LANMOR Consulting

Civil Engineers & Transport Planners

Kingston Bridge House

Transport Statement

March 2022

201345/TS/JR/KBL/02

Rev A

LANMOR Consulting

Civil Engineers & Transport Planners

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1 INTRODUCTION

1.1 Scope

1.1.1 Lanmor Consulting Ltd has been commissioned to provide an assessment of the highway and transportation implications to the proposed development at the site of Kingston Bridge House, Church Grove, Hampton Wick, Kingston upon Thames, KT1 4AG.

1.1.2 Within this Transport Statement, detailed consideration will be given to the location of the proposed development in terms of its accessibility by car and non-car modes of travel such as walking, cycling and public transport. It will consider changes in travel demand arising from the development and the associated implications for the highway and transport networks within the area.

1.1.3 This statement will also demonstrate that the proposed development accords with the key planning policies, will have minimal impact on the surrounding highway and transportation infrastructure and that the parking provisions for the development will be adequate and will not increase parking on-street.

1.2 Site Description and Existing Conditions

1.2.1 The site is located within an area made up of residential, commercial and public spaces, with the London Borough of Richmond. The site is located at the junction of Church Grove and Hampton Court Road, opposite the Kings Field.

1.2.2 Kingston Bridge House is currently made up of student living facilities which span over 7 floors. Drawing FLU.1191.3.02 in Appendix A show the existing site plan for the site.

1.3 Proposed Development

1.3.1 The proposed development will see the conversion from the existing student living arrangement (C4) to make way for a total of 70 new residential (C3) units spread across 7 floors. Drawing FLU.1191.3.10 shows the proposed site plan and this is enclosed within Appendix A.

2 PLANNING POLICY

2.1 National Planning Policy Framework (NPPF) revised 2021

2.1.1 Within the NPPF it states:

"The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. Achieving sustainable development means that the planning system has three overarching objectives, Economic; Social; Environmental; which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives)".

Promoting Sustainable Transport

2.1.2 NNPF acknowledges Transport policies have an important role to play in facilitating sustainable development but also in contributing to the wider sustainability and health objectives and it states planning policies should;

a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;

b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;

d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans); and

e) Provide for any large-scale transport facilities that need to be in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should consider whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements.

2.1.3 The NPPF 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.

2.1.4 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 vehicles; and

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

Parking Standards

2.1.5 NPPF states when setting local parking standards for residential and non-residential development, local planning authorities should consider:

- The accessibility of the development;
- The type, mix and use of development;
- The availability of and opportunities for public transport;
- Local car ownership levels; and

2.1.6 the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

2.2 Regional Planning Policy

Adopted London Plan (2021)

2.2.1 The new London Plan was adopted in March 2021. The Plan provides an appropriate spatial strategy that plans for London's growth in a sustainable way. The London Plan is part of the Development Plan. The policies have been drafted in a way that allows London to implement this ambitious London Plan as soon as possible. There is no requirement for the policies to be repeated at the local level. However, in some instances a local approach is required within the context of the overall policy.

2.2.2 The Plan provides the framework to address the key planning issues facing London, allowing boroughs to spend time and resources on those issues that have a distinctly local dimension and on measures that will help deliver the growth London needs. This includes area-based frameworks, action plans and Supplementary Planning Documents, site allocations, brownfield registers and design codes, as well as supporting neighbourhood planning.

2.2.3 Policy GG2 – Making the best use of land

- "*Enable the development of brownfield land, particularly in Opportunity Areas, on surplus public sector land, and sites within and on the edge of town centres, as well as utilising small sites.*

- *Prioritise sites which are well-connected by existing or planned public transport*
- *proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling*
- *applying a design–led approach to determine the optimum development capacity of sites*
- *understand what is valued about existing places and use this as a catalyst for growth, renewal, and place-making, strengthening London's distinct and varied character*
- *protect and enhance London's open spaces, including the Green Belt, Metropolitan Open Land, designated nature conservation sites and local spaces, and promote the creation of new green infrastructure and urban greening, including aiming to secure net biodiversity gains where possible*
- *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*
- *maximise opportunities to use infrastructure assets for more than one purpose, to make the best use of land and support efficient maintenance."*

2.2.4 **Policy GG3 – Creating a healthy city**

- "*ensure that the wider determinants of health are addressed in an integrated and co-ordinated way, taking a systematic approach to improving the mental and physical health of all Londoners and reducing health inequalities*
- *promote more active and healthy lives for all Londoners and enable them to make healthy choices*
- *use the Healthy Streets Approach to prioritise health in all planning decisions*
- *assess the potential impacts of development proposals and Development Plans on the mental and physical health and wellbeing of communities, in order to mitigate any potential negative impacts, maximise potential positive impacts, and help reduce health inequalities, for example using Health Impact Assessments*

- *plan for appropriate health and care infrastructure to address the needs of London's changing and growing population*
- *seek to improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution*
- *plan for improved access to and quality of green spaces, the provision of new green infrastructure, and spaces for play, recreation and sports*
- *ensure that new buildings are well-insulated and sufficiently ventilated to avoid the health problems associated with damp, heat and cold*
- *Seek to create a healthy food environment, increasing the availability of healthy food and restricting unhealthy options.*

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

- *"Development Plans and development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity.*
- *When required in accordance with national or local guidance,179 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.*
- *Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities and highways improvements or through financial contributions, will be required to address adverse transport impacts that are identified.*

- *Where the ability to absorb increased travel demand through active travel modes has been exhausted, existing public transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans and funding exist for an increase in capacity to cater for the increased demand, planning permission will be contingent on the provision of necessary public transport and active travel infrastructure.*
- *The cumulative impacts of development on public transport and the road network capacity including walking and cycling, as well as associated effects on public health, should be taken into account and mitigated.*
- *Development proposals should not increase road danger."*

2.2.6 Policy T5 – Cycling

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 10.3, ensuring that a minimum of two shortstay 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.182 Development proposals should demonstrate how cycle parking facilities will cater for larger cycles, including adapted cycles for disabled people.*

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

D *Where it is not possible to provide suitable short-stay cycle parking off the public highway, the borough should work with stakeholders to identify an appropriate on-street location for the required provision. This may mean the reallocation of space from other uses such as on-street car parking. Alternatively, in town centres, adding the required provision to general town centre cycle parking is also acceptable. In such cases, a commuted sum should be paid to the local authority to secure provision.*

E *Where it is not possible to provide adequate cycle parking within residential developments, boroughs must work with developers to propose alternative solutions which meet the objectives of the standards. These may include options such as providing spaces in secure, conveniently-located, on-street parking facilities such as bicycle hangers."*

Table 10.2 Minimum Cycle Parking Standards

Use Class	Description of use	Long-stay (e.g. for residents or employees)	Short-stay (e.g. for visitors or customers)
B1	Business offices	• areas with higher cycle parking standards (see Figure 10.3): 1 space per 75 sqm • rest of London: 1 space per 150 sqm (GEA)	• first 5,000 sqm: 1 space per 500 sqm • thereafter: 1 space per 5,000 sqm (GEA)
B1	Light industry and research and development	1 space per 250 sqm (GEA)	1 space per 1,000 sqm (GEA)
B2-B8	General industrial, storage or distribution	1 space per 500 sqm (GEA)	1 space per 1,000 sqm (GEA)
C3-C4	Dwellings (all)	• 1 space per studio or 1 person 1 bedroom dwelling • 1.5 spaces per 2 person 1 bedroom dwelling • 2 spaces per all other dwellings	• 5 to 40 dwellings: 2 spaces • Thereafter: 1 space per 40 dwellings
Sui generis		As per most relevant other standard e.g. casino and theatre = D2, room in large-scale purpose-built shared living or student accommodation = studio C3.	

