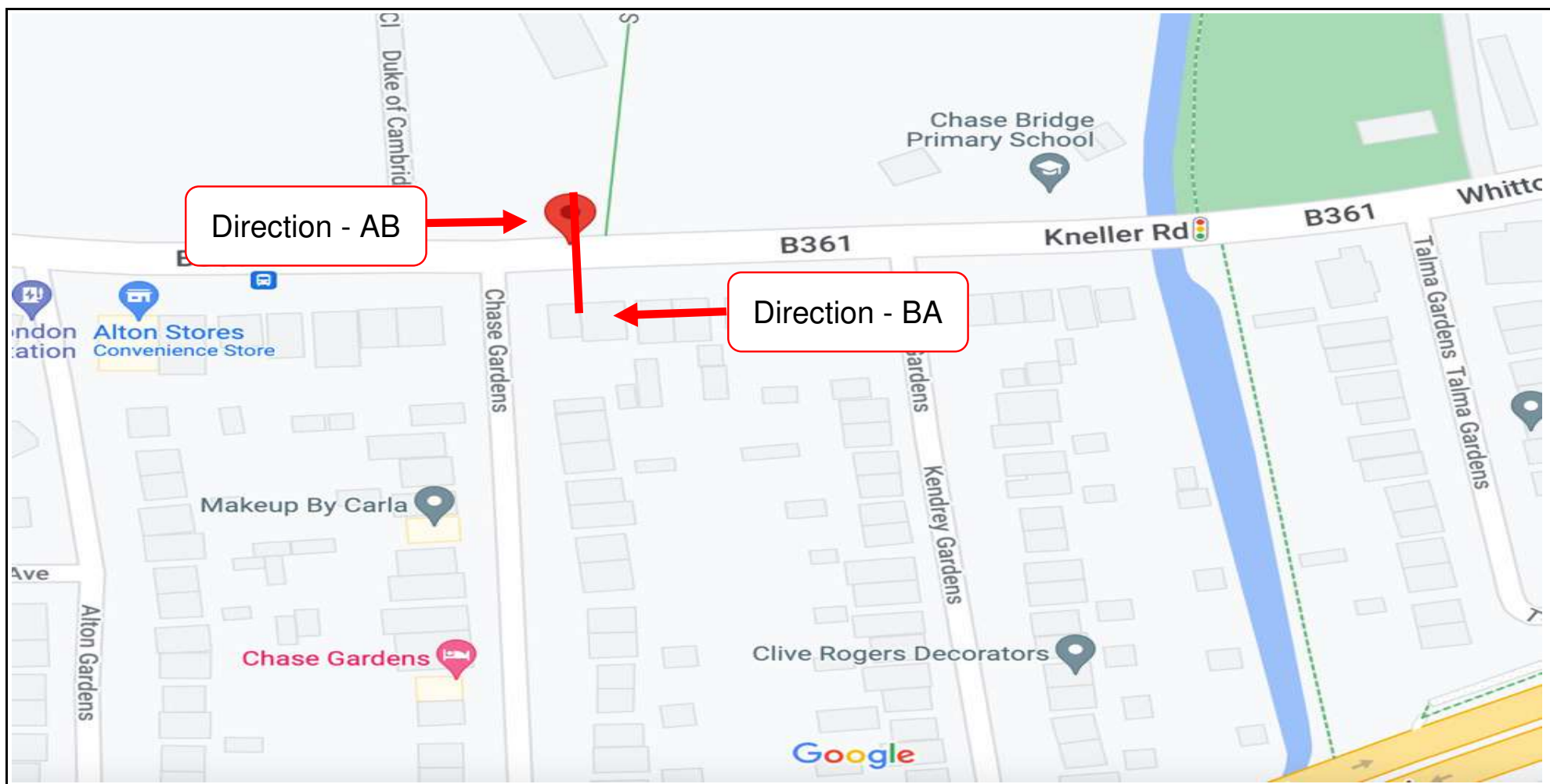
Direction BA - Southbound



Vehicle Classification - VRX

Cls 1	SV	2 axles	Short vehicle car or light Van
Cls 2	SVT	3,4 or 5 axles	Short vehicle towing trailer, caravan, boat, etc
Cls 3	TB2	2 axles	Two-axle truck or bus
Cls 4	TB3	3 axles	Three-axle truck or bus
Cls 5	T4	> 4 axles	Four-axle truck
Cls 6	ART3	3 axles	Three-axle articulated or rigid vehicle and trailer
Cls 7	ART4	4 axles	Four-axle articulated or rigid vehicle and trailer
Cls 8	ART5	5 axles	Five-axle articulated or rigid vehicle and trailer
Cls 9	RT6	>6 axles	Six or more axle articulated or rigid vehicle and trailer
Cls 10	BD	>6 axles	Double or heavy truck and trailer
Cls 11	DRT	>6 axles	Double road train or heavy truck and two trailers
Cls 12	TRT	>6 axles	Triple road train or heavy truck and three or more trailers
Cls 14	M/C	2 axles	Motorcycles
Cls 15	Cycle	2 axles	Bicycles

Job ID	Project Name	Site Location	Google Coordinates	Survey Dates	Survey Day	Survey Timings
IW0056	Kneller Hall, Twickenham	Kneller Road	51.453768, -0.346368	25/06/2022 - 01/07/2022	Saturday-Friday	0000-0000hrs on each day





Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound)

25 June 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Number of vehicles exceeding PSL 20		
Period		1	2	3	4	5	6	7	8	9	10	11	12	14	15		85	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80									
0000	24	22	0	2	0	0	0	0	0	0	0	0	0	0	0	28.7	34.1	0	0	0	0	2	6	9	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
0015	21	17	0	3	0	0	0	0	0	0	0	0	0	1	0	28.5	32.3	0	0	0	0	0	5	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
0030	20	15	0	5	0	0	0	0	0	0	0	0	0	0	0	28.7	31.6	0	0	0	0	1	3	6	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
0045	16	12	0	4	0	0	0	0	0	0	0	0	0	0	0	30.8	42	0	0	0	0	1	3	3	5	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
0100	16	12	0	4	0	0	0	0	0	0	0	0	0	0	0	28.5	33.7	0	0	0	0	0	3	7	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
0115	21	19	0	2	0	0	0	0	0	0	0	0	0	0	0	31	38	0	0	0	0	1	2	9	2	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
0130	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	28.7	-	0	0	0	0	1	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
0145	11	9	0	2	0	0	0	0	0	0	0	0	0	0	0	34.3	45.2	0	0	0	0	0	1	2	4	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	11		
0200	14	11	0	3	0	0	0	0	0	0	0	0	0	0	0	29.3	35.3	0	0	0	0	1	1	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
0215	10	9	0	1	0	0	0	0	0	0	0	0	0	0	0	29.1	-	0	0	1	0	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
0230	9	4	0	5	0	0	0	0	0	0	0	0	0	0	0	33.3	-	0	0	0	0	0	0	3	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
0245	8	6	0	2	0	0	0	0	0	0	0	0	0	0	0	31.3	-	0	0	0	0	1	1	1	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	
0300	8	3	0	5	0	0	0	0	0	0	0	0	0	0	0	32.4	-	0	0	0	0	0	0	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
0315	12	9	0	3	0	0	0	0	0	0	0	0	0	0	0	29.4	34	0	0	0	0	0	2	4	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
0330	8	4	0	2	0	0	0	0	0	0	0	0	0	2	0	27.2	-	0	0	1	1	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
0345	9	7	0	2	0	0	0	0	0	0	0	0	0	0	0	26.7	-	0	0	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
0400	5	4	0	1	0	0	0	0	0	0	0	0	0	0	0	32.7	-	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
0415	5	1	0	4	0	0	0	0	0	0	0	0	0	0	0	33	-	0	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
0430	7	5	0	2	0	0	0	0	0	0	0	0	0	0	0	30.5	-	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
0445	10	8	0	2	0	0	0	0	0	0	0	0	0	0	0	31.3	-	0	0	0	0	0	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
0500	12	9	0	3	0	0	0	0	0	0	0	0	0	0	0	32.4	35.8	0	0	0	0	0	0	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
0515	19	12	0	7	0	0	0	0	0	0	0	0	0	0	0	30.7	37.1	0	0	0	0	1	2	6	5	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
0530	13	10	0	2	0	0	0	0	0	0	0	0	0	1	0	28.8	33	0	0	0	0	0	3	6	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
0545	17	13	0	1	0	0	0	0	0	0	0	0	0	0	3	29.1	34.7	0	0	1	2	2	3	7	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	14	
0600	24	8	0	12	0	0	0	0	0	0	0	0	0	2	2	30.5	36	0	0	0	0	1	3	9	7	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	23	
0615	31	22	0	7	0	0	0	0	0	0	0	0	0	2	0	29	34.1	0	0	0	0	1	5	14	7	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	30	
0630	34	26	0	6	1	0	0	0	0	0	0	0	0	1	0	30	36.4	0	0	0	0	1	4	17	7	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
0645	34	27	0	4	0	0	0	0	1	0	0	0	0	0	2	28.9	33.8	0	0	0	0	2	9	9	11	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
0700	37	30	0	4	0	0	0	0	0	0	0	0	0	2	1	29.5	33.3	0	0	0	0	0	7	11	15	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
0715	37	28	0	4	0	0	0	0	0	0	0	0	0	2	3	26.6	32.2	0	0	1	5	7	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
0730	53	41	0	9	0	1	0	0	0	0	0	0	0	1	1	27.4	33.8	0	0	0	0	12	9	16	10	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	41	
0745	58	45	0	7	0	0	0	0	0	0	0	0	0	5	1	28.4	36.2	0	0	1	6	15	9	17	8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	
0800	54	40	1	7	0	0	0	0	1	0	0	0	0	2	3	25.2	31.3	0	0	1	7	16	21	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
0815	77	66	0	8	0	0	0	0	1	0	0	0	0	1	1	24.6	29.9	0	0	1	12	37	18	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	
0830	85	64	0	15	0	0	0	0	0	1	0	0	0	2	3	26.6	32	0	0	1	10	22	30	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	
0845	90	79	1	4	0	1	0	1	0	0	0	0	0	2	3	25.9	30.9	0	0	2	9	22	36	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
0900	78	65	1	3	0	0	0	0	0	0	0	0	0	3	6	26	31.8	0	0	2	13	16	32	11	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	
0915	93	75	2	13	0	0	0	0	0	0	0	0	0	2	1	24.8	29.3	0	0	1	13	38	32	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	
0930	107	92	0	12	0	0	0	0	0	0	0	0	0	1	2	24.7	30.4	0	0	7	8	39	36	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	
0945	85	71	0	8	0	0	0	0	0	0	0	0	0	5	1	26	30.7	0	0	2	6	31	32	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77
1000	73	58	0	10	0	0	0	0	0	1	0	0	0	2	2	25.3	28.6	0	0	2	6	26	33	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	
1015	67	61	0	3	0	0	0	0	0	0	0	0	0	0	3	25.4	28.7	0	0	2	6	21	31	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	
1030	101	84	2																																								



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound)

26 June 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Number of vehicles exceeding PSL 20
Period		1	2	3	4	5	6	7	8	9	10	11	12	14	15	85	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
0000	22	18	0	2	0	0	0	0	0	0	0	0	0	2	0	30.6	35.6	0	0	0	0	5	4	9	3	1	0	0	0	0	0	0	22
0015	28	25	0	2	0	0	0	0	0	0	0	0	0	0	1	29.7	34.6	0	0	0	0	2	14	9	2	0	1	0	0	0	0	0	28
0030	24	21	0	3	0	0	0	0	0	0	0	0	0	0	0	28.9	32.6	0	0	0	0	4	14	4	2	0	0	0	0	0	0	0	24
0045	23	22	0	1	0	0	0	0	0	0	0	0	0	0	0	26.8	31.9	0	0	0	3	6	8	6	0	0	0	0	0	0	0	0	23
0100	22	17	0	4	0	0	0	0	0	0	0	0	0	0	0	29.7	34.3	0	0	0	0	5	7	8	2	0	0	0	0	0	0	0	22
0115	19	16	0	1	0	0	0	0	0	0	0	0	0	2	0	31.1	35.2	0	0	0	0	1	10	5	2	0	1	0	0	0	0	0	19
0130	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	26.7	29.5	0	0	0	0	1	2	10	1	0	0	0	0	0	0	0	14
0145	5	4	0	1	0	0	0	0	0	0	0	0	0	0	0	26.5	-	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	5
0200	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	27.4	-	0	0	0	2	0	1	4	1	0	0	0	0	0	0	0	8
0215	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	28.4	33	0	0	0	1	3	3	8	1	0	0	0	0	0	0	0	16
0230	9	8	0	1	0	0	0	0	0	0	0	0	0	0	0	30.6	-	0	0	0	0	2	3	3	0	1	0	0	0	0	0	0	9
0245	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	31.5	-	0	0	0	0	1	2	2	0	1	0	0	0	0	0	0	6
0300	8	6	0	2	0	0	0	0	0	0	0	0	0	0	0	29.7	-	0	0	0	1	1	2	2	2	0	0	0	0	0	0	0	7
0315	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	29	-	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	5
0330	7	6	0	1	0	0	0	0	0	0	0	0	0	0	0	28.7	-	0	0	0	0	1	4	1	1	0	0	0	0	0	0	0	7
0345	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	35.2	-	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	4
0400	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	29.2	-	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
0415	4	3	0	0	0	0	0	0	0	0	0	0	0	1	0	21	-	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	4
0430	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	26.9	-	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4
0445	5	4	0	1	0	0	0	0	0	0	0	0	0	0	0	35	-	0	0	0	0	1	0	2	0	1	0	1	0	0	0	0	5
0500	7	4	0	2	0	0	0	0	0	0	0	0	0	0	1	29.2	-	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0	6
0515	7	6	0	1	0	0	0	0	0	0	0	0	0	0	0	33.9	-	0	0	0	0	0	2	2	1	2	0	0	0	0	0	0	7
0530	13	9	0	3	0	0	0	0	0	0	0	0	0	1	0	31.5	40.1	0	0	0	0	2	4	3	2	2	0	0	0	0	0	0	13
0545	16	14	0	1	0	0	0	0	0	0	0	0	0	0	1	31.9	40	0	0	0	1	0	5	7	1	1	0	1	0	0	0	0	15
0600	10	8	0	1	0	0	0	0	0	0	0	0	0	0	1	29.5	-	0	0	0	0	3	1	5	1	0	0	0	0	0	0	0	10
0615	19	11	0	4	0	0	0	0	0	0	0	0	0	2	2	28.6	35	0	0	2	0	3	6	5	1	1	1	0	0	0	0	0	17
0630	15	11	0	3	0	0	0	0	0	0	0	0	0	1	0	27.4	35.1	0	0	1	1	3	5	2	3	0	0	0	0	0	0	0	13
0645	16	12	0	2	0	0	0	0	0	0	0	0	0	1	1	29.3	36.1	0	0	0	1	3	5	4	3	0	0	0	0	0	0	0	15
0700	24	17	0	5	0	0	0	0	0	0	0	0	0	1	1	27.4	32.4	0	0	1	1	4	12	5	1	0	0	0	0	0	0	0	22
0715	29	22	0	1	0	0	0	0	0	0	0	0	0	3	3	25.3	32	0	0	3	4	7	7	6	1	1	0	0	0	0	0	0	22
0730	25	16	0	6	0	0	0	0	0	0	0	0	0	0	2	24.5	31.6	0	0	0	10	3	8	2	2	0	0	0	0	0	0	0	15
0745	31	24	1	2	0	0	0	0	0	0	0	0	0	3	1	29.2	34	0	0	0	1	2	19	5	3	0	1	0	0	0	0	0	30
0800	34	29	0	3	0	0	0	0	0	0	0	0	0	0	2	27.7	32.2	0	0	0	2	6	17	8	1	0	0	0	0	0	0	0	32
0815	40	30	0	6	0	0	0	0	0	0	0	0	0	3	1	26.8	32.8	0	0	0	6	12	13	5	1	2	0	1	0	0	0	0	34
0830	52	41	0	7	0	0	0	0	0	0	0	0	0	1	3	26.6	31.3	0	0	1	5	12	24	7	3	0	0	0	0	0	0	0	46
0845	36	27	1	5	0	0	0	0	0	0	0	0	0	3	0	28.1	34.9	0	0	0	0	11	15	5	4	1	0	0	0	0	0	0	36
0900	52	49	0	1	0	0	0	0	0	0	0	0	0	1	1	26.6	30.8	0	0	0	3	19	21	7	2	0	0	0	0	0	0	0	49
0915	72	64	0	6	0	0	0	0	0	0	0	0	0	1	1	26.2	30.8	0	0	0	6	26	26	12	1	0	0	1	0	0	0	0	66
0930	68	62	0	3	0	0	0	0	0	0	0	0	0	0	3	26.3	30.4	0	0	2	4	19	33	8	1	1	0	0	0	0	0	0	62
0945	74	63	0	8	0	0	0	0	0	0	0	0	0	2	1	25.3	30.8	0	0	1	9	24	26	12	0	2	0	0	0	0	0	0	64
1000	84	71	0	7	0	0	0	0	0	0	0	0	0	4	1	26.4	31.1	0	0	1	8	23	33	15	3	0	1	0	0	0	0	0	75
1015	92	77	1	7	0	0	0	0	0	0	0	0	0	5	2	25.4	29.4	0	0	2	6	31	45	7	1	0	0	0	0	0	0	0	84
1030	81	68	1	8	0	0	0	0	0	0	0	0	0	1	3	25.3	30.2	0	0	0	13	27	29	8	3	1	0	0	0	0	0	0	68
1045	96	85	0	6	0	0	0	0	0	0	0	0	0	3	2	24.6	30.1	0	0	2	17	33	28	16	0	0	0	0	0	0	0	0	77
1100	82	77	1	3	0	0	0	0	0	0	0	0	0	0	1	25.2	30	0	0	0	10	31	29	12	0	0	0	0	0	0	0	0	72
1115	71	60	2	6	0	0	0	0	0	0	0	0	0	3	0	25.1	30	0	0	0	11	27	23	9	1	0	0	0	0	0	0	0	60
1130	93	84	1	3	0	0	0	0	0	0	0	0	0	2	3	25.7	29.2	0	0	1	9	26	46	9	2	0	0	0	0	0	0	0	83
1145	120	111	0	6	0	0	0	0	0	0	0	0	0	1	2	24.5	30.2	0	0	1	28	32	39	18	2	0	0	0	0	0	0	0	91
1200	87	79	0	1	0	0	0	0	0	0	0	0	0	6	1	26.1	31.1	0	0	0	10	21	37	17	2	0	0	0	0	0	0	0	77
1215	94	88	0	3	0	0	0	0	0	0	0	0	0	3	0	25.4	30.7	0	0	0	6	47	26	11	4	0	0	0	0	0	0	0	88
1230	95	90	0	3	0	0	0	0	0	0	0	0	0	1	1	25.4	29.9	0	0	1	11	32	37	14	0	0	0	0	0	0	0	0	83
1245	87	79	0	4	0	0	0	0	0	0	0	0	0	3	1	25.9	31.6	0	0	2	9	22	37	15	2	0	0	0	0	0	0	0	76
1300	100	94	1	2	0	0	0	0	0	0	0	0	0	1	2	23.8	27.7	0	0	1	10	55	31	3	0	0	0	0	0	0	0	0	89