Table 2.1 – Cycle Parking Standard

2.2.7 Policy T6 - Car Parking

- *"Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity."*

- *"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 ('car-lite')." Car-free development has no general parking but should still provide disabled persons parking in line with Part E of this policy.*
- *"The maximum car parking standards set out in Policy T6.1 Residential parking to Policy T6.5 Non-residential disabled persons parking should be applied to development proposals and used to set local standards within Development Plans."*
- *"Appropriate disabled persons parking for Blue Badge holders should be provided as set out in Policy T6.1 Residential parking to Policy T6.5 Non-residential disabled persons parking."*

2.2.8 Policy T6.1 Residential Parking

2.2.9 Table 10.3 in policy 6.1 of the London Plan sets out the relevant maximum residential car parking standards and is included at Table 2.2 below.

Table 10.3 Maximum Car Parking Standards	
Location	**Parking Provision**
Central Activities Zone, Inner London, Metropolitan and Major Town Centres, All areas of PTAL 5-6, Inner London PTAL 4	Car Free~
Inner London PTAL 3	Up to 0.25 Spaces per nit
Inner London PTAL 2 **OutOuter London Opportunity Areas**	Up to 0.5 Spaces per unit
Inner London PTAL 0-1	Up to 0.75 Spaces per unit

Location	Number of Beds	Maximum parking provision
Outer London PTAL 4	1-2	Up to 0.5-0.75 Spaces per unit +
Outer London PTAL 4	3+	Up to 0.5-0.75 Spaces per unit +
Outer London PTAL 2-3	1-2	Up to 0.75 Spaces per unit
Outer London PTAL 2-3	3+	Up to 1.0 Spaces per unit
Outer London PTAL 0-1	1-2	Up to 1.5 Spaces per unit
Outer London PTAL 0-1	3+	Up to 1.5 Spaces per unit ^
*** Where small units (studios and on bedroom flats) make up a proportion of a development, parking provisions should reflect the resultant reduction in demand so that provision across the site is less than 1.5 spaces per unit ~ With the exception of disabled persons parking, see Part G Policy T6 .1 Residential parking + When considering development proposals that are higher density or in more accessible locations, the lower standard shown here should be applied as a maximum ^ Boroughs should consider standards that allow for higher levels of provision where there is clear evidence that this would support additional family housing**		

Table 2.2 – Maximum Car Parking Standards

2.3 Local Policies

London Borough of Hounslow (2015)

2.3.1 The London Borough of Hounslow adopted their Local Plan in September 2015 it sets out the councils' proposals for the future development of the Borough. Below is a list of key policies which are relevant to this Transport Statement.

Policy SC3

2.3.2 The council seek to meet the local housing need by securing a mix of new housing type, size and tenure across the borough.

"Seeking a mix of new housing to meet objectively assessed and evidenced local need, based on the latest and/or most specific available evidence, and applying the general housing need mix requirements"

"Using this mix as the basis of monitoring new development across the borough and in local areas, and possibly adjusting site mix requirements in the light of the results of this evidenced monitoring"

Policy EQ2

2.3.3 The council hope to promote the highest standards of sustainable design and construction in development to mitigate and adapt to climate change.

"Promoting sustainable design and construction, consistent with the principles established in the London Plan."

"Using national standards for sustainable design and construction to assess environmental credentials of developments, and requiring schemes to meet specified levels as minimum"

Policy EC1

2.3.4 Hounslow Council will strive to secure investments to the existing and future strategic transport connections within the borough, these include those on the London Underground, rail services, bus services and cycle/highway improvements.

"Promoting new cycle networks, including a 'cycling spine' along the A315, with connecting Greenways and Quietway's, and the provision of cycle parking at transport interchanges"

"Promoting improvements to the highway network to best facilitate sustainable modes, including targeted junction improvements, targeted travel demand management (including trip banking where appropriate), signal optimisation and bridge works"

Policy EC2

2.3.5 Developing a sustainable local transport network will be achieved by the following:

"Promoting 'car-free' or 'low car' development where appropriate, as well as car clubs and car sharing schemes"

"Promoting the active management of car parking and travel demand in the borough, particularly through the implementation of Controlled Parking Zones (CPZs) and restricting access to these zones to existing dwellings, and requiring developments to plan end-use in accordance with these measures"

"Preparing site specific development briefs where strategic sites include existing car parks, to ensure that sufficient car parking is retained to meet local needs"

"Using the standards established in the London Plan for car parking, cycle parking, motorcycle parking, coach parking, and electric vehicle charging (or as updated by alterations to the London Plan)"

"The London Plan specifies the maximum number of car parking spaces that developments should provide, having regard to the type of development and public transport accessibility."

Policy IMP1

2.3.6 Hounslow Borough Council will take a plan-led approach to all growth and development within the borough that is considered to be in accordance with the principles of sustainable as set out in the NPPF.

"Implementing the Local Plan in accordance with the principles of sustainable development as set out in the NPPF"

3 ACCESSIBILITY OF THE SITE

3.1 Site Accessibility and Local Facilities

3.1.1 Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km. A number of local facilities are located within close proximity of the site, these include supermarkets, schools, restaurants, pharmacies and leisure facilities.

3.1.2 The site is located to west of Kingston Town Centre, on the opposite side of Kingston Bridge. Most facilities are located to the north and to the east of the site of the site. Table 3.1 below shows some selected facilities near the site.

Facility	Description	Distance from site (m)
HSBC UK	Bank	50m
St Johns Hampton Wick	Place of Worship	60m
Hampton Wick Hotel	Hotel	100m
Copper Leaf Restaurant	Restaurant	105m
London Pizza Experts	Restaurant	110m
Bright Horizons Nursery (HW)	School	145m
CLD Computers	Computer Repair Shop	170m
The Swan	Restaurant	195m
Bills Kingston	Restaurant	280m
TK Maxx	Superstore	290m
John Lewis	Superstore	320m
Hampton Wick Station	Train Station	432m
Bentall Centre	Shopping Centre	434m
All Saints Church	Place of Worship	445m
Barclays Bank	Bank	445m
Hampton Wick Library	Library	465m
Kingston Historic Market	Market	466m
Kingston Train Station	Train Station	900m

Table 3.1 – Local Facilities

3.1.3 As mentioned, Kingston Town Centre is located just over Kingston Bridge, approximately 300m away. There are various facilities located within a Kingston Town Centre.

3.2 Public Accessibility Rating Level (PTAL)

3.2.1 PTAL (Public Transport Accessibility Level) is a method of calculating public transport access in Central and Greater London. Originally developed by the London Borough of Hammersmith and Fulham, it has since been adopted by Transport for London. The PTAL ratings specified by Transport for London vary from 1a, considered very poor, to 6b considered excellent. The PTAL of the site has been categorized as Level 4, this considered to be good. It is also very close to PTAL zone 6 which have very good accessibility level.

3.2.2 A copy of the full PTAL report can be found in Appendix B.

3.3 Pedestrian Access

3.3.1 Walking is the most important mode that offers the greatest potential to replace short car trips, particular those under 2.0 km. Guidance suggests that walking distances of between 200m and 2km depending on the journey purpose are reasonable. There is a network of footways within the vicinity of the site. This runs alongside all the major and minor routes allowing safe and convenient access to the site. The footpaths in the area are generally well maintained and lit.