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound)

2230	24	19	0	3	0	0	0	0	0	0	0	0	0	1	1	27.9	32.4	0	0	0	0	6	10	7	0	1	0	0	0	0	0	0	0	0	0	0	24	
2245	23	21	0	2	0	0	0	0	0	0	0	0	0	0	0	28.6	34.2	0	0	0	1	5	10	4	2	1	0	0	0	0	0	0	0	0	0	0	22	
2300	16	14	0	2	0	0	0	0	0	0	0	0	0	0	0	27.7	34.4	0	0	0	1	3	7	3	2	0	0	0	0	0	0	0	0	0	0	0	15	
2315	27	20	0	5	0	0	0	0	0	0	0	0	0	1	1	28.2	33.7	0	0	0	2	5	9	10	1	0	0	0	0	0	0	0	0	0	0	0	25	
2330	18	12	0	6	0	0	0	0	0	0	0	0	0	0	0	31.4	37.5	0	0	0	0	2	6	7	2	0	1	0	0	0	0	0	0	0	0	0	18	
2345	12	8	0	3	0	0	0	0	0	0	0	0	0	1	0	28.8	36.1	0	0	1	0	2	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	11
07-19	3331	2894	20	192	0	3	0	3	0	0	0	0	0	149	70	26	30.9	0	0	41	309	1091	1235	520	96	27	6	5	0	0	1	0	0	0	2981			
06-22	3908	3354	27	244	0	4	0	3	0	0	0	0	0	188	88	26.2	31.1	0	2	48	352	1233	1446	646	125	34	11	7	1	2	1	0	0	3506				
06-00	4094	3500	28	274	0	4	0	3	0	0	0	0	0	194	91	26.3	31.2	0	2	49	363	1282	1513	691	134	36	13	7	1	2	1	0	0	3680				
00-00	4373	3740	28	303	0	4	0	3	0	0	0	0	0	201	94	26.5	31.5	0	2	50	373	1324	1619	775	155	47	15	9	1	2	1	0	0	3948				



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound)

27 June 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Number of vehicles exceeding PSL 20
Period		1	2	3	4	5	6	7	8	9	10	11	12	14	15		85	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80			
0000	20	11	0	9	0	0	0	0	0	0	0	0	0	0	28.1	33.9	0	0	0	0	1	6	6	5	2	0	0	0	0	0	0	0	0	0	19		
0015	10	9	0	1	0	0	0	0	0	0	0	0	0	0	30.5	-	0	0	0	0	0	1	2	6	1	0	0	0	0	0	0	0	0	0	10		
0030	6	4	0	1	0	0	0	0	0	0	0	0	0	1	31.4	-	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6		
0045	8	5	0	2	0	0	0	0	0	0	0	0	0	1	32.8	-	0	0	0	0	0	0	2	5	0	1	0	0	0	0	0	0	0	0	8		
0100	5	2	0	2	1	0	0	0	0	0	0	0	0	0	31.5	-	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	5		
0115	3	3	0	0	0	0	0	0	0	0	0	0	0	0	25.5	-	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	2		
0130	4	2	0	2	0	0	0	0	0	0	0	0	0	0	31.2	-	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4		
0145	2	2	0	0	0	0	0	0	0	0	0	0	0	0	30.3	-	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2		
0200	2	1	0	1	0	0	0	0	0	0	0	0	0	0	23.1	-	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2		
0215	3	1	0	1	0	0	0	0	0	0	0	0	0	0	28.2	-	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2		
0230	5	1	0	3	0	0	0	0	0	0	0	0	1	0	36.3	-	0	0	0	0	0	0	1	3	0	0	0	1	0	0	0	0	0	0	5		
0245	5	3	0	2	0	0	0	0	0	0	0	0	0	0	28.8	-	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	5		
0300	5	2	0	3	0	0	0	0	0	0	0	0	0	0	28.6	-	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	5		
0315	6	5	0	0	0	0	0	0	0	0	0	0	0	1	30.8	-	0	0	0	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	6		
0330	3	1	0	2	0	0	0	0	0	0	0	0	0	0	31.5	-	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3		
0345	4	4	0	0	0	0	0	0	0	0	0	0	0	0	29.3	-	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4		
0400	2	0	0	2	0	0	0	0	0	0	0	0	0	0	37.2	-	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2		
0415	6	6	0	0	0	0	0	0	0	0	0	0	0	0	28.7	-	0	0	0	0	1	0	3	1	1	0	0	0	0	0	0	0	0	0	5		
0430	12	8	0	4	0	0	0	0	0	0	0	0	0	0	32.3	39.3	0	0	0	0	0	0	5	4	2	0	1	0	0	0	0	0	0	0	12		
0445	11	7	0	2	0	0	0	0	0	0	0	0	0	1	29	35.1	0	0	0	0	1	2	2	5	0	1	0	0	0	0	0	0	0	0	10		
0500	11	6	0	4	0	0	0	0	0	0	0	0	0	1	32	41.5	0	0	0	0	0	2	3	1	3	2	0	0	0	0	0	0	0	0	11		
0515	17	10	0	4	0	0	0	0	0	0	0	0	0	1	26.6	33.4	0	0	1	1	4	6	3	2	0	0	0	0	0	0	0	0	0	0	15		
0530	22	14	0	6	0	0	0	0	0	0	0	0	0	2	30.4	38.6	0	0	0	0	1	2	10	3	5	1	0	0	0	0	0	0	0	0	21		
0545	40	31	0	4	0	0	0	0	0	0	0	0	0	2	29.7	36.1	0	0	0	0	2	8	11	12	5	1	0	1	0	0	0	0	0	0	38		
0600	56	40	0	7	0	0	0	0	0	0	0	0	0	4	27.3	32.6	0	0	0	2	4	14	22	8	4	1	1	0	0	0	0	0	0	0	50		
0615	52	44	0	6	0	0	0	0	0	0	0	0	0	2	29.7	35.3	0	0	0	0	1	12	13	18	5	3	0	0	0	0	0	0	0	0	51		
0630	69	56	0	9	0	0	0	0	0	0	0	0	0	2	26.4	32.8	0	0	0	0	8	23	22	14	2	0	0	0	0	0	0	0	0	0	61		
0645	68	56	0	9	0	1	0	0	0	0	0	0	1	0	28.8	35	0	0	1	1	13	33	10	8	2	0	0	0	0	0	0	0	0	0	66		
0700	87	67	0	13	1	0	0	0	0	0	0	0	1	5	26.9	31.7	0	0	3	5	22	34	19	3	1	0	0	0	0	0	0	0	0	0	79		
0715	111	83	0	21	1	1	0	0	0	0	0	0	3	3	26.1	30.5	0	0	1	5	38	47	17	3	0	0	0	0	0	0	0	0	0	0	105		
0730	103	75	1	15	0	1	0	0	1	0	0	0	2	8	25.4	30.3	0	0	2	8	21	29	35	12	3	0	0	0	0	0	0	0	0	0	80		
0745	89	69	0	13	0	0	0	0	0	0	0	0	2	5	24.4	29.7	0	1	5	8	33	31	9	2	0	0	0	0	0	0	0	0	0	0	75		
0800	102	87	0	10	1	0	0	1	0	0	0	0	2	2	23.1	28.6	0	5	3	17	36	31	7	3	0	0	0	0	0	0	0	0	0	0	77		
0815	112	90	0	13	0	0	1	2	1	0	0	0	3	2	21.5	27.4	0	0	7	46	32	21	5	0	0	0	1	0	0	0	0	0	0	0	59		
0830	138	117	0	6	2	3	0	1	0	0	0	0	3	6	19.2	25.1	0	7	17	55	38	19	2	0	0	0	0	0	0	0	0	0	0	0	0	59	
0845	126	100	2	14	0	0	0	0	0	0	0	0	3	7	19.4	24.2	0	1	18	48	45	14	0	0	0	0	0	0	0	0	0	0	0	0	0	59	
0900	103	84	0	13	0	0	0	0	0	1	0	0	0	1	22.5	27	0	0	3	31	43	23	2	1	0	0	0	0	0	0	0	0	0	0	0	69	
0915	75	56	0	10	0	0	0	0	0	1	0	0	0	5	26.4	31.4	0	0	1	5	23	30	11	4	1	0	0	0	0	0	0	0	0	0	69		
0930	91	71	0	15	0	0	0	0	0	0	0	0	0	3	24.8	29.7	0	0	0	13	33	34	10	1	0	0	0	0	0	0	0	0	0	0	0	78	
0945	80	65	0	13	0	0	0	0	0	0	0	0	0	2	24.5	29.4	0	0	1	10	36	24	8	1	0	0	0	0	0	0	0	0	0	0	0	69	
1000	87	65	0	15	1	0	1	0	0	0	0	0	0	2	24	28.7	0	0	2	14	40	23	6	1	1	0	0	0	0	0	0	0	0	0	0	71	
1015	89	72	0	13	0	0	0	1	0	0	0	0	0	1	24.2	29.6	0	0	0	17	38	23	9	2	0	0	0	0	0	0	0	0	0	0	0	72	
1030	69	59	0	8	0	0	1	0	0	0	0	0	0	1	25.2	29.5	0	0	0	6	27	29	6	1	0	0	0	0	0	0	0	0	0	0	0	63	
1045	71	59	0	10	0	0	0	0	1	0	0	0	0	1	25	30.6	0	0	0	10	29	18	11	1	2	0	0	0	0	0	0	0	0	0	0	61	
1100	105	82	1	17	0	0	0	3	0	0	0	0	0	2	24	27.9	0	0	0	12	57	28	5	3	0	0	0	0	0	0	0	0	0	0	0	93	
1115	89	64	0	17	1	0	0	0	2	0	0	0	3	2	23	26.8	0	0	2	15	42	27	2	1	0	0	0	0	0	0	0	0	0	0	0	72	
1130	67	45	0	11	0	0	0	0	4	1	0	0	4	1	23.3	27.6	0	0	2	9	37	12	7	0	0	0	0	0	0	0	0	0	0	0	0	56	
1145	68	56	2	9	1	0	0	0	0	0	0	0	0	0	24	29	0	0	0	19	23	18	5	1	2	0	0	0	0	0	0	0	0	0	0	49	
1200	82	68	0	9	0	0	0	0	0	0	0	0	3	2	23.9	27.5	0	0	2	5	49	23	3	0	0	0	0	0	0	0	0	0	0	0	0	75	
1215	62	51	1	7	0	0	0	0	1	0	0	0	0	2	25.9	30.4	0	0	1	3	21	26	1														



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound)

28 June 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Number of vehicles exceeding PSL 20	
Period		1	2	3	4	5	6	7	8	9	10	11	12	14	15		85	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80				
0000	15	10	0	5	0	0	0	0	0	0	0	0	0	0	0	29.3	34.9	0	0	0	0	1	1	6	5	2	0	0	0	0	0	0	0	0	14			
0015	12	8	0	2	0	0	0	0	0	0	0	0	0	2	0	34.4	43.6	0	0	0	0	1	0	4	4	1	2	1	0	0	0	0	0	0	12			
0030	15	8	0	5	0	0	0	0	0	0	0	0	0	1	1	29.4	34.4	0	0	0	0	1	0	9	4	0	1	0	0	0	0	0	0	0	14			
0045	6	4	0	2	0	0	0	0	0	0	0	0	0	0	0	27	-	0	0	1	0	0	2	2	1	0	0	0	0	0	0	0	0	0	5			
0100	7	5	0	2	0	0	0	0	0	0	0	0	0	0	0	30.8	-	0	0	0	0	0	4	2	0	0	1	0	0	0	0	0	0	0	7			
0115	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	32.6	-	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2			
0130	4	1	0	2	0	0	0	0	0	0	0	0	0	0	1	24.9	-	0	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	3			
0145	8	6	0	1	0	0	0	0	0	0	0	0	0	1	0	32.8	-	0	0	0	0	0	0	4	1	1	1	1	0	0	0	0	0	0	8			
0200	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	30.4	-	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2			
0215	4	0	0	3	0	0	0	0	0	0	0	0	0	1	0	33.3	-	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	4			
0230	4	0	0	2	1	0	0	0	0	0	0	0	0	1	0	44.6	-	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	6			
0245	6	4	0	2	0	0	0	0	0	0	0	0	0	0	0	35.6	-	0	0	0	0	0	1	2	2	0	1	0	0	0	0	0	0	0	4			
0300	4	1	0	3	0	0	0	0	0	0	0	0	0	0	0	30.5	-	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4			
0315	4	2	0	2	0	0	0	0	0	0	0	0	0	0	0	26.8	-	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4		
0330	4	2	0	2	0	0	0	0	0	0	0	0	0	0	0	31.1	-	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4		
0345	9	3	0	6	0	0	0	0	0	0	0	0	0	0	0	34.7	-	0	0	0	0	0	0	1	5	2	1	0	0	0	0	0	0	0	0	9		
0400	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	28	-	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4		
0415	6	5	0	1	0	0	0	0	0	0	0	0	0	0	0	33.3	-	0	0	0	0	1	0	1	1	2	1	0	0	0	0	0	0	0	0	5		
0430	8	3	0	4	0	0	0	0	0	0	0	0	0	1	0	30.3	-	0	0	0	0	0	1	4	1	2	0	0	0	0	0	0	0	0	0	8		
0445	16	11	0	4	0	0	0	0	0	0	0	0	0	1	0	33.4	38.5	0	0	0	0	0	0	4	6	5	1	0	0	0	0	0	0	0	0	16		
0500	11	6	0	4	0	0	0	0	0	0	0	0	0	0	1	30.5	34.7	0	0	0	0	2	2	7	0	0	0	0	0	0	0	0	0	0	0	11		
0515	15	9	0	5	0	0	0	0	0	0	0	0	0	0	1	32.4	41.3	0	0	1	0	1	2	6	1	4	0	0	0	0	0	0	0	0	0	14		
0530	22	13	0	6	0	0	0	0	0	0	0	0	0	2	1	30.8	36.8	0	0	0	2	2	5	5	9	0	0	0	0	0	0	0	0	0	0	20		
0545	40	30	0	5	0	0	0	0	0	0	0	0	0	1	4	28.8	37	0	0	1	6	5	8	10	10	0	0	0	0	0	0	0	0	0	0	33		
0600	52	32	1	13	0	0	0	0	0	0	0	0	0	3	3	28.9	36.4	0	0	0	5	10	18	10	5	3	1	0	0	0	0	0	0	0	0	47		
0615	59	45	0	12	0	0	0	0	0	0	0	0	0	2	2	28	34.6	0	0	2	3	10	27	10	6	1	0	0	0	0	0	0	0	0	0	54		
0630	70	54	1	11	0	0	0	0	0	0	0	0	0	2	2	27.4	32.3	0	0	0	3	25	26	11	2	1	1	1	0	0	0	0	0	0	0	67		
0645	78	58	1	14	0	0	0	0	0	0	0	0	0	0	5	27.7	32.2	0	0	1	4	11	41	16	3	1	1	4	0	0	0	0	0	0	0	73		
0700	98	81	0	11	0	0	0	0	1	0	0	0	0	2	3	25.7	31.5	0	0	1	10	35	32	17	3	0	0	0	0	0	0	0	0	0	0	0	87	
0715	103	86	1	11	0	0	0	0	0	0	0	0	0	2	3	24.6	29.3	0	0	1	17	44	27	12	2	0	0	0	0	0	0	0	0	0	0	0	85	
0730	97	72	0	17	0	0	0	1	0	0	0	0	0	2	5	24.6	29.5	0	0	1	11	46	26	10	3	0	0	0	0	0	0	0	0	0	0	0	85	
0745	120	98	1	10	0	0	0	1	0	0	0	0	0	3	7	22	26.4	0	2	10	19	61	24	4	0	0	0	0	0	0	0	0	0	0	0	0	89	
0800	124	97	0	17	1	0	0	0	0	0	0	0	0	2	7	22.7	27.1	0	0	9	20	61	24	10	0	0	0	0	0	0	0	0	0	0	0	0	0	95
0815	134	113	1	9	0	0	1	0	0	0	0	0	0	4	6	24	29.1	0	1	3	21	58	37	10	3	1	0	0	0	0	0	0	0	0	0	0	0	109
0830	118	92	2	16	1	0	0	0	0	0	0	0	0	2	5	20.2	24.4	0	0	10	47	47	13	0	1	0	0	0	0	0	0	0	0	0	0	0	0	61
0845	111	96	1	12	0	0	0	0	0	0	0	0	0	0	2	21.1	25.4	0	1	10	29	53	14	3	1	0	0	0	0	0	0	0	0	0	0	0	0	71
0900	91	72	0	10	0	1	0	0	0	0	0	0	0	0	8	23.9	28.7	0	1	4	15	26	37	7	1	0	0	0	0	0	0	0	0	0	0	0	0	71
0915	97	79	0	14	0	0	0	0	0	0	0	0	0	2	2	25	29.7	0	0	1	12	41	31	9	3	0	0	0	0	0	0	0	0	0	0	0	0	84
0930	93	71	0	19	0	1	0	0	0	0	0	0	0	0	2	24.4	29.2	0	0	1	14	41	24	12	1	0	0	0	0	0	0	0	0	0	0	0	0	78
0945	85	65	0	16	1	0	0	0	0	0	0	0	0	1	2	24.5	28.3	0	0	2	13	29	35	6	0	0	0	0	0	0	0	0	0	0	0	0	0	70
1000	84	66	1	12	0	1	0	0	0	0	0	0	0	2	2	23.2	28.3	0	0	4	24	28	19	4	5	0	0	0	0	0	0	0	0	0	0	0	0	56
1015	87	72	1	10	0	0	0	1	0	0	0	0	0	2	1	26.1	31	0	0	1	9	27	35	11	3	1	0	0	0	0	0	0	0	0	0	0	0	77
1030	79	64	0	14	0	0	0	0	0	0	0	0	0	1	0	23.3	26.6	0	0	0	13	44	16	4	2	0	0	0	0	0	0	0	0	0	0	0	0	66
1045	79	61	0	12	1	0	0	0	0	0	0	0	0	3	2	23.9	28.6	0	0	1	11	45	15	4	1	1	0	0	0	0	0	0	0	0	0	0	0	67
1100	66	53	1	6	0	0	0	0	0	0	0	0	0	2	4	24.1	30.6	0	0	6	13	18	16	9	4	0	0	0	0	0	0	0	0	0	0	0	0	47
1115	75	62	0	8	0	0	0	0	0	0	0	0	0	5	0	24.6	29.8	0	0	0	9	39	17	8	2	0	0	0	0	0	0	0	0	0	0	0	0	66
1130	66	54	0	6	1	1	0	0	0	0	0	0	0	2	2	24.5	30	0	0	3	6	24	23	10	0	0	0	0	0	0	0	0	0	0	0	0	0	57
1145	75	61	1	12	0	0	0	0	0	0	0	0	0	1	0	24.1	30	0	0	0	15	29	20	10	1	0	0	0	0	0	0	0	0	0	0	0	0	60
1200	70	56	0	8</																																		