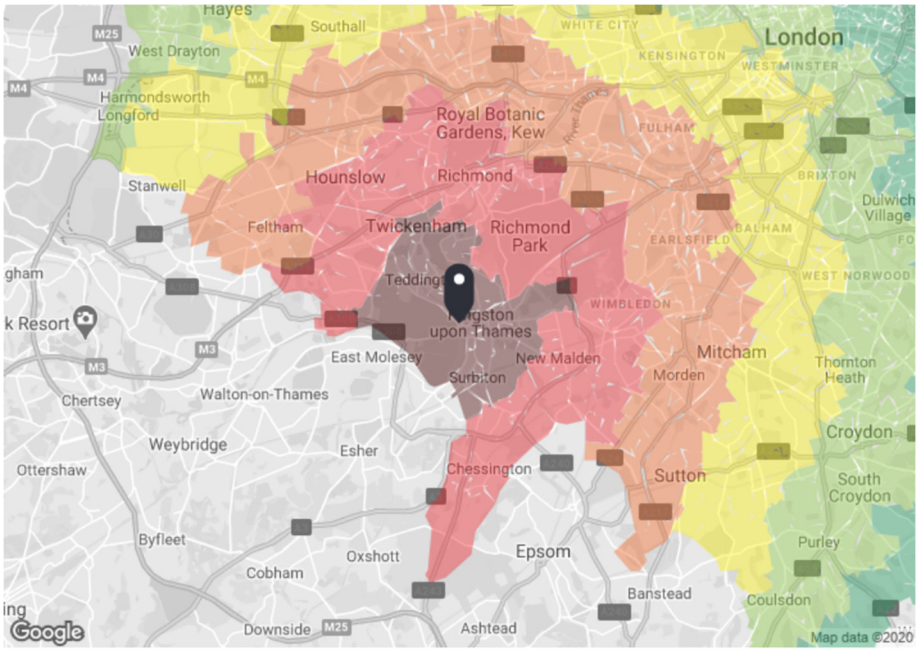
3.3.2 Walking can also from part of a wider journey for commuting and leisure purposes when combined with public transport. The nearest train stations are Hampton Wick and Kingston Station, which are located 450m from the site (6-minute walk) and 900m (11-minute walk) respectively.

3.3.3 Drawing 201345/TS/01 is included in Appendix B and shows the range of destinations that can be reached within walking distance of the site.

3.4 Cycle Access

3.4.1 Cycling also has the potential to substitute for short car trips particularly for those journeys of less than 5km, or when it forms part of a longer journey by public transport etc. Both train stations can be reached within 4-minutes of cycling from the site. Drawing 201345/TS/02 in Appendix B shows the destinations that can be reached within different cycle times.

3.4.2 There are cycle routes within the vicinity of the site, those on main roads, quieter roads, through parks and along canals. The closest identified on road cycle route is located on Hampton Court Road which has cycle lanes marked on the road surface. A cycle route map is provided in Appendix B and shows all routes within the vicinity of the site. Figure 3.1 below also shows information from a PTAL Time Map on the range of destinations that can be reached within cycling distance of the site. The map below only covers London, the cycle times with the county of Surrey are not shown.



TIM output for Base Year

Scenario: Base Year Mode: Cycle only, Time of day: Between peak times, Direction: From location

KT1 4AG
Kingston upon Thames KT1 4AG, UK
Easting: 517494, Northing: 169388

Code: NWMAT00I

Map key - Travel Time

- < 15 mins
- 15 - 30 mins
- 30 - 45 mins
- 45 - 60 mins
- 60 - 75 mins
- 75 - 90 mins
- 90 - 105 mins
- 105 - 120 mins
- 120 - 135 mins
- 135 - 150 mins

Map layers

Travel Times

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Figure 3.1 – Cycle PTAL Time Map

3.5 Travel by Bus

3.5.1 The nearest bus stop to the site is located directly outside the building on Hampton Court Road however the services for this stop end in Kingston which is 2-3 stops away. Therefore, bus stops within the area which provide services away from Kingston have been considered as users are most likely to use a bus for longer journeys.

3.5.2 The nearest bus stops which provide a greater service to the application site are located outside the site on Church Grove opposite the existing access for Kingston Bridge House, 93m to the southwest on Hampton Court Road, 230m to the northeast on the High Street, 130m to the northeast on the High Street and 550m to the east on Wood Street. The services calling at the surrounding bus stops are tabulated below in Table 3.2 and outline the frequencies.

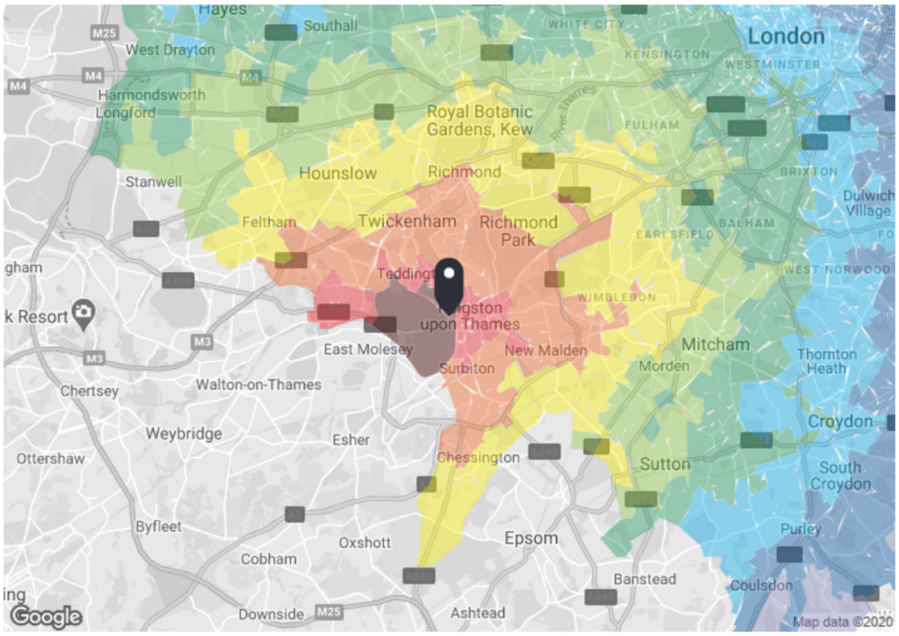
Service	Bus Stop	Distance from Site	Bus Route	Weekday Frequency (p/h)	Saturday Frequency (p/h)	Sunday Frequency (p/h)
111	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton - Hanworth - Hounslow - Heston - Cranford - Heathrow Central	24 Hours 7	24 Hours 5-6	24 Hours 5
216	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton Court Green - Hampton - Sunbury - Ashford - Staines	(06:28 – 00:34) 2-3	(06:29 – 00:34) 3	(06:28 – 00:33) 2
411	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton Court - West Molesey	(05:33 – 00:13) 3-4	(05:34 – 00:13) 3	(08:08 – 00:13) 2
461	Church Grove / The King's Field (Stop J)	93m	Kingston Upon Thames - Weybridge - Addlestone	(06:42 – 18:51) 2	(06:42 – 18:45) 2	-
481	Church Grove / The King's Field (Stop U)	Outside Site	Kingston - Twickenham - West Middlesex Hospital	(06:49 – 19:04) 1	(06:58 – 19:04) 1	(10:03 – 19:04) 1
281 Northbound	Lower Teddington Road (Stop A)	230m	Tolworth - Kingston - Hounslow	(05:39 – 00:29) 6	(06:14 – 00:29) 6	(06:24 – 00:29) 4-5
281 Southbound	Lower Teddington Road (Stop H)	130m	Hounslow - Kingston - Tolworth	(05:28 – 01:08) 5-6	(05:28 – 01:08) 5-6	(05:28 – 01:08) 4
285	Lower Teddington Road (Stop A)	230m	Kingston - Hampton Wick - Teddington - Hanworth - Feltham - Hatton Cross - Heathrow Central	24 Hours 5	24 Hours 4-5	24 Hours 4-5