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound)

2230	29	23	0	5	0	0	0	0	0	0	0	0	0	1	0	29.3	35.5	0	0	0	0	4	16	5	2	2	0	0	0	0	0	0	0	0	0	0	29
2245	32	22	0	6	0	0	0	0	0	0	0	0	0	4	0	29.6	35.8	0	0	0	0	7	11	9	4	0	1	0	0	0	0	0	0	0	0	0	32
2300	15	12	0	2	0	0	0	0	0	0	0	0	0	0	1	26.4	33	0	0	1	2	3	4	4	0	1	0	0	0	0	0	0	0	0	0	0	12
2315	20	16	0	4	0	0	0	0	0	0	0	0	0	0	0	26.2	29.4	0	0	0	0	9	9	1	1	0	0	0	0	0	0	0	0	0	0	0	20
2330	29	23	0	4	0	0	0	0	0	0	0	0	0	1	1	28.6	34.4	0	0	0	0	7	13	6	2	1	0	0	0	0	0	0	0	0	0	0	29
2345	17	12	0	4	0	0	0	0	0	0	0	0	0	1	0	27.7	31.1	0	0	0	0	6	8	2	1	0	0	0	0	0	0	0	0	0	0	0	17
07-19	4153	3406	24	476	9	8	2	5	0	1	0	0	0	124	98	24.3	29.1	0	9	99	639	1673	1251	397	69	8	2	6	0	0	0	0	0	0	3406		
06-22	5043	4119	35	579	9	8	2	5	0	1	0	0	0	162	123	24.8	29.6	0	9	109	705	1910	1619	542	110	21	6	10	0	0	0	0	0	1	4220		
06-00	5258	4289	35	614	9	8	2	5	0	1	0	0	0	170	125	24.9	29.9	0	9	111	709	1965	1711	583	124	26	8	10	0	0	0	0	0	1	4429		
00-00	5486	4426	35	684	10	8	2	5	0	1	0	0	0	181	134	25.2	30.2	0	9	114	721	1981	1778	652	167	38	12	10	1	1	0	0	1	4642			



Project ID and Name: IW0056 Kneller Hall, Twickenham
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2230	38	29	0	7	0	0	0	0	0	0	0	0	1	1	28	32.1	0	0	0	2	3	24	7	2	0	0	0	0	0	0	0	0	0	0	36
2245	23	16	0	6	0	1	0	0	0	0	0	0	0	0	27.6	31.7	0	0	0	1	4	14	3	1	0	0	0	0	0	0	0	0	0	22	
2300	25	21	0	2	0	0	0	0	0	0	0	0	2	0	27.2	33.2	0	1	1	1	5	7	8	2	0	0	0	0	0	0	0	0	0	22	
2315	16	13	0	3	0	0	0	0	0	0	0	0	0	0	31.3	38	0	0	0	0	1	6	6	2	1	0	0	0	0	0	0	0	16		
2330	24	19	0	4	1	0	0	0	0	0	0	0	0	0	29.2	33	0	0	0	0	7	8	7	1	0	0	1	0	0	0	0	0	24		
2345	22	18	0	4	0	0	0	0	0	0	0	0	0	0	28.2	36.4	0	0	0	1	6	9	2	3	1	0	0	0	0	0	0	0	21		
07-19	4297	3563	28	440	14	7	3	9	2	6	0	1	1	122	101	23.7	28.5	0	20	164	746	1763	1181	348	51	15	7	1	0	0	0	0	3367		
06-22	5140	4233	33	532	15	10	4	11	2	7	0	1	1	171	120	24.3	29.5	0	20	171	799	1981	1511	515	106	25	8	2	0	0	0	1	0	4150	
06-00	5352	4405	33	564	16	11	4	11	2	7	0	1	1	175	122	24.5	29.6	0	21	172	806	2020	1609	564	119	27	9	3	0	0	0	1	0	4353	
00-00	5583	4546	33	643	16	11	4	11	2	7	0	1	1	181	127	24.7	30	0	21	175	814	2042	1699	638	142	34	11	5	0	0	0	1	0	4573	



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound)

2230	38	31	0	2	0	0	0	0	0	0	0	0	0	5	0	28.6	31.1	0	0	0	2	11	18	3	1	0	1	1	1	0	0	0	0	0	0	36	
2245	37	28	0	7	0	0	0	0	0	0	0	0	0	2	0	27.4	32.1	0	0	0	1	11	16	6	3	0	0	0	0	0	0	0	0	0	0	0	36
2300	27	25	0	2	0	0	0	0	0	0	0	0	0	0	0	27.7	31.5	0	0	0	3	3	13	8	0	0	0	0	0	0	0	0	0	0	0	0	24
2315	25	21	0	2	0	0	0	0	0	0	0	0	0	2	0	31.5	35.2	0	0	0	0	1	5	15	4	0	0	0	0	0	0	0	0	0	0	0	25
2330	34	29	0	3	0	0	0	0	0	0	0	0	0	2	0	27.4	32.4	0	0	0	2	12	10	7	1	1	1	0	0	0	0	0	0	0	0	32	
2345	34	29	0	3	0	0	0	0	0	0	0	0	0	2	0	28.5	31.3	0	0	0	2	3	17	10	1	1	0	0	0	0	0	0	0	0	0	0	32
07-19	4455	3651	46	495	4	7	0	6	0	3	0	0	2	151	90	24.2	29.1	0	25	122	675	1759	1379	398	73	12	2	7	1	0	0	1	1	3633			
06-22	5385	4404	52	579	5	8	0	6	0	4	0	0	2	217	108	24.7	29.6	0	27	133	741	2011	1759	549	117	27	7	10	1	1	0	1	1	4484			
06-00	5650	4630	52	603	5	8	0	6	0	4	0	0	2	232	108	24.9	29.9	0	27	133	751	2064	1874	616	130	30	9	11	2	1	0	1	1	4739			
00-00	5940	4824	52	675	8	8	1	6	0	4	0	0	2	243	117	25.1	30.2	0	28	138	758	2103	1975	706	165	38	13	11	2	1	0	1	1	5016			



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: BA (Westbound)

25 June 2022

Time Period	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Number of vehicles exceeding PSL 20
0000	33	27	0	3	0	0	0	0	0	0	0	0	0	2	1	26.6	32.8	0	0	1	5	4	14	7	1	1	0	0	0	0	0	0	27	
0015	38	28	0	9	0	0	0	0	0	0	0	0	0	1	0	24.9	31.4	0	0	1	3	19	8	6	1	1	0	0	0	0	0	0	34	
0030	25	21	0	4	0	0	0	0	0	0	0	0	0	0	0	26.3	31.8	0	0	0	2	7	12	3	0	1	0	0	0	0	0	0	23	
0045	33	28	0	4	0	0	0	0	0	0	0	0	0	1	0	24.9	34.8	0	0	1	12	5	8	4	2	0	1	0	0	0	0	0	20	
0100	30	24	0	5	0	0	0	0	0	0	0	0	0	1	0	28.5	36.7	0	0	0	0	11	12	2	3	0	1	0	1	0	0	0	30	
0115	26	22	1	1	0	0	0	0	0	0	0	0	0	2	0	27.6	32.1	0	0	0	0	5	13	8	0	0	0	0	0	0	0	0	26	
0130	20	18	0	2	0	0	0	0	0	0	0	0	0	0	0	28.2	35.1	0	0	0	1	3	11	2	3	0	0	0	0	0	0	0	19	
0145	21	20	0	1	0	0	0	0	0	0	0	0	0	0	0	27.6	32.6	0	0	0	0	6	10	5	0	0	0	0	0	0	0	0	21	
0200	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	25.8	30	0	0	0	1	2	8	1	0	0	0	0	0	0	0	0	11	
0215	10	9	0	1	0	0	0	0	0	0	0	0	0	0	0	28.4	-	0	0	0	0	3	3	3	1	0	0	0	0	0	0	0	10	
0230	10	9	0	0	0	0	0	0	0	0	0	0	0	1	0	30.1	-	0	0	0	1	4	0	3	0	1	1	0	0	0	0	0	9	
0245	12	10	0	2	0	0	0	0	0	0	0	0	0	0	0	29.1	37.6	0	0	0	0	3	5	2	2	0	0	0	0	0	0	0	12	
0300	10	9	0	1	0	0	0	0	0	0	0	0	0	0	0	24.6	-	0	1	0	1	2	5	1	0	0	0	0	0	0	0	0	8	
0315	12	9	0	2	0	0	0	0	0	0	0	0	0	1	0	27.4	33.3	0	0	0	0	4	4	3	1	0	0	0	0	0	0	0	12	
0330	8	4	0	3	0	0	0	0	0	0	0	0	0	1	0	25.6	-	0	0	0	3	1	1	2	1	0	0	0	0	0	0	0	5	
0345	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	30	-	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	4	
0400	11	8	0	3	0	0	0	0	0	0	0	0	0	0	0	28.8	32.9	0	0	0	1	0	6	4	0	0	0	0	0	0	0	0	10	
0415	9	7	0	2	0	0	0	0	0	0	0	0	0	0	0	29.9	-	0	0	0	0	2	4	2	0	1	0	0	0	0	0	0	9	
0430	14	6	0	8	0	0	0	0	0	0	0	0	0	0	0	29.1	36	0	0	0	2	1	5	4	1	0	1	0	0	0	0	0	12	
0445	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	30.2	-	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3	
0500	9	6	0	3	0	0	0	0	0	0	0	0	0	0	0	34.3	-	0	0	0	0	0	1	2	6	0	0	0	0	0	0	0	9	
0515	6	3	0	3	0	0	0	0	0	0	0	0	0	0	0	29.8	-	0	0	0	0	1	3	1	0	1	0	0	0	0	0	0	6	
0530	10	7	0	3	0	0	0	0	0	0	0	0	0	0	0	32.4	-	0	0	0	0	1	2	5	2	0	0	0	0	0	0	0	10	
0545	13	8	0	4	1	0	0	0	0	0	0	0	0	0	0	27.3	37.2	0	0	0	1	4	5	1	2	0	0	0	0	0	0	0	12	
0600	8	5	0	3	0	0	0	0	0	0	0	0	0	0	0	34.4	-	0	0	0	0	2	2	0	1	2	0	0	0	0	0	0	8	
0615	13	7	0	6	0	0	0	0	0	0	0	0	0	0	0	31.2	37.8	0	0	0	0	2	4	3	3	1	0	0	0	0	0	0	13	
0630	17	9	0	7	0	0	0	0	0	0	0	0	0	1	0	30.7	41.6	0	0	1	1	2	6	2	3	0	1	1	0	0	0	0	15	
0645	21	18	0	1	0	0	0	0	0	0	0	0	0	0	2	29	34.7	0	0	0	3	3	5	9	0	0	1	0	0	0	0	0	18	
0700	16	10	0	4	1	0	0	0	0	0	0	0	0	1	0	29.5	36.7	0	0	0	1	4	5	2	3	0	1	0	0	0	0	0	15	
0715	16	12	0	4	0	0	0	0	0	0	0	0	0	0	0	29.1	36.8	0	0	0	2	3	2	7	1	1	0	0	0	0	0	0	14	
0730	21	15	0	3	0	0	0	0	0	0	0	0	0	1	2	27.6	36.8	0	0	1	5	2	4	5	3	1	0	0	0	0	0	0	15	
0745	20	17	0	1	0	0	0	0	0	0	0	0	0	1	1	25	33.6	0	0	1	6	2	6	4	1	0	0	0	0	0	0	0	13	
0800	32	26	0	6	0	0	0	0	0	0	0	0	0	0	0	25.5	30.3	0	0	0	5	7	15	5	0	0	0	0	0	0	0	0	27	
0815	40	32	0	6	0	0	0	0	0	0	0	0	0	1	1	25.4	29.7	0	0	2	2	17	15	3	0	0	1	0	0	0	0	0	36	
0830	32	27	0	5	0	0	0	0	0	0	0	0	0	0	0	25.8	32.9	0	0	0	3	15	9	3	1	0	1	0	0	0	0	0	29	
0845	34	27	0	5	0	0	0	0	0	0	0	0	0	1	1	25	29.7	0	0	0	2	16	11	3	0	1	0	0	0	0	0	0	31	
0900	46	39	0	5	0	0	0	0	0	0	0	0	0	2	2	25.3	31.4	0	0	3	8	9	15	9	2	0	0	0	0	0	0	0	35	
0915	60	51	0	3	0	0	0	0	0	0	0	0	0	5	1	24.6	29.1	0	0	2	6	26	18	7	1	0	0	0	0	0	0	0	52	
0930	66	60	0	4	0	0	0	0	0	0	0	0	0	1	1	23	26.6	0	0	0	11	41	10	4	0	0	0	0	0	0	0	0	55	
0945	69	56	0	9	0	0	0	0	0	0	0	0	0	1	3	25.6	31.3	0	0	3	8	18	27	8	5	0	0	0	0	0	0	0	58	
1000	58	50	1	3	0	1	0	0	0	0	0	0	0	0	3	24.1	30.8	0	2	4	5	20	17	8	2	0	0	0	0	0	0	0	47	
1015	61	53	0	5	0	1	0	0	0	0	0	0	0	1	0	24.2	30.8	0	0	0	14	25	7	15	0	0	0	0	0	0	0	0	47	
1030	61	53	0	5	1	0	0	0	0	0	0	0	0	0	2	22.9	27.2	0	0	1	13	30	15	1	1	0	0	0	0	0	0	0	47	
1045	70	56	1	7	0	0	0	0	0	0	0	0	0	3	3	23.1	28.4	0	0	2	18	32	11	5	2	0	0	0	0	0	0	0	50	
1100	65	52	0	9	0	0	0	0	0	0	0	0	0	1	3	24.7	29.4	0	0	3	8	17	30	7	0	0	0	0	0	0	0	0	54	
1115	69	64	0	3	0	0	0	0	0	0	0	0	0	1	1	24.4	28.3	0	0	3	6	28	27	5	0	0	0	0	0	0	0	0	60	
1130	80	71	0	5	0	0	0	0	0	0	0	0	0	2	2	24.4	28.7	0	0	2	14	27	29	5	2	1	0	0	0	0	0	0	64	
1145	75	67	0	5	0	0	0	0	0	0	0	0	0	1	2	23	26.9	0	0	1	18	30	24	1	1	0	0	0	0	0	0	0	56	
1200	76	68	0	6	0	0	0	0	0	0	0	0	0	2	0	23.4	27.4	0	0	1	13	35	23	4	0	0	0	0	0	0	0	0	62	
1215	89	78	0	4	1	0	0	0	0	0	0	0	0	1	5	22.7	28.4	0	1	4	28	29	19	7	1	0	0	0	0	0	0	0	56	
1230	97	85	0	7	1	1	0	0	0	0	0	0	0	2	1	23.3	28.1	0	1	7	14	42	26	6	1	0	0	0	0	0	0	0	75	
1245	102	85	0	13	0	0	0	0	1	0	0	0	0	2	1	24	29.2	0	1	1	20	40	28	12	0	0	0	0	0	0	0	0	80	
1300	68	56	1	4	0	0	0	0	0	0	0	0	0	4	3	23.8	28.4	0	0	1	14	29	16	5	2	1	0	0	0	0	0	0	53	
1315	84	75	1	4	0	1	0	0	0	0	0	0	0	3	0	24																		