X26 SE-Bound	Wood Street (Stop N)	550m	Heathrow Central - West Croydon	(06:17 – 01:00) 2	(06:15 – 00:59) 2	(06:15 – 00:59) 2
X26 NW-Bound	Wood Street (Stop P1)	550m	West Croydon - Heathrow Central	(05:01 – 00:01) 2	(05:00 – 00:01) 2	(05:01 – 00:01) 2

Table 3.2 – Bus Schedule

3.5.3 Guidance suggest that people will walk up to 400m for a bus, the assessments used in TfL PTAL scoring assumes distances of up to 640m which equates to an 8-minute journey time by foot at a walking speed of 80m per minute. The bus stops are well within walking distance of the site. The services offered from these stops provide a highly frequent service to a wide range of destinations including underground stations, national rail stations, hospitals, schools, supermarkets and other facilities.

3.5.4 The majority of buses around the local area are run and maintained by Transport for London, others include Falcon Buses, Metrobus and Reptons Coaches. A bus route map for Richmond is included within Appendix B. Figure 3.2 below also shows information from the PTAL Time Map on the range of destinations that can be reached by bus in London, again destinations within Surrey are not shown.



TIM output for Base Year

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- 75 - 90 mins
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- 105 - 120 mins
- 120 - 135 mins
- 135 - 150 mins

Map layers

Travel Times

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Figure 3.2 – Bus PTAL Time Map

3.6 National Rail

3.6.1 The nearest rail stations which offer national services is Hampton Wick Station and Kingston Station, which are located to the north of the site on High Street (A310) and east on Wood Street (A307) respectively. Facilities provided at Hampton Wick include public Wi-Fi and ticket machines, more facilities are provided at Kingston Station where there are payphones, post box, shops, toilets and step free access.

3.6.2 Hampton Wick and Kingston Station are within the Travelcard Zone 6, train services from the stations are operated by South Western Railway. The typical off-peak weekday service at both stations in trains per hour are:

- 6 to Waterloo, of which:
  - 4 run via Wimbledon
  - 2 run via Richmond and Twickenham
- 2 to Shepperton

3.6.3 On Sundays, there are hourly services at Kingston to Waterloo via Wimbledon & via Richmond and along the branch to Shepperton. An additional hourly service to Waterloo via the Hounslow Loop Line (calling at all intermediate stations) starts/terminates here.

3.6.4 Stations which can be accessed include Twickenham, Richmond, Wimbledon, Clapham Junction and London Waterloo. A copy of the South Western Railway map is included in Appendix B.

3.7 Car Clubs

3.7.1 Car clubs are another great sustainable means of travel which have been implemented largely across London over recent years. The nearest car club spot is located only a 7-minute walk away towards the north of the site on Seymour Road. There is currently one car available at this location and is provided by Enterprise Car Club.

3.7.2 There are more car club locations within the area provided by Zipcar, 9-11 minutes away located on Down Hall Road and Seven Kings Way. It is considered that there are sufficient car clubs within the area and within suitable walking distance and therefore a car club provision on site is considered excessive.

3.8 Site Location Summary

3.8.1 The site has very good access to a wide range of services and facilities within the local area. In respect of land use and transport planning, the site is well located in close proximity to public transport facilities and therefore discourages the need to travel by car.

3.8.2 It is considered that the site has 'good' access to public transport as assessed by Transport for London and would offer many alternatives to the use of a private car to travel to local facilities thus encouraging the use to use different modes of sustainable transport making it a suitable proposed development.

4 DEVELOPMENT PROPOSALS

4.1 Proposed Uses

4.1.1 The proposed development is fully described in the accompanying planning application documents and will involve the conversion of the existing student accommodation (C4) building to provide 70 new residential (C3) units spread across 7 floors with associated access, parking, cycle and bin storage provision.

4.1.2 The development will include for 21 parking spaces, 7 of the car parking spaces will be allocated for disabled; 160 secure cycle spaces will also be provided, 80 in one store and 80 in neighbouring store.

4.2 Site Access

4.2.1 There are currently two points of vehicular access to the site and one pedestrian access into the building which is achieved via Church Grove. The central access point will be maintained for access to the parking at the rear of the site and the existing pedestrian access will also be retained for pedestrians.

4.2.2 The current vehicular accesses will be adjusted to accommodate service vehicles off road to the front of the site, it is intended that this service area could be shared with other uses such as a play area want refuse collections are not taking place. Swept path assessments have been undertaken for a large refuse vehicle entering and leaving the site from both the north and south.

4.2.3 A copy of the swept paths is included in Appendix D.

4.3 Visibility Splays

4.3.1 Church Grove has a speed limit of 30mph, guidance in Manual for Streets Stopping for visibility requirements from junctions recommends 43 metres should be provided for drivers at the site egress point. The footways are wide and there is a grass verge providing very good visibility from the existing accesses. Visibility splays in excess of 2.4 x 43 metres are achievable to the nearside carriageway edge in both directions offering drivers exiting the site with appropriate levels of visibility. Table 4.1 below lists the required horizontal visibilities based on speed limits.

Speed	Kilometres per hour	16	20	24	25	30	32	40	45	48	50	60
	Miles per hour	10	12	15	16	19	20	25	28	30	31	37
SSD (metres)		9	12	15	16	20	22	31	36	40	43	56
SSD adjusted for bonnet length. See 7.6.4		11	14	17	18	23	25	33	39	43	45	59
		Additional features will be needed to achieve low speeds										

Table 4.1 – Visibility Splay Requirements

4.4 Parking Provisions

4.4.1 The volume of car parking to be provided within any development is a key consideration, National Policy is promoting parking restraint to encourage sustainable travel behaviour, it is recognised that parking levels should be appropriate to the developments accessibility to public transport.

4.4.2 Public Transport Accessibility (PTAL) will play a significant role in potential car ownership, as greater access to public transport reduces the need to travel by car.

4.4.3 Given the high level of accessibility available to the public transport network, low residential parking levels will be provided on site. The proposals will provide for 21 spaces. This level of provision is considered adequate given the site proximity to public transport facilities. These are also less than one space per 1 / 2 bed unit and therefore complies with Richmond's current policy. The London Plan sets out the maximum provision for parking in PTAL zones 4 as up to 0.5-0.75 spaces per unit. The proposal allows for 21 spaces which is less than 0.5 spaces per unit and therefore meets the London Plan policy.

4.4.4 The London Plan also sets out the requirements for disabled parking, the plan sets out the minimum level of disabled parking and that the provision of the upper level of 10% should be catered for in the event of demand. The proposals incorporate space for 7 disabled bays which equated to 10% of the proposed 70 units, in line with the London Plan.