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: BA (Westbound)

2230	33	22	0	6	0	0	0	0	0	0	0	0	0	0	3	2	26.3	31.8	0	0	2	4	8	13	4	0	1	0	1	0	0	0	0	0	0	0	0	27		
2245	29	17	0	10	0	0	0	0	0	0	0	0	0	0	2	0	26.3	28.8	0	0	0	1	7	19	1	1	0	0	0	0	0	0	0	0	0	0	0	0	28	
2300	30	24	0	3	0	0	0	0	0	0	0	0	0	0	3	0	27.8	32.8	0	0	0	2	10	11	4	1	1	0	0	0	0	1	0	0	0	0	0	0	28	
2315	36	27	0	6	0	0	0	0	0	0	0	0	0	0	2	1	26	32.8	0	0	1	4	10	14	5	1	1	0	0	0	0	0	0	0	0	0	0	0	31	
2330	21	17	0	2	0	0	0	0	0	0	0	0	0	0	2	0	25.1	27.8	0	0	0	1	10	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
2345	24	19	0	2	0	0	0	0	0	0	0	0	0	0	2	1	28.4	36.2	0	0	0	3	3	10	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	21
07-19	2952	2585	12	176	3	4	0	1	0	0	0	0	0	102	68	24.6	29.2	0	6	71	399	1182	948	250	62	22	8	1	1	0	2	0	0	0	0	0	2476			
06-22	3612	3124	17	231	3	5	0	1	0	1	0	0	0	153	77	24.9	29.5	0	10	77	466	1399	1186	339	83	29	14	5	2	0	2	0	0	0	0	0	3059			
06-00	3868	3312	18	269	3	5	0	1	0	1	0	0	0	173	86	25	29.6	0	10	83	494	1470	1290	367	91	35	15	7	2	1	2	2	1	0	0	0	0	3281		
00-00	4220	3609	18	306	3	5	0	2	0	1	0	0	0	183	93	25.1	30	0	10	89	525	1560	1423	424	115	43	16	9	2	1	2	1	0	0	0	0	3596			



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: BA (Westbound)

2230	44	35	1	3	0	1	0	0	0	0	0	0	0	4	0	25.8	30.8	0	0	0	4	19	14	5	1	0	0	1	0	0	0	0	0	0	0	0	40	
2245	25	17	0	4	0	0	0	0	0	0	0	0	0	2	2	26	31.8	0	0	1	3	6	10	3	2	0	0	0	0	0	0	0	0	0	0	0	0	21
2300	32	26	0	3	0	0	0	0	0	0	0	0	0	2	1	25.7	33.6	0	0	1	4	13	6	5	2	1	0	0	0	0	0	0	0	0	0	0	0	27
2315	32	23	0	5	0	0	0	0	0	0	0	0	0	1	3	25.4	31.7	0	0	2	4	8	12	3	3	0	0	0	0	0	0	0	0	0	0	0	0	26
2330	37	32	0	2	0	0	0	0	0	0	0	0	0	2	1	26.5	34	0	0	1	3	9	17	2	5	0	0	0	0	0	0	0	0	0	0	0	0	33
2345	29	20	0	6	0	0	0	0	0	0	0	0	0	2	1	27.2	31.9	0	0	0	1	8	11	8	1	0	0	0	0	0	0	0	0	0	0	0	0	28
07-19	3844	3167	33	427	9	12	1	4	1	3	0	0	0	91	96	22.8	27.4	0	21	142	856	1652	930	201	31	8	2	0	1	0	0	0	0	0	0	2825		
06-22	4623	3761	39	527	9	12	1	4	1	3	0	0	0	139	127	23.3	28.1	0	23	171	955	1896	1194	290	67	17	5	2	2	0	1	0	0	0	3474			
06-00	4917	3997	40	555	9	13	1	4	1	3	0	0	0	158	136	23.4	28.3	0	23	176	987	1992	1293	329	84	22	5	3	2	0	1	0	0	0	0	3731		
00-00	5145	4148	40	627	9	13	1	4	1	3	0	0	0	163	136	23.7	28.6	0	23	176	995	2027	1379	388	111	29	10	4	2	0	1	0	0	0	0	3951		



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Site No: 3
 Location Name: Whitton Dene
 Direction: AB (Eastbound) + BA (Westbound)

LDV 8886 HDV 1168 HDV% 13%

Direction	Total No. of Vehicles	No. of Vehicles exceeding PSL (20mph)	No. of Vehicles exceeding PSL %
Direction AB - Eastbound	37680	32072	85%
Direction BA - Westbound	34434	27073	79%

Direction - AB	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15
Total Vehicle Proportion	30890	242	4098	61	54	16	60	5	25	0	3	4	1385	837
Vehicle Proportion - %	82.0%	0.6%	10.9%	0.2%	0.1%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	3.7%	2.2%

Direction - BA	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15
Total Vehicle Proportion	28238	197	3659	70	58	6	29	5	18	0	2	0	1252	900
Vehicle Proportion - %	82.0%	0.6%	10.6%	0.2%	0.2%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	3.6%	2.6%

Average Daily Across Week

8447

63

1108

19

16

3

13

1

6

0

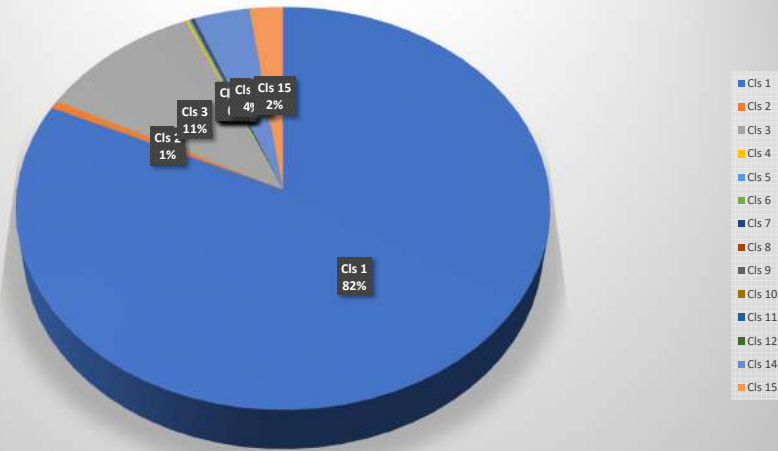
1

1

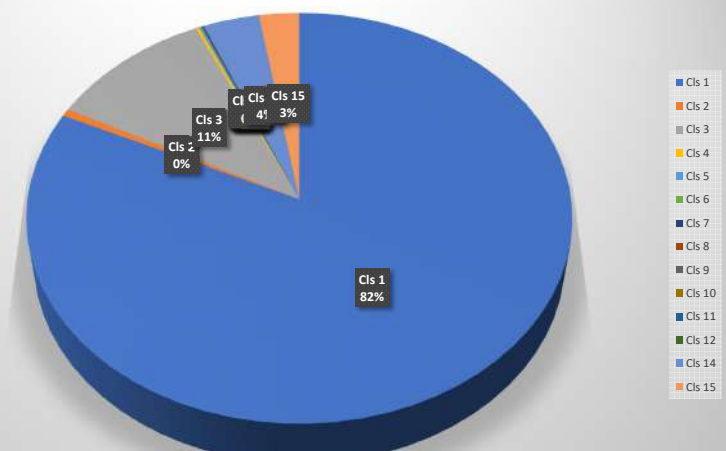
377

248

Direction AB - Eastbound



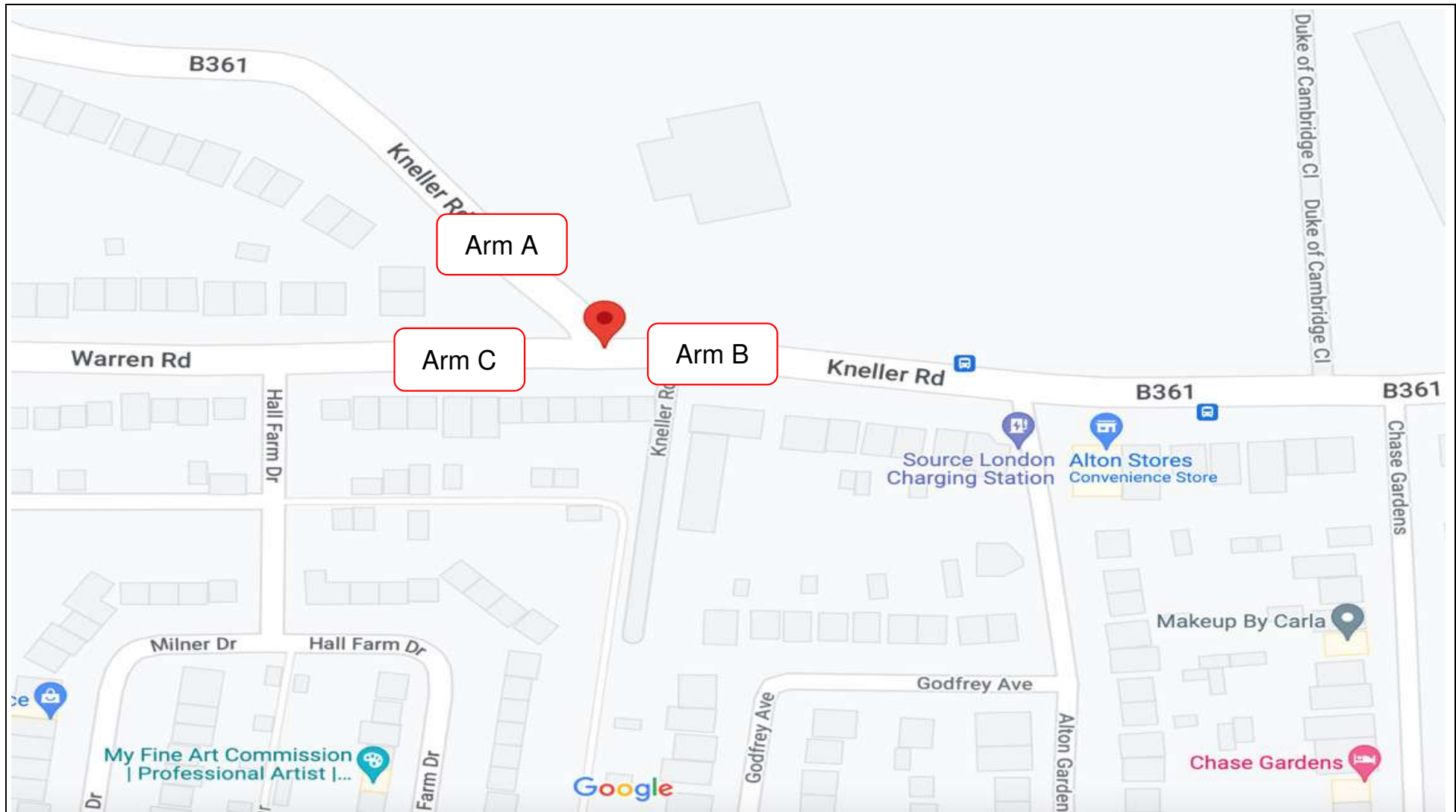
Direction BA - Westbound



Vehicle Classification - VRX

Cls 1	SV	2 axles	Short vehicle car or light Van
Cls 2	SVT	3,4 or 5 axles	Short vehicle towing trailer, caravan, boat, etc
Cls 3	TB2	2 axles	Two-axle truck or bus
Cls 4	TB3	3 axles	Three-axle truck or bus
Cls 5	T4	> 4 axles	Four-axle truck
Cls 6	ART3	3 axles	Three-axle articulated or rigid vehicle and trailer
Cls 7	ART4	4 axles	Four-axle articulated or rigid vehicle and trailer
Cls 8	ART5	5 axles	Five-axle articulated or rigid vehicle and trailer
Cls 9	RT6	>6 axles	Six or more axle articulated or rigid vehicle and trailer
Cls 10	BD	>6 axles	Double or heavy truck and trailer
Cls 11	DRT	>6 axles	Double road train or heavy truck and two trailers
Cls 12	TRT	>6 axles	Triple road train or heavy truck and three or more trailers
Cls 14	M/C	2 axles	Motorcycles
Cls 15	Cycle	2 axles	Bicycles

Job ID	Project Name	Site Location	Google Coordinates	Survey Date	Survey Day	Survey Timings	Weather AM	Weather PM
IW0056	Kneller Hall, Twickenham	Kneller Road/Warren Road	51.453848, -0.349185	28/06/2022	Tuesday	0700-1000 & 1500-1900hrs	Sunny	Sunny





Project ID and Name: IW0056 Kneller Hall, Twickenham
 Junction name: Kneller Road / Warren Road

Survey Date: 28/06/2022
 Survey Day: Tuesday

A - B (15-minute intervals)											A - C (15-minute intervals)										
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
07:00-07:15	5	3	1	0	1	0	1	11	11.7	07:00-07:15	1	0	0	0	0	0	0	1	1		
07:15-07:30	13	2	0	0	0	0	2	17	15.4	07:15-07:30	2	0	0	0	0	0	0	2	2		
07:30-07:45	12	2	0	0	1	1	4	20	17.2	07:30-07:45	2	0	0	0	0	0	0	2	2		
07:45-08:00	19	1	0	0	0	0	3	23	20.6	07:45-08:00	4	0	0	0	0	0	0	4	4		
08:00-08:15	21	0	0	0	1	1	2	25	23.8	08:00-08:15	1	0	0	0	0	0	0	1	1		
08:15-08:30	27	2	0	0	1	1	4	35	32.2	08:15-08:30	3	0	0	0	1	0	0	4	5		
08:30-08:45	22	1	1	0	1	1	2	28	27.3	08:30-08:45	0	0	0	0	0	0	0	0	0		
08:45-09:00	21	1	0	0	0	0	2	24	22.4	08:45-09:00	2	0	0	0	0	1	0	3	2.4		
09:00-09:15	4	0	0	0	0	0	3	7	4.6	09:00-09:15	3	0	0	0	0	0	0	3	3		
09:15-09:30	12	3	0	0	1	0	1	17	17.2	09:15-09:30	2	0	0	0	0	0	0	2	2		
09:30-09:45	6	2	0	0	2	0	1	11	12.2	09:30-09:45	1	0	0	0	0	1	0	2	1.4		
09:45-10:00	7	2	1	0	0	2	1	13	11.5	09:45-10:00	1	1	0	0	0	0	0	2	2		
Total (AM & PM)											Total										
355 35 3 0 17 11 43 464 441.5											52 6 0 0 1 2 2 63 61.2										

A - B (rolling hour)											A - C (rolling hour)										
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
07:00-08:00	49	8	1	0	2	1	10	71	64.9	07:00-08:00	9	0	0	0	0	0	0	9	9		
07:15-08:15	65	5	0	0	2	2	11	85	77	07:15-08:15	9	0	0	0	0	0	0	9	9		
07:30-08:30	79	5	0	0	3	3	13	103	93.8	07:30-08:30	10	0	0	0	1	0	0	11	12		
07:45-08:45	89	4	1	0	3	3	11	111	103.9	07:45-08:45	8	0	0	0	1	0	0	9	10		
08:00-09:00	91	4	1	0	3	3	10	112	105.7	08:00-09:00	6	0	0	0	1	1	0	8	8.4		
08:15-09:15	74	4	1	0	2	2	11	94	86.5	08:15-09:15	8	0	0	0	1	1	0	10	10.4		
08:30-09:30	59	5	1	0	2	1	8	76	71.5	08:30-09:30	7	0	0	0	0	1	0	8	7.4		
08:45-09:45	43	6	0	0	3	0	7	59	56.4	08:45-09:45	8	0	0	0	0	2	0	10	8.8		
09:00-10:00	29	7	1	0	3	2	6	48	45.5	09:00-10:00	7	1	0	0	0	1	0	9	8.4		
09:15-10:15	25	7	1	0	3	2	3	41	40.9	09:15-10:15	4	1	0	0	0	1	0	6	5.4		
09:30-10:30	13	4	1	0	2	2	2	24	23.7	09:30-10:30	2	1	0	0	0	1	0	4	3.4		
09:45-10:45	7	2	1	0	0	2	1	13	11.5	09:45-10:45	1	1	0	0	0	0	0	2	2		
15:00-16:00	54	4	0	0	3	1	6	68	65.6	15:00-16:00	5	2	0	0	0	0	1	8	7.2		
15:15-16:15	52	4	0	0	3	1	4	64	63.2	15:15-16:15	4	3	0	0	0	0	0	7	7		
15:30-16:30	45	5	0	0	4	1	6	61	59.6	15:30-16:30	2	3	0	0	0	0	0	5	5		
15:45-16:45	48	4	0	0	3	1	4	60	59.2	15:45-16:45	1	1	0	0	0	0	0	2	2		
16:00-17:00	40	5	0	0	2	1	6	54	50.6	16:00-17:00	2	1	0	0	0	0	0	3	3		
16:15-17:15	41	5	0	0	3	1	5	55	53.4	16:15-17:15	7	1	0	0	0	0	0	8	8		
16:30-17:30	39	6	0	0	1	1	4	51	48.2	16:30-17:30	7	1	0	0	0	0	1	9	8.2		
16:45-17:45	43	5	0	0	2	1	4	55	53.2	16:45-17:45	9	1	0	0	0	0	1	11	10.2		
17:00-18:00	43	4	0	0	2	1	3	53	52	17:00-18:00	10	2	0	0	0	0	1	13	12.2		
17:15-18:15	51	3	0	0	2	2	4	62	59.6	17:15-18:15	9	1	0	0	0	0	1	11	10.2		
17:30-18:30	53	3	0	0	2	2	4	64	61.6	17:30-18:30	11	1	0	0	0	0	0	12	12		
17:45-18:45	48	4	0	0	2	2	3	59	57.4	17:45-18:45	13	1	0	0	0	0	0	14	14		
18:00-19:00	49	3	0	0	2	2	2	58	57.2	18:00-19:00	13	0	0	0	0	0	0	13	13		
18:15-19:15	30	3	0	0	1	0	1	35	35.2	18:15-19:15	9	0	0	0	0	0	0	9	9		
18:30-19:30	18	1	0	0	1	0	0	20	21	18:30-19:30	7	0	0	0	0	0	0	7	7		
18:45-19:45	9	0	0	0	0	0	0	9	9	18:45-19:45	3	0	0	0	0	0	0	3	3		
TOTAL											TOTAL										
355 35 3 0 17 11 43 396 375.9											52 6 0 0 1 2 2 55 54										



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Junction name: Kneller Road / Warren Road

Survey Date: 28/06/2022
 Survey Day: Tuesday

B - A (15-minute intervals)											B - C (15-minute intervals)										
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
07:00	07:15	3	1	0	0	0	0	4	4	07:00	07:15	27	4	2	0	2	2	38	39		
07:15	07:30	11	1	0	0	0	1	13	12.2	07:15	07:30	23	4	0	0	2	1	33	32		
07:30	07:45	7	0	0	0	1	1	10	9.6	07:30	07:45	25	6	1	0	2	0	36	36.9		
07:45	08:00	7	2	0	0	0	2	11	9.4	07:45	08:00	40	9	1	0	3	1	56	57.3		
08:00	08:15	10	1	0	0	1	0	12	13	08:00	08:15	40	6	2	0	2	0	52	53.4		
08:15	08:30	12	2	0	0	0	1	15	14.4	08:15	08:30	48	5	0	0	3	0	59	59.6		
08:30	08:45	10	0	0	0	0	1	11	10.4	08:30	08:45	47	4	0	0	2	1	55	55.6		
08:45	09:00	19	0	0	0	1	0	21	21.2	08:45	09:00	48	6	1	0	2	1	59	60.1		
09:00	09:15	12	0	0	0	0	1	13	12.4	09:00	09:15	44	4	0	1	3	0	52	56.3		
09:15	09:30	2	2	0	0	0	0	4	4	09:15	09:30	34	6	0	0	4	1	45	48.4		
09:30	09:45	4	1	0	0	0	0	5	5	09:30	09:45	50	4	0	0	2	2	59	59		
09:45	10:00	9	2	0	0	1	0	13	13.2	09:45	10:00	34	3	1	1	1	4	45	44.6		
Total											Total										
305											1487										
33											209										
0											13										
0											2										
15											75										
13											62										
34											65										
400											1913										
380											1907.9										

B - A (rolling hour)											B - C (rolling hour)										
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
07:00	08:00	28	4	0	0	1	1	38	35.2	07:00	08:00	115	23	4	0	9	4	163	165.2		
07:15	08:15	35	4	0	0	2	1	46	44.2	07:15	08:15	128	25	4	0	9	2	177	179.6		
07:30	08:30	36	5	0	0	2	2	48	46.4	07:30	08:30	153	26	4	0	10	1	203	207.2		
07:45	08:45	39	5	0	0	1	2	49	47.2	07:45	08:45	175	24	3	0	10	2	222	225.9		
08:00	09:00	51	3	0	0	2	2	59	59	08:00	09:00	183	21	3	0	9	2	225	228.7		
08:15	09:15	53	2	0	0	1	3	60	58.4	08:15	09:15	187	19	1	1	10	2	225	231.6		
08:30	09:30	43	2	0	0	1	2	49	48	08:30	09:30	173	20	1	1	11	3	211	220.4		
08:45	09:45	37	3	0	0	1	1	43	42.6	08:45	09:45	176	20	1	1	11	4	215	223.8		
09:00	10:00	27	5	0	0	1	1	35	34.6	09:00	10:00	162	17	1	2	10	7	201	208.3		
09:15	10:15	15	5	0	0	1	0	22	22.2	09:15	10:15	118	13	1	1	7	7	149	152		
09:30	10:30	13	3	0	0	1	0	18	18.2	09:30	10:30	84	7	1	1	3	6	104	103.6		
09:45	10:45	9	2	0	0	1	0	13	13.2	09:45	10:45	34	3	1	1	1	4	45	44.6		
15:00	16:00	62	2	0	0	5	1	74	75.2	15:00	16:00	255	41	2	0	13	9	328	330.2		
15:15	16:15	68	4	0	0	2	2	84	78.4	15:15	16:15	251	45	1	0	15	8	326	331.9		
15:30	16:30	65	5	0	0	2	3	82	76.6	15:30	16:30	254	46	1	0	14	9	327	333.7		
15:45	16:45	53	7	0	0	3	4	75	69.2	15:45	16:45	269	44	0	0	11	11	341	340.6		
16:00	17:00	53	9	0	0	2	3	77	69.2	16:00	17:00	257	42	1	0	12	10	329	329.9		
16:15	17:15	49	9	0	0	3	2	70	66.2	16:15	17:15	263	36	1	0	13	11	334	332.9		
16:30	17:30	37	9	0	0	2	1	58	52.2	16:30	17:30	266	32	1	0	13	11	338	332.9		
16:45	17:45	38	7	0	0	1	0	53	48.4	16:45	17:45	254	41	2	0	12	10	337	329.6		
17:00	18:00	38	5	0	0	2	3	54	49.4	17:00	18:00	271	40	1	0	10	13	354	341.5		
17:15	18:15	40	4	0	0	1	5	56	49.2	17:15	18:15	277	42	1	0	10	14	365	350.3		
17:30	18:30	46	4	0	0	2	5	64	57.4	17:30	18:30	265	42	1	0	11	13	351	339.5		
17:45	18:45	47	4	0	0	2	5	67	58.8	17:45	18:45	258	28	1	0	10	15	327	316.5		
18:00	19:00	46	5	0	0	2	2	63	57.4	18:00	19:00	244	25	1	0	12	17	313	304.1		
18:15	19:15	31	3	0	0	2	0	42	39.2	18:15	19:15	174	17	1	0	9	13	223	217.5		
18:30	19:30	20	2	0	0	1	0	26	24.6	18:30	19:30	118	8	1	0	6	10	149	144.7		
18:45	19:45	10	2	0	0	1	0	14	14.2	18:45	19:45	61	5	0	0	5	6	81	79.2		
TOTAL											TOTAL										
305											1487										
33											209										
0											13										
0											2										
15											75										
13											62										
34											65										
326											1585										
304.8											1577.7										



Project ID and Name: IW0056 Kneller Hall, Twickenham
 Junction name: Kneller Road / Warren Road

Survey Date: 28/06/2022
 Survey Day: Tuesday

C - A (15-minute intervals)											C - B (15-minute intervals)										
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
07:00	07:15	3	0	0	0	0	0	3	3	07:00	07:15	70	9	1	1	6	2	2	91	96	
07:15	07:30	3	1	0	0	0	0	4	4	07:15	07:30	62	9	0	1	2	2	2	78	78.5	
07:30	07:45	3	1	0	0	0	0	4	4	07:30	07:45	60	14	1	0	5	1	4	85	86.7	
07:45	08:00	1	0	0	0	0	0	1	1	07:45	08:00	73	13	0	0	2	2	7	97	92.2	
08:00	08:15	6	0	1	0	0	0	7	7.5	08:00	08:15	67	15	2	0	4	2	3	93	94.4	
08:15	08:30	5	0	0	0	0	0	5	5	08:15	08:30	83	7	1	0	3	4	4	102	99.9	
08:30	08:45	2	0	0	0	0	0	2	2	08:30	08:45	76	13	0	0	3	0	5	97	96	
08:45	09:00	5	0	0	0	0	0	5	5	08:45	09:00	76	15	0	0	3	0	4	98	97.8	
09:00	09:15	3	1	0	0	0	0	4	4	09:00	09:15	66	10	0	2	2	0	3	83	85.2	
09:15	09:30	4	0	0	0	0	0	4	4	09:15	09:30	59	10	1	0	3	2	1	76	77.5	
09:30	09:45	1	0	0	0	0	1	2	1.4	09:30	09:45	54	11	2	0	5	0	3	75	78.6	
09:45	10:00	0	0	0	0	0	0	0	0	09:45	10:00	57	12	1	0	3	2	0	75	77.3	
Total											Total										
64											1677										
9											219										
1											26										
0											4										
0											86										
1											64										
2											62										
77											2138										
75.3											2154.2										

C - A (rolling hour)											C - B (rolling hour)										
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
07:00	08:00	10	2	0	0	0	0	12	12	07:00	08:00	265	45	2	2	15	7	15	351	353.4	
07:15	08:15	13	2	1	0	0	0	16	16.5	07:15	08:15	262	51	3	1	13	7	16	353	351.8	
07:30	08:30	15	1	1	0	0	0	17	17.5	07:30	08:30	283	49	4	0	14	9	18	377	373.2	
07:45	08:45	14	0	1	0	0	0	15	15.5	07:45	08:45	299	48	3	0	12	8	19	389	382.5	
08:00	09:00	18	0	1	0	0	0	19	19.5	08:00	09:00	302	50	3	0	13	6	16	390	388.1	
08:15	09:15	15	1	0	0	0	0	16	16	08:15	09:15	301	45	1	2	11	4	16	380	378.9	
08:30	09:30	14	1	0	0	0	0	15	15	08:30	09:30	277	48	1	2	11	2	13	354	356.5	
08:45	09:45	13	1	0	0	0	1	15	14.4	08:45	09:45	255	46	3	2	13	2	11	332	339.1	
09:00	10:00	8	1	0	0	1	0	10	9.4	09:00	10:00	236	43	4	2	13	4	7	309	318.6	
09:15	10:15	5	0	0	0	0	1	6	5.4	09:15	10:15	170	33	4	0	11	4	4	226	233.4	
09:30	10:30	1	0	0	0	0	1	2	1.4	09:30	10:30	111	23	3	0	8	2	3	150	155.9	
09:45	10:45	0	0	0	0	0	0	0	0	09:45	10:45	57	12	1	0	3	2	0	75	77.3	
15:00	16:00	3	1	0	0	0	0	4	4	15:00	16:00	191	22	3	0	11	5	6	238	242.7	
15:15	16:15	2	2	0	0	0	0	4	4	15:15	16:15	207	27	4	0	14	8	5	265	272.2	
15:30	16:30	6	2	0	0	0	0	8	8	15:30	16:30	219	26	5	0	12	7	5	274	280.3	
15:45	16:45	6	1	0	0	0	0	7	7	15:45	16:45	221	27	5	0	15	12	4	284	291.1	
16:00	17:00	8	1	0	0	0	1	10	9.2	16:00	17:00	242	29	4	0	15	14	3	307	313.2	
16:15	17:15	10	3	0	0	0	1	14	13.2	16:15	17:15	240	25	3	0	12	15	3	298	300.1	
16:30	17:30	10	4	0	0	0	1	15	14.2	16:30	17:30	237	23	3	0	12	16	3	294	295.5	
16:45	17:45	11	4	0	0	0	1	16	15.2	16:45	17:45	240	20	3	0	10	14	5	292	291.1	
17:00	18:00	12	4	0	0	0	0	16	16	17:00	18:00	227	14	4	0	9	13	8	275	271.8	
17:15	18:15	11	1	0	0	0	0	12	12	17:15	18:15	212	14	6	0	9	11	7	259	258.8	
17:30	18:30	9	0	0	0	0	1	10	9.2	17:30	18:30	224	14	6	0	9	12	10	275	271.8	
17:45	18:45	7	0	0	0	0	1	8	7.2	17:45	18:45	216	17	7	0	10	14	8	272	270.7	
18:00	19:00	5	0	0	0	0	1	6	5.2	18:00	19:00	214	16	6	0	10	15	7	268	266.4	
18:15	19:15	4	0	0	0	0	1	5	4.2	18:15	19:15	167	11	3	0	8	11	7	207	204.3	
18:30	19:30	2	0	0	0	0	0	2	2	18:30	19:30	107	6	2	0	5	7	3	130	129.4	
18:45	19:45	1	0	0	0	0	0	1	1	18:45	19:45	53	0	0	0	2	2	3	60	58.4	
TOTAL											TOTAL										
64											1677										
9											219										
1											26										
0											4										
0											86										
1											64										
2											62										
73											1900										
71.3											1911.5										



Project ID and Name: IW0056 Kneller Hall, Twickenham
Junction name: Kneller Road / Warren Road



Survey Date: 28/06/2022 Project ID and Name: IW0056 Kneller Hall, Twickenham
Survey Day: Tuesday Junction name: Kneller Road / Warren Road

Arm A - Entry (15-minute intervals)											Arm A - Exit (15-minute intervals)											Arm B - E			
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	
07:00-07:15	6	3	1	0	1	0	1	12	12.7	07:00-07:15	6	1	0	0	0	0	0	7	7	07:00-07:15	30	5	2	0	
07:15-07:30	15	2	0	0	0	0	2	19	17.4	07:15-07:30	14	2	0	0	0	0	1	17	16.2	07:15-07:30	34	5	0	0	
07:30-07:45	14	2	0	0	1	1	4	22	19.2	07:30-07:45	10	1	0	0	1	1	1	14	13.6	07:30-07:45	32	6	1	0	
07:45-08:00	23	1	0	0	0	0	3	27	24.6	07:45-08:00	8	2	0	0	0	0	2	12	10.4	07:45-08:00	47	11	1	0	
08:00-08:15	22	0	0	0	1	1	2	26	24.8	08:00-08:15	16	1	1	0	1	0	0	19	20.5	08:00-08:15	50	7	2	0	
08:15-08:30	30	2	0	0	2	1	4	39	37.2	08:15-08:30	17	2	0	0	0	1	0	20	19.4	08:15-08:30	60	7	0	0	
08:30-08:45	22	1	1	0	1	1	2	28	27.3	08:30-08:45	12	0	0	0	0	1	0	13	12.4	08:30-08:45	57	4	0	0	
08:45-09:00	23	1	0	0	0	1	2	27	24.8	08:45-09:00	24	0	0	0	1	0	1	26	26.2	08:45-09:00	67	6	1	0	
09:00-09:15	7	0	0	0	0	0	3	10	7.6	09:00-09:15	15	1	0	0	0	1	0	17	16.4	09:00-09:15	56	4	0	1	
09:15-09:30	14	3	0	0	1	0	1	19	19.2	09:15-09:30	6	2	0	0	0	0	0	8	8	09:15-09:30	36	8	0	0	
09:30-09:45	7	2	0	0	2	1	1	13	13.6	09:30-09:45	5	1	0	0	0	1	0	7	6.4	09:30-09:45	54	5	0	0	
09:45-10:00	8	3	1	0	0	2	1	15	13.5	09:45-10:00	9	2	0	0	1	0	1	13	13.2	09:45-10:00	43	5	1	1	
Total	407	41	3	0	18	13	45	527	502.7	Total	369	42	1	0	15	14	36	477	455.3	Total	1792	242	13	2	

Arm A - Entry (rolling hour)											Arm A - Exit (rolling hour)											Arm B			
Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Time Interval	Car	LGV	OGV1	OGV2	
07:00-08:00	58	8	1	0	2	1	10	80	73.9	07:00-08:00	38	6	0	0	1	1	4	50	47.2	07:00-08:00	143	27	4	0	
07:15-08:15	74	5	0	0	2	2	11	94	86	07:15-08:15	48	6	1	0	2	1	4	62	60.7	07:15-08:15	163	29	4	0	
07:30-08:30	89	5	0	0	4	3	13	114	105.8	07:30-08:30	51	6	1	0	2	2	3	65	63.9	07:30-08:30	189	31	4	0	
07:45-08:45	97	4	1	0	4	3	11	120	113.9	07:45-08:45	53	5	1	0	1	2	2	64	62.7	07:45-08:45	214	29	3	0	
08:00-09:00	97	4	1	0	4	4	10	120	114.1	08:00-09:00	69	3	1	0	2	2	1	78	78.5	08:00-09:00	234	24	3	0	
08:15-09:15	82	4	1	0	3	3	11	104	96.9	08:15-09:15	68	3	0	0	1	3	1	76	74.4	08:15-09:15	240	21	1	1	
08:30-09:30	66	5	1	0	2	2	8	84	78.9	08:30-09:30	57	3	0	0	1	2	1	64	63	08:30-09:30	216	22	1	1	
08:45-09:45	51	6	0	0	3	2	7	69	65.2	08:45-09:45	50	4	0	0	1	2	1	58	57	08:45-09:45	213	23	1	1	
09:00-10:00	36	8	1	0	3	3	6	57	53.9	09:00-10:00	35	6	0	0	1	2	1	45	44	09:00-10:00	189	22	1	2	
09:15-10:15	29	8	1	0	3	3	3	47	46.3	09:15-10:15	20	5	0	0	1	1	1	28	27.6	09:15-10:15	133	18	1	1	
09:30-10:30	15	5	1	0	2	3	2	28	27.1	09:30-10:30	14	3	0	0	1	1	1	20	19.6	09:30-10:30	97	10	1	1	
09:45-10:45	8	3	1	0	0	2	1	15	13.5	09:45-10:45	9	2	0	0	1	0	1	13	13.2	09:45-10:45	43	5	1	1	
15:00-16:00	59	6	0	0	3	1	7	76	72.8	15:00-16:00	65	3	0	0	5	1	4	78	79.2	15:00-16:00	317	43	2	0	
15:15-16:15	56	7	0	0	3	1	4	71	70.2	15:15-16:15	70	6	0	0	2	2	8	88	82.4	15:15-16:15	319	49	1	0	
15:30-16:30	47	8	0	0	4	1	6	66	64.6	15:30-16:30	71	7	0	0	2	3	7	90	84.6	15:30-16:30	319	51	1	0	
15:45-16:45	49	5	0	0	3	1	4	62	61.2	15:45-16:45	59	8	0	0	3	4	8	82	76.2	15:45-16:45	322	51	0	0	
16:00-17:00	42	6	0	0	2	1	6	57	53.6	16:00-17:00	61	10	0	0	2	3	11	87	78.4	16:00-17:00	310	51	1	0	
16:15-17:15	48	6	0	0	3	1	5	63	61.4	16:15-17:15	59	12	0	0	3	2	8	84	79.4	16:15-17:15	312	45	1	0	
16:30-17:30	46	7	0	0	1	1	5	60	56.4	16:30-17:30	47	13	0	0	2	1	10	73	66.4	16:30-17:30	303	41	1	0	
16:45-17:45	52	6	0	0	2	1	5	66	63.4	16:45-17:45	49	11	0	0	1	0	8	69	63.6	16:45-17:45	292	48	2	0	
17:00-18:00	53	6	0	0	2	1	4	66	64.2	17:00-18:00	50	9	0	0	2	3	6	70	65.4	17:00-18:00	309	45	1	0	
17:15-18:15	60	4	0	0	2	2	5	73	69.8	17:15-18:15	51	5	0	0	1	5	6	68	61.2	17:15-18:15	317	46	1	0	
17:30-18:30	64	4	0	0	2	2	4	76	73.6	17:30-18:30	55	4	0	0	2	5	8	74	66.6	17:30-18:30	311	46	1	0	
17:45-18:45	61	5	0	0	2	2	3	73	71.4	17:45-18:45	54	4	0	0	2	5	10	75	66	17:45-18:45	305	32	1	0	
18:00-19:00	62	3	0	0	2	2	2	71	70.2	18:00-19:00	51	5	0	0	2	2	9	69	62.6	18:00-19:00	290	30	1	0	
18:15-19:15	39	3	0	0	1	0	1	44	44.2	18:15-19:15	35	3	0	0	2	0	7	47	43.4	18:15-19:15	205	20	1	0	
18:30-19:30	25	1	0	0	1	0	0	27	28	18:30-19:30	22	2	0	0	1	0	3	28	26.6	18:30-19:30	138	10	1	0	
18:45-19:45	12	0	0	0	0	0	0	12	12	18:45-19:45	11	2	0	0	1	0	1	15	15.2	18:45-19:45	71	7	0	0	
TOTAL	407	41	3	0	18	13	45	451	429.9	TOTAL	369	42	1	0	15	14	36	399	376.1	TOTAL	1792	242	13	2	