4.4.5 The current London Plan also sets out a minimum requirement that 20% of the available parking spaces are be fitted with electrical changing points. The proposals will provide for 20% of the spaces to have an electrical charging point and a further 20% will have a passive facility for later conversion.

4.5 Cycle Parking

4.5.1 The proposals will incorporate a total of 160 secure cycle storage spaces. These will be located on the ground in 2 cycle stores.

4.5.2 The proposed level of cycle parking to be provided will be more than the minimum requirements of 1 space per studio, 1.5 spaces per 1 bedroom unit, 2 spaces per all other dwellings.

4.6 Servicing

4.6.1 At the design review panel concerns was raised that a refuse vehicle cannot enter the site due to the clearance under the building. This is not true refuse vehicles can enter the site and have done before, it is the council current policy not to allow refuse vehicles on site unless there is a minimum vertical clearance of 4.5m

4.6.2 The development will provide refuse stores at the ground floor level adjacent to the undercroft access. To meet current policy it is anticipated that the refuse vehicle will collect from the service area to be created to the front of the site. This will also allow other delivery vehicles to unload from this area if needed.

4.6.3 Smaller service vehicles under 4m high will be able to enter the site under the building and turn around on site.

4.6.4 The existing access also serves properties to the rear, adjacent to the main building, these will be unaffected by the proposals and servicing arrangements for these properties will be retained as per the current situation.

5 TRAFFIC GENERATION & IMPACT ON TRANSPORT NETWORKS

5.1 Trip Generation

5.1.1 Both the existing and proposed uses has the potential to generate vehicle movements. The site is located on the edge of a town centre and the peak periods in traffic movements on Church Grove are considered to between 8.00am – 9.00am and 5.00pm – 6.00pm.

5.2 Existing Use

The site is currently used as student accommodation which has a controlled car parking for 32 vehicles. The TRICS database was interrogated to assess the number of trips generated from similar student accommodation sites. The table below sets out the peak trip rates based on TRICS database. The TRICS outputs have been included in Appendix C.

Trip Rates Vehicles	AM Peak 08:00 – 09:00		PM Peak 18:00 – 17:00		Daily Total	
	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep
C4 – Student Accommodation (per resident)	0.003	0.005	0.012	0.012	0.073	0.069
Total Trips Vehicles	**AM Peak 08:00 – 09:00**		**PM Peak 17:00 – 18:00**		**Daily Total**	
	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep
C4 – Student Accommodation (Approx. 216 residents)	0.648	1.080	2.592	2.592	15.768	14.904

Table 5.1 – TRICS Vehicle Trip Rates (Existing C4 Student Accommodation)

5.3 Proposed Use

5.3.1 The TRICS database was interrogated to establish the level of vehicle trips the proposed development might generate. The development to contain 70 units and TRICS outputs are included in Appendix C, a summary of the results is tabulated below.

Trip Rates Vehicles	AM Peak 08:00 – 09:00		PM Peak 18:00 – 17:00		Daily Total	
	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep
C3 – Residential Accommodation Private (per unit)	0.031	0.092	0.056	0.042	0.761	0.761
Total Trips Vehicles	**AM Peak 08:00 – 09:00**		**PM Peak 17:00 – 18:00**		**Daily Total**	
	Total Trip Arr	**Total Trips Dep**	**Total Trip Arr**	**Total Trips Dep**	**Total Trip Arr**	**Total Trips Dep**
C3 – Residential Accommodation Private (70 units)	2.17	6.44	3.92	2.94	53.27	53.27

Table 5.2 – Vehicle Trip Rates for (70 Private Flats)

5.3.2 As can be seen for the above the level of traffic that will be generated by the development will be 2 arrivals and 6 departures in the morning peak and 4 and 3 in the evening peak. Compared to the current situation the development has the potential to generate up to 10 additional trips in the peak hour when compared to the existing situation. However, this is considered an over estimate as the current facility has 32 parking spaces and therefore the existing site is likely to generate more than 2-5 trips in the peak hour suggested by the TRICS data.

5.3.3 A similar exercise was carried out for the total person trips for the housing mix and then combined to give a total person movements for the 70 units, these are tabulated below.

Private Flats	Person Trip Rates (per dwelling)		Total Person Movements (70 units)	
	Arrivals	**Departures**	**Arrivals**	**Departures**
Weekday Morning (08:00 – 09:00)	0.102	0.599	7.14	41.93
Weekday Evening (17:00 – 18:00)	0.416	0.262	29.12	18.34
Daily Total	3.341	3.218	233.87	225.26

Table 5.3 – Person Trip Rates (70 Private Flats)

5.3.4 In order to establish the number of trips by travel mode, the 2011 Census Data has been reviewed to determine the modal split for journeys to work from the area. The modal split for from the census data is outlined in Table 5.4 below.

5.3.5 The modal splits below have been applied to the total person trips from the TRICS database to give the estimated number of trips the proposed development might generate. The number of trips is summarised below in Table 5.5.

Method of Travel to Work	Total Person Movements AM Peak	
	Persons	**Percentage**
All Categories: Method of Travel to Work	1,352	100.00%
Work mainly at or from home	68	5.03%
Underground, metro, light rail, tram	32	2.37%
Train	269	19.90%
Bus, minibus or coach	57	4.22%
Taxi	0	0.00%
Motorcycle, scooter or moped	10	0.74%
Driving a car	246	18.20%
Passenger in car	10	0.74%
Bicycle	38	2.81%
On foot	134	9.91%
Other method of travel to work	4	0.30%
Not in employment	484	35.80%

Table 5.4 – Modal Split (2011 Census Data)

Method of Travel to Work	Total Person Movements AM Peak		Total Person Movements PM Peak	
	Arrivals	Departures	Arrivals	Departures
Underground, metro, light rail, tram (2.37%)	0	1	1	0
Train (19.90%)	2	8	6	4
Bus, minibus or coach (4.22%)	0	2	1	1
Taxi (0.00%)	0	0	0	0
Motorcycle, scooter or moped (0.74%)	0	0	0	0
Driving a car (18.94%)	2	8	5	3
Bicycle (2.81%)	0	1	1	1
On foot (9.91%)	1	4	3	2

Table 5.5– Proposed Person Trips

5.3.6 The above assessment shows a very similar level of trips to the TRICS data above, the TRICS data shows a slightly higher rate so it is considered the use of the TRICS rates will provide a more robust assessment. In the worst case in the morning peak the TRICS data indicates that there could be net increase in departures from the site of 8 vehicles which equates to one extra vehicle on the highway network every 7.5 minutes.

5.3.7 This level of additional traffic is considered to have no impact on the flow of traffic on the surrounding road as the increase is likely the be well within the daily fluctuations that would occur on the road network in the area. The increase in traffic will have no detrimental impact on the capacity of the highway networks or junctions in the vicinity of the site.

6 PARKING SURVEYS

6.1 Scope

6.1.1 Although the proposed development provides for 21 car parking spaces, parking surveys of the surrounding area have been completed to establish if the surrounding roads could accommodate any additional parking on-street. Two surveys were undertaken at night when residents are considered to be at home.

6.1.2 The methodology employed for the parking beat surveys was that developed by Lambeth Borough Council and that recommends that:-

"The survey should be undertaken when the highest number of residents are at home; generally late at night during the week. A snapshot survey between the hours of 0030-0530 should be undertaken on two separate weekday nights (i.e. Monday, Tuesday, Wednesday or Thursday)."

6.1.3 The night surveys were undertaken between the hours of 1.00am to 5.00am. This is considered to represent the period when the majority of residents are at home and will give an accurate reflection of the average parking congestion in the area.

6.2 Survey of Existing Parked Vehicles

6.2.1 The methodology sets out the limits for the survey, for residential developments it recommends all roads within 200m walking distance of the site should be covered as this is the maximum people are likely to walk to their residence. It goes on say that as people are unlikely to stop half way along the road so the survey should be extended to a convenient point, it states:-

"All roads within 200 metres (or 500m for commercial uses) walking distance of the site. Note this area is NOT a circle with a 200/500m radius but a 200/500m walking distance as measured along all roads up to a point 200/500m from the site.

Since people are unlikely to stop half way along a road at an imaginary 200/500m line so the survey should be extended to the next junction or shortened to the previous one, or taken to a suitable location along a road."

6.2.2 The 200m meter walking distance from the site covered parts of Church Grove, St John's Road, High Street and Hampton Court Road. Drawings 201345/PS/01, 02 and 03 are included in Appendix D. Drawing 201345/PS/01 shows all base line parking restrictions, identifying the different types of parking bays and restrictions. It also shows single/double yellow lines and restricted lines as well as how many cars were parked or spaces available.

6.2.3 Drawing 201345/PS/02 and 03 shows the number of vehicles parked and spaces available.

6.3 Survey Results – Friday 16th October 2020

6.3.1 The first survey was carried out between the hours of 01.15am to 01.45am and during this survey all vehicles were parked in the marked bays. Both the number of cars parked, and available spaces were recorded within the survey area of approximately 200m walking distance from the site. This survey showed that the overall parking stress during this period was 47%.

6.3.2 The full results of the parking survey are tabulated below as Table 6.2.

6.4 Survey Results – Wednesday 21st October 2020

6.4.1 The second survey was carried out between the hours of 01.30am to 02.00am and during the survey all vehicles were also parked in the marked bays. Both the number of cars parked, and available spaces were recorded within the survey area of approximately 200m walking distance from the site. This survey showed that the overall parking stress during this period was 48%.

6.4.2 The full results are tabulated below as Table 6.3.

6.5 Conclusion

6.5.1 The parking stress in the controlled parking bays only was also assessed and the results are tabulated below.

Date	Total Permit Holder Bays	Total Parked	Parking Stress
16/10/2020	32	30	94%
21/10/2020		30	94%

Table 6.1 – CPZ Parking Bays

6.5.2 The development proposals include for 28 parking spaces which is a slight reduction of the existing number of spaces, this level is considered adequate for the proposed development. The proposed development shouldn't therefore result in any overspill parking on to the surrounding roads. The parking surveys have demonstrated that there is more than adequate space on the surrounding roads to accommodate parking for additional vehicles.

6.5.3 During the 2 night time surveys, of the 87 spaces available only an average of 42 were occupied, clearly demonstrating that the surrounding roads could accommodate any overspill parking.

6.5.4 On Church Grove alone there were 18 & 17 spaces available during the surveys, more than enough to cater for parking for overspill vehicles from the development should this occur. The parking stresses on Church Grove during the survey was recorded at 38% and 41%. Based on the parking surveys it is clear the proposed development will not have any impact on the ability of local residents to park on street.

Parking Survey Undertaken on 16/10/2020 at 01.15am to 01.45am

Time	Road Name Length of road measured (m)		Type of Parking Bays					Total
			Permit Holders Only Zone X	Permit Holders or Pay and Display (Max 10 Hours)	Pay and Display	Restricted Parking (Single Yellow Line)	Urban Clearway (8am to 6.30pm)	
01.15am - 01.45am	**Church Grove 215**	Available Spaces	0	29	0	0	0	29
		Parked Vehicles	0	11	0	0	0	11
		Parking Stress	**0%**	**38%**	**0%**	**0%**	**0%**	38%
	St John's Road 115	Available Spaces	32	0	0	0	0	32
		Parked Vehicles	30	0	0	0	0	30
		Parking Stress	**94%**	**0%**	**0%**	**0%**	**0%**	94%
	High Street 70	Available Spaces	4	0	0	0	0	4
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
	Hampton Court Road 240	Available Spaces	0	0	0	0	22	22
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
						Total Spaces Available		87
						Total Vehicles Parked		41
						Overall Parking Stress		47.13%

Table 6.2 – Parking Survey (16/10/2020)

Parking Survey Undertaken on 21/10/2020 at 01.30am to 02.00am

Time	Road Name Length of road measured (m)		Type of Parking Bays					Total
			Permit Holders Only Zone X	Permit Holders or Pay and Display (Max 10 Hours)	Pay and Display	Restricted Parking (Single Yellow Line)	Urban Clearway (8am to 6.30pm)	
01.30am - 02.00am	**Church Grove 215**	Available Spaces	0	29	0	0	0	29
		Parked Vehicles	0	12	0	0	0	12
		Parking Stress	**0%**	**41%**	**0%**	**0%**	**0%**	41%
	St John's Road 115	Available Spaces	32	0	0	0	0	32
		Parked Vehicles	30	0	0	0	0	30
		Parking Stress	**94%**	**0%**	**0%**	**0%**	**0%**	94%
	High Street 70	Available Spaces	4	0	0	0	0	4
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
	Hampton Court Road 240	Available Spaces	0	0	0	0	22	22
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
						Total Spaces Available		87
						Total Vehicles Parked		42
						Overall Parking Stress		48.28%

Table 6.2 – Parking Survey (21/10/2020)

7 PROMOTING SUSTAINABLE TRAVEL

7.1.1 National and local planning policy requires that all major development proposals are accompanied by a Travel Plan in order to encourage sustainable travel choices for trips to and from the development. The proposed development will be a car free development, so it is important to communicate the benefits of public transport as well walking and cycling as part of their everyday routine.

7.1.2 A Travel Plan will be prepared and implemented prior to first occupation of the development. The contents and measures in the plan will be agreed with the planning authority and it will be reviewed and monitored by the developer for the 5 year life of the plan. Annual surveys will form part of the plan to measure the change in people's mode of travel and to engage with residents to encourage more activate life styles and not rely on private motor vehicles.

7.1.3 The Travel Plan will be implemented by the Travel Plan Coordinator (TPC) who is likely to be part of the management team at the development, they will also provide personal travel plan information for residents and monitor the cycle storage usage on site to see if additional provisions are required.

7.1.4 The development is a low parking development and residents will be prevented from obtaining a residents parking permit by way of legal obligation with the planning authority. To reinforce the low car ownership ethos all new residents will be entitled to 2 years free membership of the local car club to allow those residents that may need the use of a car infrequently the ability to have one without them needing to purchase a car.

7.1.5 Sustainable travel at the development will be promoted through the Travel Plan, incentives will be clearly set out in the plan along with the aims of the plan and targets, against which it will be measured. Leaflets and notices will also play a part in the communication of using sustainable travel, this will also be coordinated by the TPC and form part of the Travel Plan.

7.1.6 The above measures will ensure a sustainable development, that not only benefits the residents on site but the wider community by reducing car traffic and pollution.

8 SUMMARY AND CONCLUSION

8.1.1 The application site is located off Church Grove in Hampton Wick, 300m to the west of Kingston town centre. The site is currently occupied by a C4 student accommodation building with associated parking.