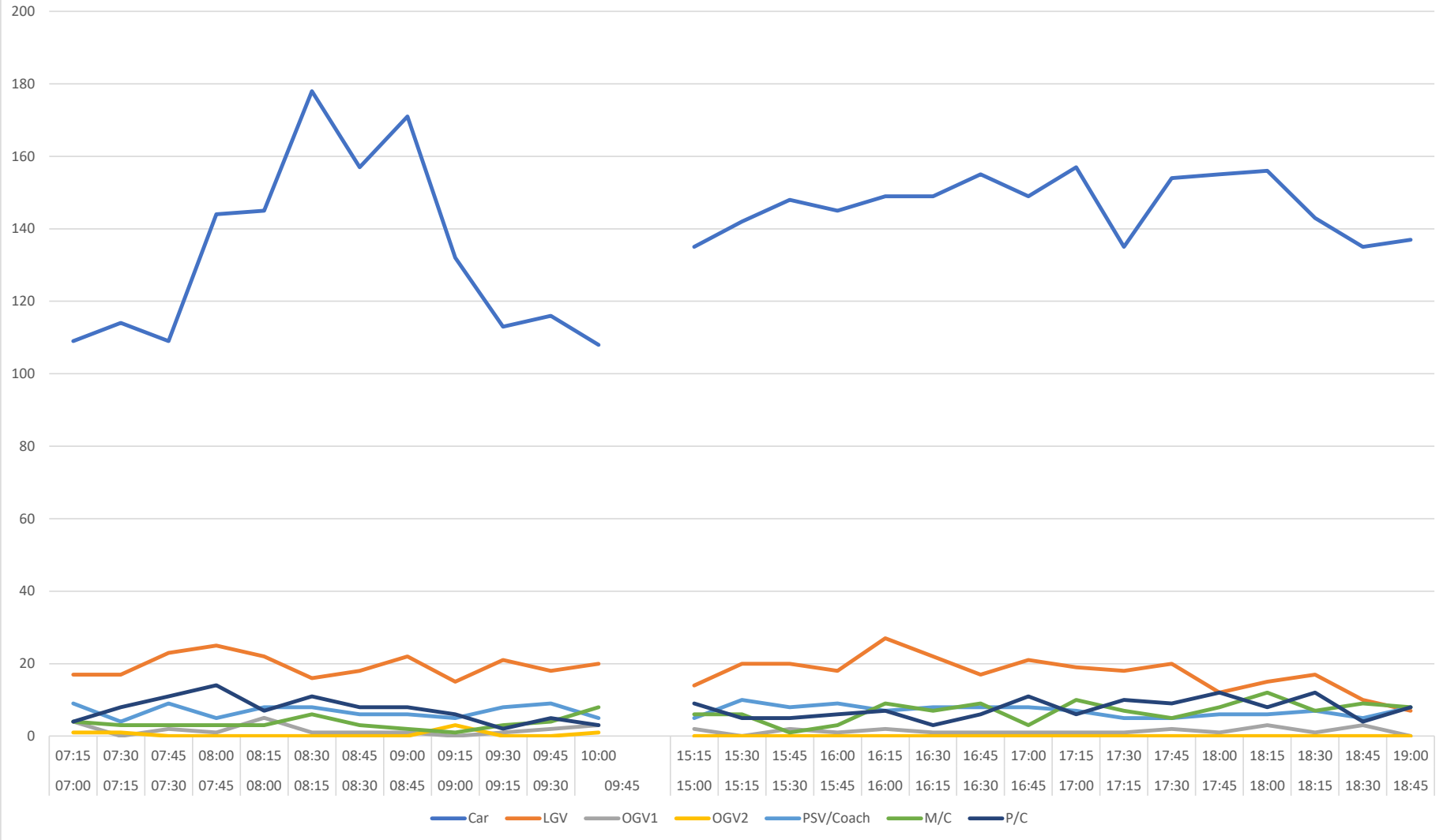
Project ID and Name: IW0056 Kneller Hall, Twickenham
 Junction name: Kneller Road / Warren Road

Survey Date: 28/06/2022
 Survey Day: Tuesday

Time Interval		Peak Hour (AM)								
		Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
08:00	08:15	145	22	5	0	8	3	7	190	193.1
08:15	08:30	178	16	1	0	8	6	11	220	216.1
08:30	08:45	157	18	1	0	6	3	8	193	191.3
08:45	09:00	171	22	1	0	6	2	8	210	208.9

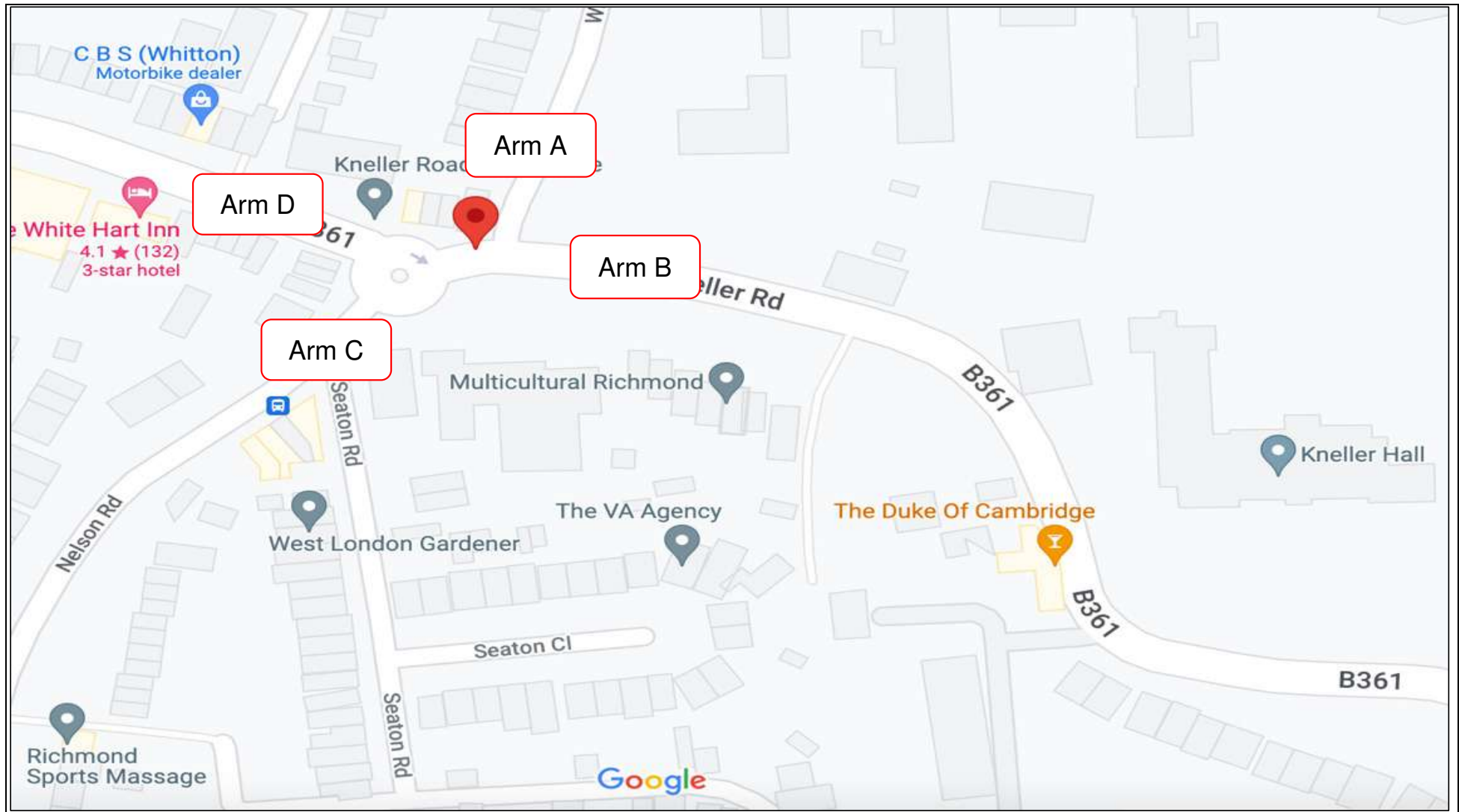
Time Interval		Peak Hour (PM)								
		Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
16:00	16:15	149	27	2	0	7	9	7	201	198
16:15	16:30	149	22	1	0	8	7	3	190	191.9
16:30	16:45	155	17	1	0	8	9	6	196	194.3
16:45	17:00	149	21	1	0	8	3	11	193	190.9

All movements (15-minute intervals)



Car	1
LGV	1
OGV1	1.5
OGV2	2.3
PSV	2
M/C	0.4
P/C	0.2

Job ID	Project Name	Site Location	Google Coordinates	Survey Date	Survey Day	Survey Timings	Weather AM	Weather PM
IW0056	Kneller Hall, Twickenham	Whitton Dene / Kneller Road / Nelson Road	51.455570, -0.353160	28/06/2022	Tuesday	0700-1000 & 1500-1900hrs	Sunny	Sunny



Survey Date: 28/06/2022
 Survey Day: Tuesday

A - D (15-minute intervals)									
Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
07:15	1	0	0	0	0	0	0	1	1
07:30	0	0	0	0	0	0	0	0	0
07:45	1	0	0	0	0	0	0	1	1
08:00	2	0	0	0	0	1	0	3	2.4
08:15	0	1	0	0	0	0	0	1	1
08:30	3	0	0	0	0	0	0	3	3
08:45	2	0	0	0	0	0	0	2	2
09:00	1	2	0	0	0	0	0	3	3
09:15	1	1	0	0	0	0	0	2	2
09:30	1	1	0	0	0	0	0	2	2
09:45	0	1	0	0	0	0	0	1	1
10:00	0	2	0	0	0	0	0	2	2

15:15	2	0	0	0	0	0	1	3	2.2
15:30	0	0	0	0	0	0	0	0	0
15:45	2	0	0	0	0	1	0	3	2.4
16:00	4	0	0	0	0	1	1	6	4.6
16:15	1	1	0	0	0	0	0	2	2
16:30	3	0	0	0	0	0	0	3	3
16:45	2	0	0	0	0	0	0	2	2
17:00	5	0	0	0	0	0	1	6	5.2
17:15	1	0	0	0	0	0	1	2	1.2
17:30	3	1	0	0	0	0	1	5	4.2
17:45	1	1	0	0	0	0	0	2	2
18:00	2	1	0	0	0	0	0	3	3
18:15	2	0	0	0	0	0	0	2	2
18:30	2	1	0	0	0	1	0	4	3.4
18:45	1	1	0	0	0	0	1	3	2.2
19:00	2	0	0	0	0	0	0	2	2
total	45	14	0	0	0	4	6	69	61.8

A - D (rolling hour)									
Interval	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
08:00	4	0	0	0	0	1	0	5	4.4
08:15	3	1	0	0	0	1	0	5	4.4
08:30	6	1	0	0	0	1	0	8	7.4
08:45	7	1	0	0	0	1	0	9	8.4
09:00	6	3	0	0	0	0	0	9	9
09:15	7	3	0	0	0	0	0	10	10
09:30	5	4	0	0	0	0	0	9	9
09:45	3	5	0	0	0	0	0	8	8
10:00	2	5	0	0	0	0	0	7	7
10:15	1	4	0	0	0	0	0	5	5
10:30	0	3	0	0	0	0	0	3	3
10:45	0	2	0	0	0	0	0	2	2
16:00	8	0	0	0	0	2	2	12	9.2
16:15	7	1	0	0	0	2	1	11	9
16:30	10	1	0	0	0	2	1	14	12
16:45	10	1	0	0	0	1	1	13	11.6
17:00	11	1	0	0	0	0	1	13	12.2
17:15	11	0	0	0	0	0	2	13	11.4
17:30	11	1	0	0	0	0	3	15	12.6
17:45	10	2	0	0	0	0	3	15	12.6
18:00	7	3	0	0	0	0	2	12	10.4
18:15	8	3	0	0	0	0	1	12	11.2
18:30	7	3	0	0	0	1	0	11	10.4
18:45	7	3	0	0	0	1	1	12	10.6
19:00	7	2	0	0	0	1	1	11	9.6
19:15	5	2	0	0	0	1	1	9	7.6
19:30	3	1	0	0	0	0	1	5	4.2
19:45	2	0	0	0	0	0	0	2	2
TOTAL	45	14	0	0	0	4	6	57	52.6

Survey Date: 28/06/2022
 Survey Day: Tuesday

C - C (15-minute intervals)									Time Interval		C - D (15-minute intervals)								
Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
0	0	0	0	0	0	0	0	0	07:00	07:15	1	0	0	0	0	0	1	1	
0	0	0	0	0	0	0	0	0	07:15	07:30	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	07:30	07:45	1	0	0	0	0	0	1	1	
0	0	0	0	1	0	0	1	2	07:45	08:00	2	1	0	0	0	1	4	3.2	
1	0	0	0	0	0	0	1	1	08:00	08:15	0	0	0	0	0	0	0	0	
0	1	0	0	0	0	0	1	1	08:15	08:30	3	2	0	0	0	5	5		
0	1	0	0	0	0	0	1	1	08:30	08:45	4	0	0	0	0	4	4		
1	0	0	0	0	0	0	1	1	08:45	09:00	5	1	0	0	0	7	6.2		
0	0	0	0	0	0	0	0	0	09:00	09:15	2	1	0	0	0	3	3		
0	0	0	0	0	0	0	0	0	09:15	09:30	1	0	0	0	0	1	1		
0	0	0	0	0	0	0	0	0	09:30	09:45	1	0	0	0	1	2	1.4		
0	0	0	0	0	0	0	0	0	09:45	10:00	2	1	0	0	0	3	3		

0	0	0	0	0	0	0	0	0	15:00	15:15	2	0	1	0	0	0	3	3.5
0	0	0	0	0	0	0	0	0	15:15	15:30	4	0	0	0	1	0	5	4.4
1	0	0	0	0	0	0	1	1	15:30	15:45	3	0	0	0	0	0	3	3
2	0	0	0	0	0	0	2	2	15:45	16:00	4	0	0	1	0	0	5	6
0	0	0	0	1	0	0	1	2	16:00	16:15	2	6	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	16:15	16:30	4	1	0	0	1	0	6	5.4
0	0	0	0	0	0	0	0	0	16:30	16:45	1	1	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	16:45	17:00	9	0	0	0	0	0	9	9
0	0	0	0	0	0	0	0	0	17:00	17:15	3	0	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	17:15	17:30	1	1	0	0	0	1	3	2.2
2	0	0	0	0	0	0	2	2	17:30	17:45	3	0	0	0	1	0	4	3.4
0	0	0	0	0	0	0	0	0	17:45	18:00	2	0	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	18:00	18:15	4	0	0	0	0	1	5	4.2
0	0	0	0	0	0	0	0	0	18:15	18:30	1	0	0	0	0	1	2	1.2
0	0	0	0	0	0	0	0	0	18:30	18:45	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	1	18:45	19:00	2	0	0	0	0	0	2	2
8	2	0	0	2	0	0	12	14	Total		67	15	1	0	1	4	93	88.1