8.1.2 The proposed application seeks the conversion of the C4 student accommodation to C3 residential flats organised to provide 70 apartments. The proposed development will also incorporate parking for 21 cars. Access to the development will be achieved directly off Church Grove. Secure cycle storage will also be provided on-site for 160 cycles in line with current policy.

8.1.3 The existing accesses off Church Grove will be retained with the creation of layby to the front of the site delivery vehicles to service the site. The site has good access to the local public transport network and has a PTAL rating of 4. The proposed development will generate very few vehicle movements. Parking for disabled residents will be provided on site in line with the merging London Plan.

8.1.4 The current site has up to 218 students on site so overall there will be a decrease in person trips to the site when compared to the existing use. The proposals however have the potential to increase the number of vehicular trips to the site, but these will be very low, and it is considered they will not have any adverse impacts on the surrounding highway network.

8.1.5 The increase in traffic is likely to be well within the daily fluctuations that would be expected on the highway network and therefore unnoticeable. Refuse vehicles will be able to collect waste from the development and be able leave in a forward gear, smaller servicing vehicles will be able enter the site under the building and turn on site so they can also leave in a forward gear.

8.1.6 A Travel Plan with other sustainable measures will be implemented as part of this development to encourage wider use of sustainable modes of travel. On the basis of the above it is concluded that the proposals accord with national, regional and local transport related policies, it will not have a detrimental impact on the surrounding highway networks and there is no reason to refuse the application on traffic or transportation grounds.

APPENDIX A

Drawing FLU.1191.3.02 – Existing Site Plan

Rev	Date	Description

FLUENT
ARCHITECTURAL DESIGN SERVICES
69-71 Windmill Road, Sunbury,
Middlesex, TW16 7DT
Tel: 0800 0438838
E-mail: info@fluent-ads.co.uk
Web: fluent-ads.co.uk

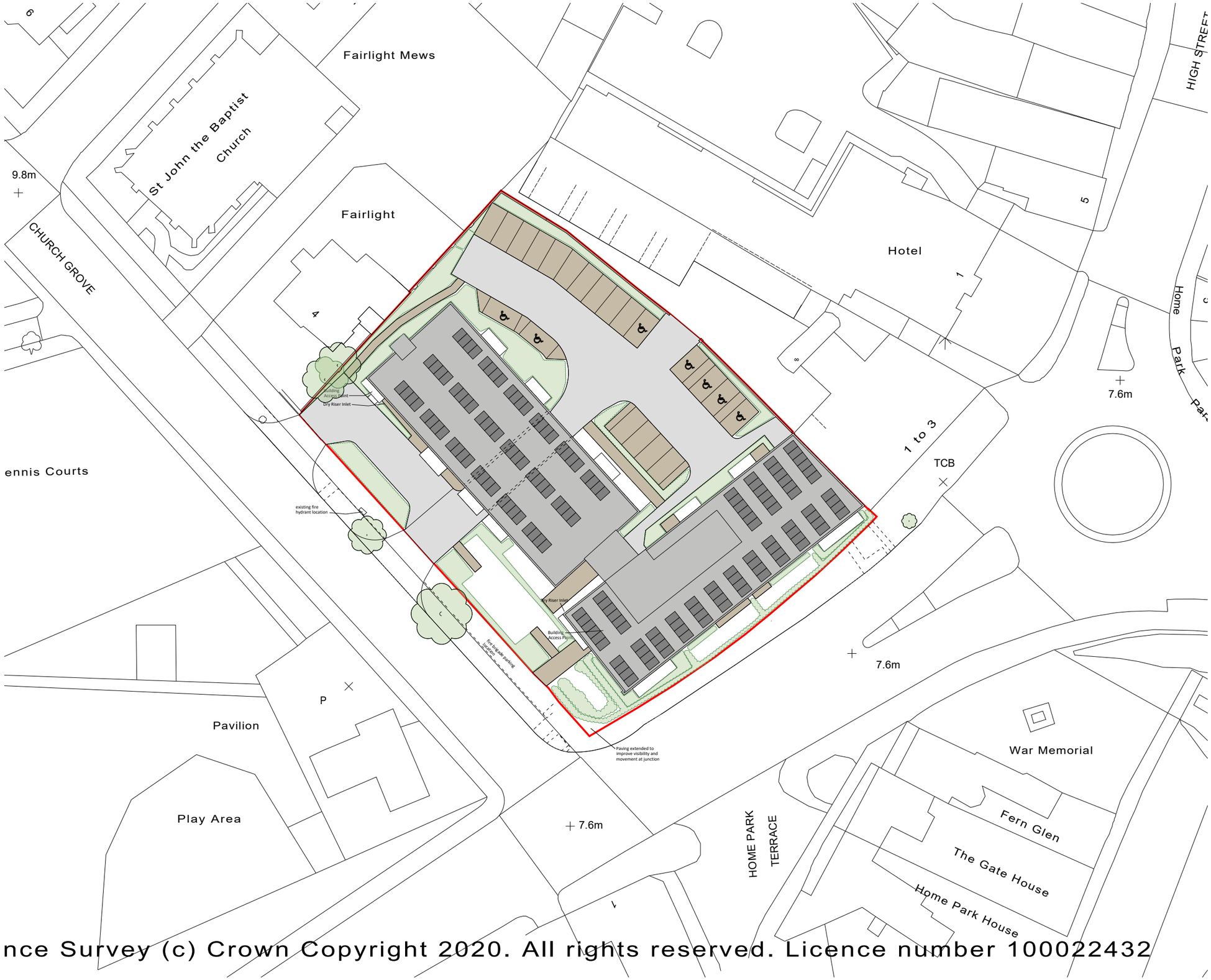
Kingston Bridge House
Church Grove, Hampton Wick