C - C (rolling hour)									Time Interval		C - D (rolling hour)								
Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU		
0	0	0	0	1	0	0	1	2	07:00	08:00	4	1	0	0	0	6	5.2		
1	0	0	0	1	0	0	2	3	07:15	08:15	3	1	0	0	1	5	4.2		
1	1	0	0	1	0	0	3	4	07:30	08:30	6	3	0	0	0	10	9.2		
1	2	0	0	1	0	0	4	5	07:45	08:45	9	3	0	0	1	13	12.2		
2	2	0	0	0	0	0	4	4	08:00	09:00	12	3	0	0	1	16	15.2		
1	2	0	0	0	0	0	3	3	08:15	09:15	14	4	0	0	1	19	18.2		
1	1	0	0	0	0	0	2	2	08:30	09:30	12	2	0	0	1	15	14.2		
1	0	0	0	0	0	0	1	1	08:45	09:45	9	2	0	0	1	13	11.6		
0	0	0	0	0	0	0	0	0	09:00	10:00	6	2	0	0	1	9	8.4		
0	0	0	0	0	0	0	0	0	09:15	10:15	4	1	0	0	1	6	5.4		
0	0	0	0	0	0	0	0	0	09:30	10:30	3	1	0	0	1	5	4.4		
0	0	0	0	0	0	0	0	0	09:45	10:45	2	1	0	0	0	3	3		
3	0	0	0	0	0	0	3	3	15:00	16:00	13	0	1	0	1	16	16.9		
3	0	0	0	1	0	0	4	5	15:15	16:15	13	6	0	1	1	21	21.4		
3	0	0	0	1	0	0	4	5	15:30	16:30	13	7	0	1	1	22	22.4		
2	0	0	0	1	0	0	3	4	15:45	16:45	11	8	0	1	1	21	21.4		
0	0	0	0	1	0	0	1	2	16:00	17:00	16	8	0	0	1	25	24.4		
0	0	0	0	0	0	0	0	0	16:15	17:15	17	2	0	0	1	20	19.4		
0	0	0	0	0	0	0	0	0	16:30	17:30	14	2	0	0	1	17	16.2		
2	0	0	0	0	0	0	2	2	16:45	17:45	16	1	0	0	1	19	17.6		
2	0	0	0	0	0	0	2	2	17:00	18:00	9	1	0	0	1	12	10.6		
2	0	0	0	0	0	0	2	2	17:15	18:15	10	1	0	0	1	14	11.8		
2	0	0	0	0	0	0	2	2	17:30	18:30	10	0	0	0	1	13	10.8		
0	0	0	0	0	0	0	0	0	17:45	18:45	7	0	0	0	2	9	7.4		
1	0	0	0	0	0	0	1	1	18:00	19:00	7	0	0	0	2	9	7.4		
1	0	0	0	0	0	0	1	1	18:15	19:15	3	0	0	0	1	4	3.2		
1	0	0	0	0	0	0	1	1	18:30	19:30	2	0	0	0	0	2	2		
1	0	0	0	0	0	0	1	1	18:45	19:45	2	0	0	0	0	2	2		
8	2	0	0	2	0	0	9	11	TOTAL		67	15	1	0	1	4	77	71.2	

Survey Date: 28/06/2022
 Survey Day: Tuesday

Interval	D - D (15-minute intervals)								
	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0

15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	1	0	0	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
tal	1	0	0	0	0	0	0	1	1

Interval	D - D (rolling hour)								
	Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	1	0	0	0	0	0	0	1	1
18:45	1	0	0	0	0	0	0	1	1
19:00	1	0	0	0	0	0	0	1	1
19:15	1	0	0	0	0	0	0	1	1
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
TAL	1	0	0	0	0	0	0	1	1



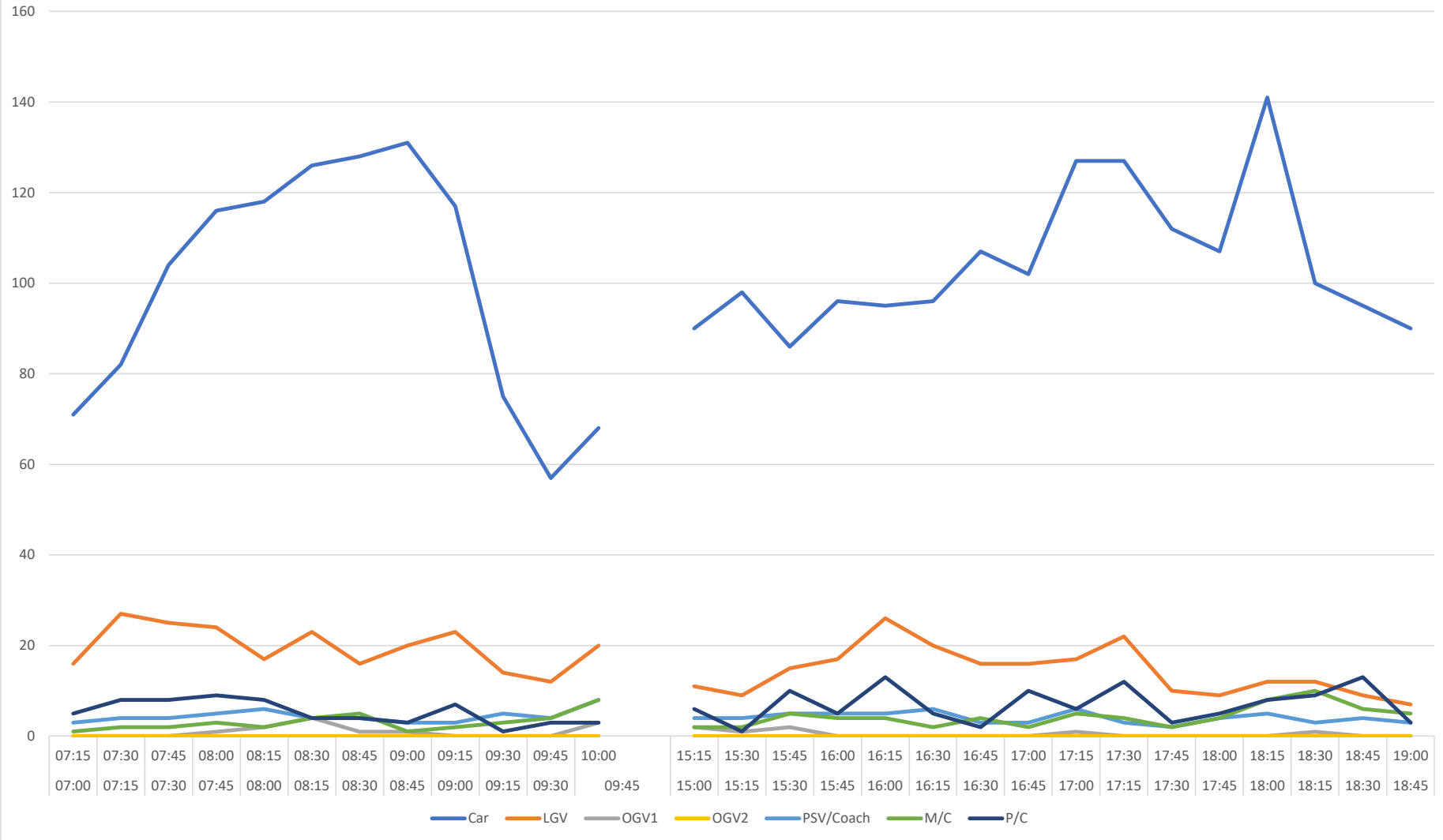
Project ID and Name: IW0056 Kneller Hall, Twickenham
 Junction name: Whitton Dene / Kneller Road / Nelson Road

Survey Date: 28/06/2022
 Survey Day: Tuesday

Time Interval		Peak Hour (AM)								
		Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
08:00	08:15	118	17	2	0	6	2	8	153	152.4
08:15	08:30	126	23	4	0	4	4	4	165	165.4
08:30	08:45	128	16	1	0	4	5	4	158	156.3
08:45	09:00	131	20	1	0	3	1	3	159	159.5

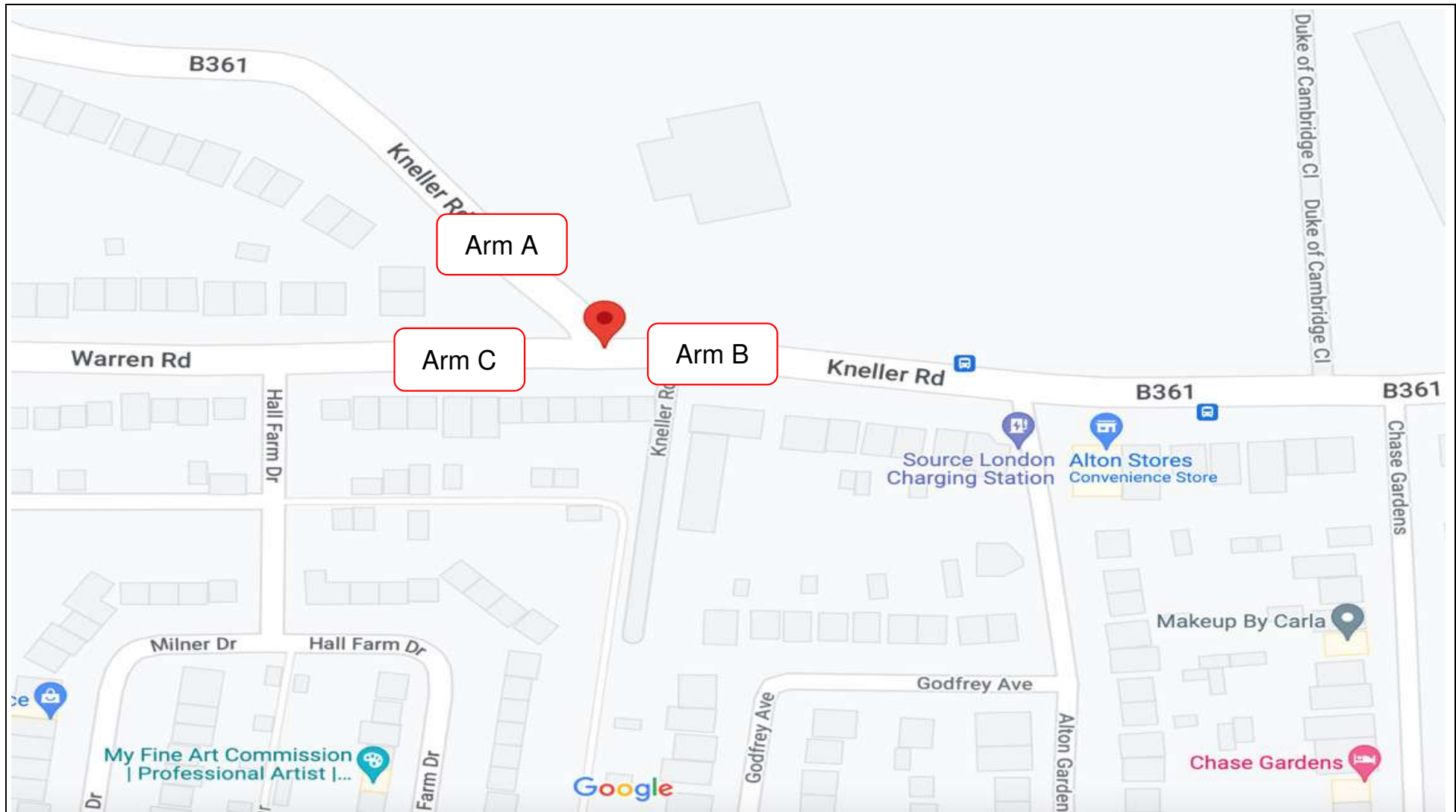
Time Interval		Peak Hour (PM)								
		Car	LGV	OGV1	OGV2	PSV/Coach	M/C	P/C	Total	PCU
17:15	17:30	127	22	0	0	3	4	12	168	159
17:30	17:45	112	10	0	0	2	2	3	129	127.4
17:45	18:00	107	9	0	0	4	4	5	129	126.6
18:00	18:15	141	12	0	0	5	8	8	174	167.8

All movements (15-minute intervals)



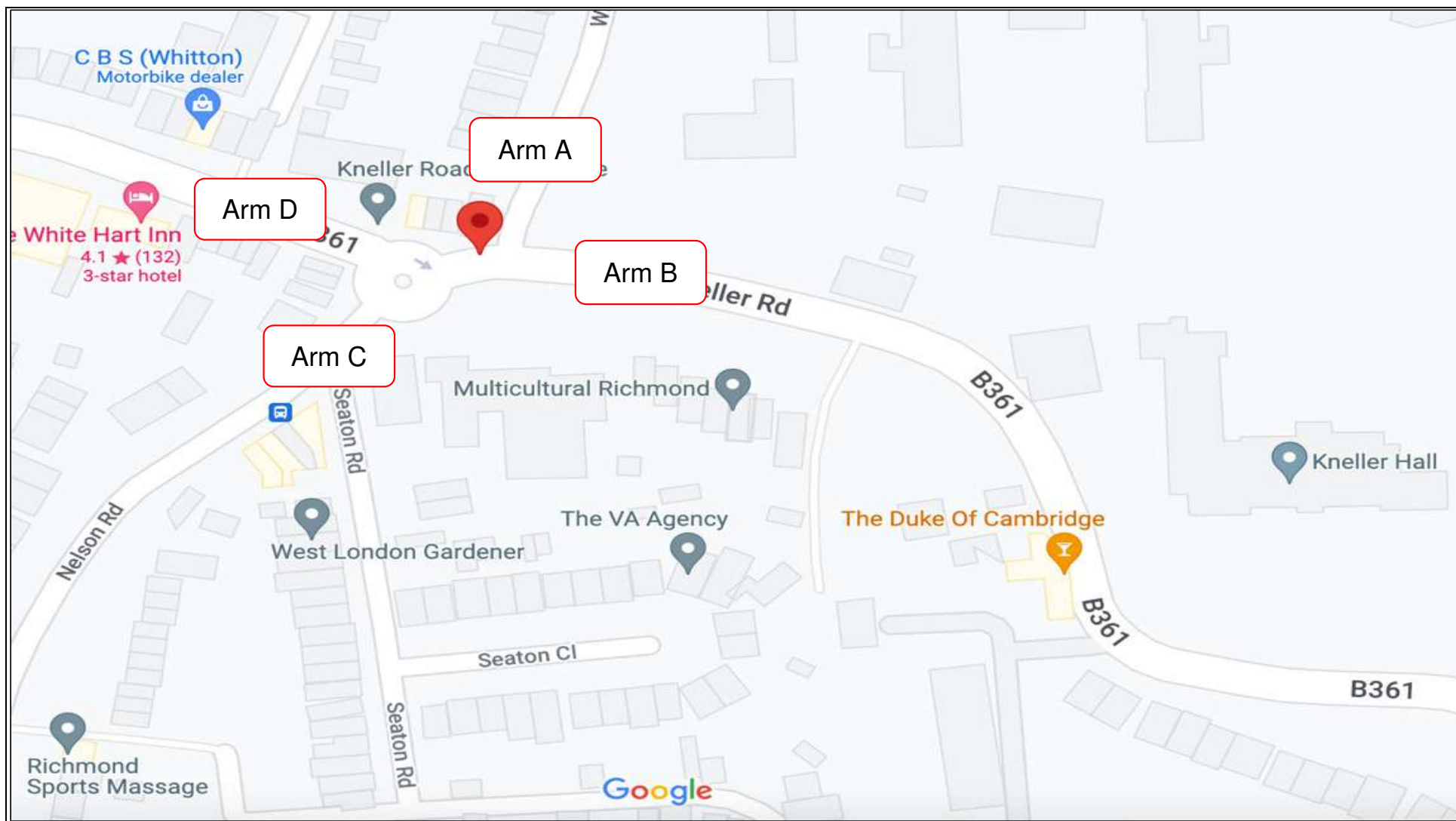
Car	1
LGV	1
OGV1	1.5
OGV2	2.3
PSV	2
M/C	0.4
P/C	0.2

Job ID	Project Name	Site Location	Google Coordinates	Survey Date	Survey Day	Survey Timings	Weather AM	Weather PM
IW0056	Kneller Hall, Twickenham	Kneller Road/Warren Road	51.453848, -0.349185	28/06/2022	Tuesday	0700-1000 & 1500-1900hrs	Sunny	Sunny



18:10	18:15	0	0	0	0	0	0	18:10	18:15	0	0	0	0	0	0	1	0	0	0	1	1	18:10	18:15	0	0	0	0	0	0
18:15	18:20	1	0	0	0	1	1	18:15	18:20	0	0	0	0	0	0	1	0	0	0	1	1	18:15	18:20	0	0	0	0	0	0
18:20	18:25	2	0	0	0	2	2	18:20	18:25	0	0	0	0	0	0	0	0	0	0	0	0	18:20	18:25	0	0	0	0	0	0
18:25	18:30	1	0	0	0	1	1	18:25	18:30	0	0	0	0	0	0	1	0	0	0	1	1	18:25	18:30	0	0	0	0	0	0
18:30	18:35	0	0	0	0	0	0	18:30	18:35	0	0	0	0	0	0	0	0	0	0	0	0	18:30	18:35	0	0	0	0	0	0
18:35	18:40	1	0	0	1	2	3	18:35	18:40	0	0	0	0	0	0	1	0	0	0	1	1	18:35	18:40	0	0	0	0	0	0
18:40	18:45	0	0	0	0	0	0	18:40	18:45	0	0	0	0	0	0	0	0	0	0	0	0	18:40	18:45	0	0	0	0	0	0
18:45	18:50	0	0	0	0	0	0	18:45	18:50	0	0	0	0	0	0	0	0	0	0	0	0	18:45	18:50	0	0	0	0	0	0
18:50	18:55	1	0	0	0	1	1	18:50	18:55	0	0	0	0	0	0	1	0	0	0	1	1	18:50	18:55	0	0	0	0	0	0
18:55	19:00	1	0	0	0	1	1	18:55	19:00	0	0	0	0	0	0	2	0	0	0	2	2	18:55	19:00	0	0	0	0	0	0

Job ID	Project Name	Site Location	Google Coordinates	Survey Date	Survey Day	Survey Timings	Weather AM	Weather PM
IW0056	Kneller Hall, Twickenham	Whitton Dene / Kneller Road / Nelson Road	51.455570, -0.353160	28/06/2022	Tuesday	0700-1000 & 1500-1900hrs	Sunny	Sunny



17:55	18:00	0	0	0	0	0	0	17:55	18:00	0	0	0	0	0	0	17:55	18:00	2	0	0	0	2	2	17:55	18:00	0	0	0	0	0	0
18:00	18:05	3	0	0	0	3	3	18:00	18:05	0	0	0	0	0	0	18:00	18:05	0	0	0	0	0	0	18:00	18:05	0	0	0	0	0	0
18:05	18:10	2	0	0	0	2	2	18:05	18:10	0	0	0	0	0	0	18:05	18:10	0	0	0	0	0	0	18:05	18:10	0	0	0	0	0	0
18:10	18:15	2	0	0	0	2	2	18:10	18:15	0	0	0	0	0	0	18:10	18:15	0	0	0	0	0	0	18:10	18:15	0	0	0	0	0	0
18:15	18:20	2	0	0	0	2	2	18:15	18:20	0	0	0	0	0	0	18:15	18:20	0	0	0	0	0	0	18:15	18:20	1	0	0	0	1	1
18:20	18:25	1	0	0	0	1	1	18:20	18:25	0	0	0	0	0	0	18:20	18:25	0	0	0	0	0	0	18:20	18:25	0	0	0	0	0	0
18:25	18:30	2	0	0	0	2	2	18:25	18:30	0	0	0	0	0	0	18:25	18:30	0	0	0	0	0	0	18:25	18:30	2	0	0	0	2	2
18:30	18:35	1	0	0	0	1	1	18:30	18:35	2	0	0	0	2	2	18:30	18:35	0	0	0	0	0	0	18:30	18:35	0	0	0	0	0	0
18:35	18:40	2	0	0	0	2	2	18:35	18:40	0	0	0	0	0	0	18:35	18:40	2	0	0	0	2	2	18:35	18:40	0	0	0	0	0	0
18:40	18:45	0	0	0	0	0	0	18:40	18:45	0	0	0	0	0	0	18:40	18:45	1	0	0	0	1	1	18:40	18:45	0	0	0	0	0	0
18:45	18:50	0	0	0	0	0	0	18:45	18:50	0	0	0	0	0	0	18:45	18:50	1	0	0	0	1	1	18:45	18:50	0	0	0	0	0	0
18:50	18:55	1	0	0	0	1	1	18:50	18:55	0	0	0	0	0	0	18:50	18:55	0	0	0	0	0	0	18:50	18:55	0	0	0	0	0	0
18:55	19:00	1	0	0	0	1	1	18:55	19:00	0	0	0	0	0	0	18:55	19:00	0	0	0	0	0	0	18:55	19:00	0	0	0	0	0	0

Car	1
LGV	1
OGV1	1.5
OGV2	2.3
PSV	2
M/C	0.4
P/C	0.2

Appendix M

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: B361 Kneller Road-Nelson Road Roundabout v1.j9
Path: C:\Users\nicol\Modelling Group\Communication site - Projects\MG0206 - Kneller Road\Technical\Models
Report generation date: 13/09/2022 06:21:38

- «Set 1 - 2029 FB + Dev, PM
 - »Junction Network
 - »Arms
 - »Traffic Demand
 - »Origin-Destination Data
 - »Vehicle Mix
 - »Results

Summary of junction performance

AM							PM					
Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	
Set 1 - 2022 Base												
Arm 1	D1	0.2	4.27	0.20	A	234 % [Arm 2]	D2	0.2	4.11	0.17	A	388 % [Arm 2]
Arm 2		0.4	5.08	0.26	A			0.2	4.46	0.17	A	
Arm 3		0.1	4.69	0.06	A			0.1	4.32	0.05	A	
Set 1 - 2023 Base												
Arm 1	D3	0.2	4.28	0.20	A	231 % [Arm 2]	D4	0.2	4.16	0.17	A	383 % [Arm 2]
Arm 2		0.4	5.10	0.26	A			0.2	4.47	0.17	A	
Arm 3		0.1	4.71	0.06	A			0.1	4.33	0.05	A	
Set 1 - 2023 FB + Dev												
Arm 1	D5	0.2	4.28	0.20	A	193 % [Arm 2]	D6	0.3	4.34	0.21	A	331 % [Arm 1]
Arm 2		0.4	5.36	0.30	A			0.2	4.47	0.17	A	
Arm 3		0.1	4.85	0.07	A			0.1	4.33	0.05	A	
Set 1 - 2029 Base												
Arm 1	D7	0.3	4.34	0.21	A	214 % [Arm 2]	D8	0.2	4.21	0.18	A	358 % [Arm 2]
Arm 2		0.4	5.20	0.28	A			0.2	4.52	0.18	A	
Arm 3		0.1	4.77	0.07	A			0.1	4.37	0.05	A	
Set 1 - 2029 FB + Dev												
Arm 1	D9	0.3	4.34	0.21	A	159 % [Arm 2]	D10	0.3	4.53	0.24	A	273 % [Arm 1]
Arm 2		0.5	5.68	0.34	A			0.2	4.52	0.18	A	
Arm 3		0.1	5.04	0.07	A			0.1	4.37	0.05	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	09/09/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-G21LB70\nicol
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Set 1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2029 FB + Dev	PM	FLAT	15:00	16:00	60	60	✓

Set 1 - 2029 FB + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 89% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Nelson Rd-B361 Kneller Rd	Mini-roundabout		1, 2, 3	4.51	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		273	Arm 1

Arms

Arms

Arm	Name	Description
1	B361 Kneller Road East	
2	Nelson Road	
3	B361 Kneller Road West	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	5.40	2.0	14.30	11.10	0.0	
2	4.40	4.40	4.50	6.7	11.60	12.40	0.0	
3	4.00	4.00	4.40	8.2	14.00	8.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.651	1066
2	0.654	994
3	0.642	973

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	255	100.000
2		FLAT	✓	176	100.000
3		FLAT	✓	48	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	220	35
	2	158	0	18
	3	35	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	1	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.24	4.53	0.3	A	255	255
2	0.18	4.52	0.2	A	176	176
3	0.05	4.37	0.1	A	48	48

Main Results for each time segment

15:00 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	255	255	13	1058	0.241	255	192	0.0	0.3	4.527	A
2	176	176	35	971	0.181	175	233	0.0	0.2	4.522	A
3	48	48	157	871	0.055	48	53	0.0	0.1	4.370	A

Junctions 9
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Filename: B361 Kneller Road-Site Access 2 model v1.j9
 Path: C:\Users\nicol\Modelling Group\Communication site - Projects\MG0206 - Kneller Road\Technical\Models
 Report generation date: 13/09/2022 06:05:57

- «2029 FB + Dev, PM
 - »Junction Network
 - »Arms
 - »Traffic Demand
 - »Origin-Destination Data
 - »Vehicle Mix
 - »Results

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
2022 Base												
Stream B-AC	D1	0.0	0.00	0.00	A	900 %	D2	0.0	0.00	0.00	A	900 %
Stream C-AB		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
2023 Base												
Stream B-AC	D3	0.0	0.00	0.00	A	900 %	D4	0.0	0.00	0.00	A	900 %
Stream C-AB		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
2023 FB + Dev												
Stream B-AC	D5	1.0	20.45	0.48	C	25 %	D6	0.6	16.33	0.34	C	49 %
Stream C-AB		0.5	6.87	0.20	A	[Stream B-AC]		0.4	5.96	0.15	A	[Stream B-AC]
2029 Base												
Stream B-AC	D7	0.0	0.00	0.00	A	900 %	D8	0.0	0.00	0.00	A	900 %
Stream C-AB		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
2029 FB + Dev												
Stream B-AC	D9	6.0	65.84	0.86	F	-11 %	D10	1.7	26.63	0.60	D	9 %
Stream C-AB		0.9	8.09	0.36	A	[Stream B-AC]		0.7	6.61	0.26	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	08/09/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-G21LB7O\nicol
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2029 FB + Dev	PM	FLAT	15:00	16:00	60	60	✓

2029 FB + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.74	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	9	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	Site Access 2	Site Access 2	Minor
C	B361 Kneller Road	B361 Kneller Road	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.40			107.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.10	18	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	496	0.085	0.214	0.135	0.306
B-C	640	0.092	0.233	-	-
C-B	636	0.231	0.231	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	567	100.000
B		FLAT	✓	228	100.000
C		FLAT	✓	501	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	124	444
	B	124	0	104
	C	397	104	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	17	1
	B	12	0	14
	C	1	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.60	26.63	1.7	D	228	228
C-AB	0.26	6.61	0.7	A	209	209
C-A					292	292
A-B					124	124
A-C					444	444

Main Results for each time segment

15:00 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	228	228	377	0.604	226	0.0	1.7	26.630	D
C-AB	209	209	790	0.264	208	0.0	0.7	6.611	A
C-A	292	292			292				
A-B	124	124			124				
A-C	444	444			444				

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Filename: B361 Kneller Road-Warren Road model v1.j9
Path: C:\Users\nicol\Modelling Group\Communication site - Projects\MG0206 - Kneller Road\Technical\Models
Report generation date: 13/09/2022 06:18:30

- «Set 1 - 2029 FB + Dev, PM
 - »Junction Network
 - »Arms
 - »Traffic Demand
 - »Origin-Destination Data
 - »Vehicle Mix
 - »Results

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
Set 1 - 2022 Base												
Stream B-AC	D1	0.2	7.12	0.18	A	175 %	D2	0.1	6.17	0.11	A	269 %
Stream C-AB		0.1	6.87	0.10	A	[Stream B-AC]		0.1	6.55	0.12	A	[Stream B-AC]
Set 1 - 2023 Base												
Stream B-AC	D3	0.2	7.15	0.19	A	173 %	D4	0.1	6.19	0.11	A	265 %
Stream C-AB		0.1	6.89	0.10	A	[Stream B-AC]		0.1	6.56	0.12	A	[Stream B-AC]
Set 1 - 2023 FB + Dev												
Stream B-AC	D5	0.3	7.77	0.22	A	127 %	D6	0.2	6.85	0.19	A	184 %
Stream C-AB		0.3	7.86	0.20	A	[Stream B-AC]		0.2	6.86	0.14	A	[Stream B-AC]
Set 1 - 2029 Base												
Stream B-AC	D7	0.2	7.27	0.20	A	159 %	D8	0.1	6.28	0.12	A	247 %
Stream C-AB		0.1	7.00	0.11	A	[Stream B-AC]		0.1	6.64	0.13	A	[Stream B-AC]
Set 1 - 2029 FB + Dev												
Stream B-AC	D9	0.4	8.52	0.26	A	95 %	D10	0.3	7.57	0.25	A	134 %
Stream C-AB		0.4	8.78	0.28	A	[Stream B-AC]		0.2	7.17	0.17	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	08/09/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-G21LB7O\nicol
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Set 1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2029 FB + Dev	PM	FLAT	15:00	16:00	60	60	✓

Set 1 - 2029 FB + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.79	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	134	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Warren Rd	Warren Rd	Major
B	B361 Kneller Road	B361 Kneller Road	Minor
C	B361 Kneller Road	B361 Kneller Road	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.40	✓	3.00	✓	3.00	92.0	✓	2.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.40	56	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	633	0.101	0.257	0.161	0.367
B-C	747	0.108	0.272	-	-
C-B	682	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	366	100.000
B		FLAT	✓	158	100.000
C		FLAT	✓	555	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	362
	B	8	0	150
	C	455	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	7.57	0.3	A	158	158
C-AB	0.17	7.17	0.2	A	102	102
C-A					453	453
A-B					4	4
A-C					362	362

Main Results for each time segment

15:00 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	158	158	633	0.250	158	0.0	0.3	7.574	A
C-AB	102	102	604	0.169	102	0.0	0.2	7.166	A
C-A	453	453			453				
A-B	4	4			4				
A-C	362	362			362				

Junctions 9
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Filename: B361 Kneller Road-Whitton Dene model v1.j9
Path: C:\Users\nicol\Modelling Group\Communication site - Projects\MG0206 - Kneller Road\Technical\Models
Report generation date: 13/09/2022 06:30:25

- «Set 1 - 2029 FB + Dev, PM
 - »Junction Network
 - »Arms
 - »Traffic Demand
 - »Origin-Destination Data
 - »Vehicle Mix
 - »Results

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
Set 1 - 2022 Base												
Stream B-C	D1	0.1	7.88	0.12	A	90 % [Stream B-A]	D2	0.1	7.02	0.07	A	146 % [Stream B-A]
Stream B-A		0.6	11.02	0.36	B			0.4	9.48	0.28	A	
Stream C-AB		0.1	7.18	0.09	A			0.1	6.67	0.08	A	
Set 1 - 2023 Base												
Stream B-C	D3	0.1	7.92	0.13	A	88 % [Stream B-A]	D4	0.1	7.04	0.07	A	144 % [Stream B-A]
Stream B-A		0.6	11.10	0.36	B			0.4	9.52	0.28	A	
Stream C-AB		0.1	7.19	0.09	A			0.1	6.68	0.08	A	
Set 1 - 2023 FB + Dev												
Stream B-C	D5	0.2	8.30	0.16	A	71 % [Stream B-A]	D6	0.2	7.95	0.16	A	90 % [Stream B-A]
Stream B-A		0.6	12.02	0.38	B			0.6	10.96	0.36	B	
Stream C-AB		0.3	8.18	0.19	A			0.1	6.82	0.10	A	
Set 1 - 2029 Base												
Stream B-C	D7	0.2	8.13	0.13	A	78 % [Stream B-A]	D8	0.1	7.14	0.07	A	131 % [Stream B-A]
Stream B-A		0.6	11.56	0.38	B			0.4	9.78	0.30	A	
Stream C-AB		0.1	7.27	0.10	A			0.1	6.72	0.08	A	
Set 1 - 2029 FB + Dev												
Stream B-C	D9	0.2	8.88	0.19	A	52 % [Stream B-A]	D10	0.3	9.09	0.23	A	56 % [Stream B-A]
Stream B-A		0.7	13.52	0.42	B			0.8	12.94	0.44	B	
Stream C-AB		0.4	9.23	0.28	A			0.1	7.00	0.12	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	08/09/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-G21LB7O\nicol
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Set 1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2029 FB + Dev	PM	FLAT	15:00	16:00	60	60	✓

Set 1 - 2029 FB + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.95	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	56	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	B361 Kneller Rd	B361 Kneller Rd	Major
B	Whitton Dene	Whitton Dene	Minor
C	B361 Kneller Road	B361 Kneller Road	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.00			42.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	7.20	4.50	4.10	3.90	✓	1.00	22	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	557	0.093	0.234	0.147	0.335
B-C	644	0.090	0.228	-	-
C-B	598	0.212	0.212	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	193	100.000
B		FLAT	✓	337	100.000
C		FLAT	✓	102	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	156	37
B	218	0	119
C	37	65	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	0
B	1	0	0
C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.23	9.09	0.3	A	119	119
B-A	0.44	12.94	0.8	B	218	218
C-AB	0.12	7.00	0.1	A	69	69
C-A					33	33
A-B					156	156
A-C					37	37

Main Results for each time segment

15:00 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	119	515	0.232	119	0.0	0.3	9.091	A
B-A	218	218	498	0.438	217	0.0	0.8	12.942	B
C-AB	69	69	583	0.118	69	0.0	0.1	6.996	A
C-A	33	33			33				
A-B	156	156			156				
A-C	37	37			37				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Whitton Dene -Site Access 1 model v1.j9
Path: C:\Users\nicol\Modelling Group\Communication site - Projects\MG0206 - Kneller Road\Technical\Models
Report generation date: 13/09/2022 05:59:26

- «Set 1 - 2029 FB + Dev, PM
 - »Junction Network
 - »Arms
 - »Traffic Demand
 - »Origin-Destination Data
 - »Vehicle Mix
 - »Results

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
Set 1 - 2022 Base												
Stream B-AC	D1	0.0	0.00	0.00	A	900 %	D2	0.0	0.00	0.00	A	900 %
Stream C-AB		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
Set 1 - 2023 Base												
Stream B-AC	D3	0.0	0.00	0.00	A	900 %	D4	0.0	0.00	0.00	A	900 %
Stream C-AB		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
Set 1 - 2023 FB + Dev												
Stream B-AC	D5	0.0	0.00	0.00	A	183 %	D6	0.2	8.03	0.15	A	278 %
Stream C-AB		0.3	5.71	0.16	A	[Stream C-AB]		0.0	0.00	0.00	A	[Stream B-AC]
Set 1 - 2029 Base												
Stream B-AC	D7	0.0	0.00	0.00	A	900 %	D8	0.0	0.00	0.00	A	900 %
Stream C-AB		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
Set 1 - 2029 FB + Dev												
Stream B-AC	D9	0.0	0.00	0.00	A	108 %	D10	0.3	9.27	0.26	A	157 %
Stream C-AB		0.6	6.56	0.28	A	[Stream C-AB]		0.0	0.00	0.00	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	08/09/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-G21LB70\nicol
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Set 1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2029 FB + Dev	PM	FLAT	15:00	16:00	60	60	✓

Set 1 - 2029 FB + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.20	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	157	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	Site Access 2	Site Access 2	Minor
C	Whitton Dene	Whitton Dene	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.65			35.8	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.30	20	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	457	0.077	0.195	0.123	0.279
B-C	590	0.084	0.212	-	-
C-B	595	0.214	0.214	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	215	100.000
B		FLAT	✓	135	100.000
C		FLAT	✓	220	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	215
	B	14	0	122
	C	220	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.26	9.27	0.3	A	135	135
C-AB	0.00	0.00	0.0	A	0	0
C-A					220	220
A-B					0	0
A-C					215	215

Main Results for each time segment

15:00 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	135	135	523	0.259	135	0.0	0.3	9.269	A
C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
C-A	220	220			220				
A-B	0	0			0				
A-C	215	215			215				