Existing Site Plan

0 10 20

Scale: 1:500 @ A3	Dwg No.: FLU.1191.3.02
Date: 28.09.20	Rev
Drawn: N.Millin	

Drawing FLU.1191.3.10 – Proposed Site Plan



Rev	Date	Description

Fluent
ARCHITECTURAL DESIGN SERVICES

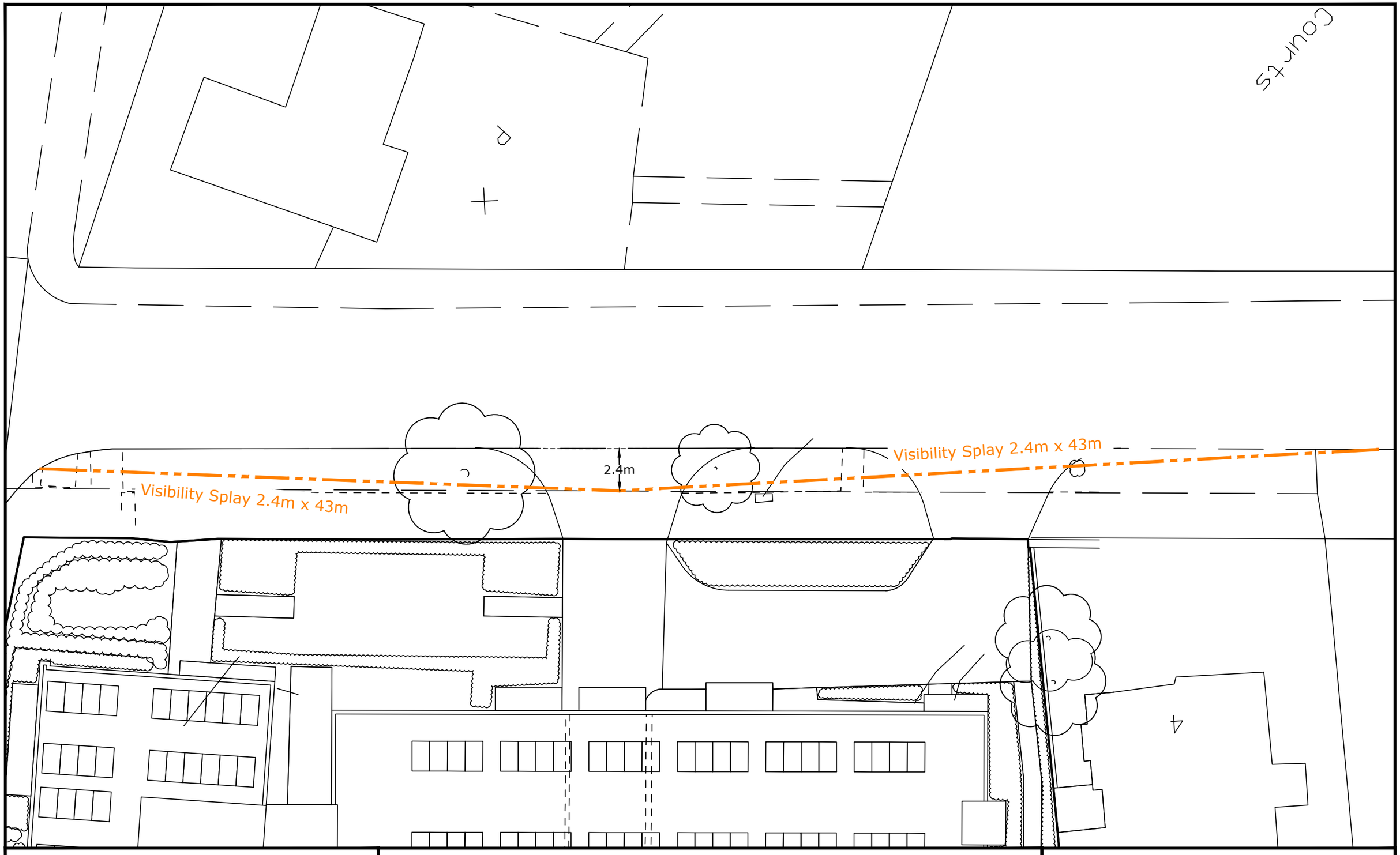
FLUENT
ARCHITECTURAL DESIGN SERVICES
69-71 Windmill Road, Sunbury,
Middlesex, TW16 7DT
Tel: 0800 0438838
E-mail: info@fluent-ads.co.uk
Web: fluent-ads.co.uk

Kingston Bridge House
Church Grove, Hampton Wick

Proposed Site Plan

0 10 20

Scale	1:500 @ A3
Dwg No.	FLU.1191.3.10
Date	07.10.20
Rev	H
Drawn	N.Millin



Westcombe Group

Kingston Bridge House
Hampton Wick

Visibility Splays

SCALE	DRAWN BY	PRJ No.	DWG No.
1:200	MK	201345	201345/TS/03 Rev A

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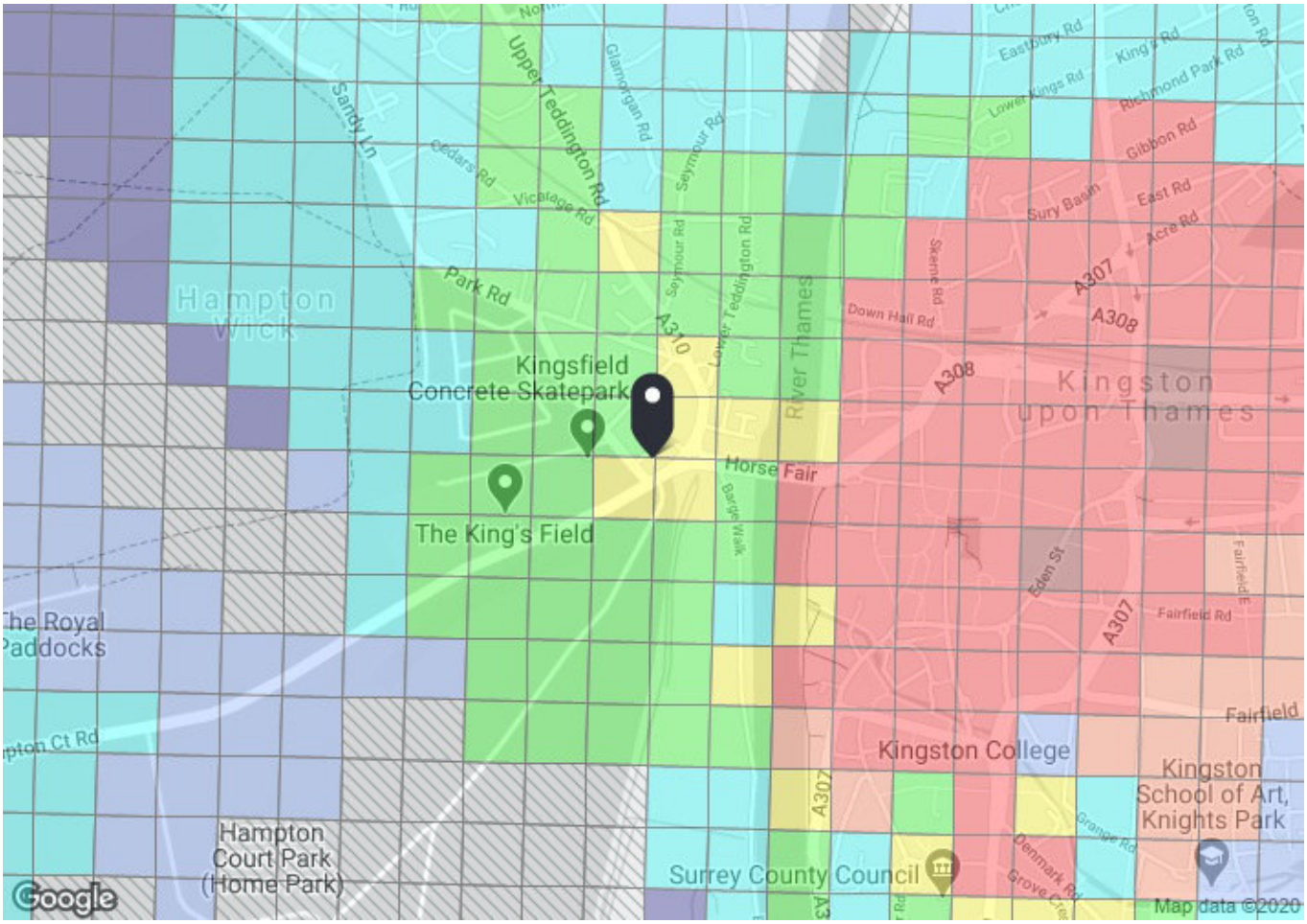
APPENDIX B

Full PTAL Report

TRANSPORT FOR LONDON



PTAL output for Base Year
4

KT1 4AG
Kingston upon Thames KT1 4AG, UK
Easting: 517494, Northing: 169388

Grid Cell: 29680

Report generated: 28/10/2020

Map key - PTAL

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

Map layers

PTAL (cell size: 100m)

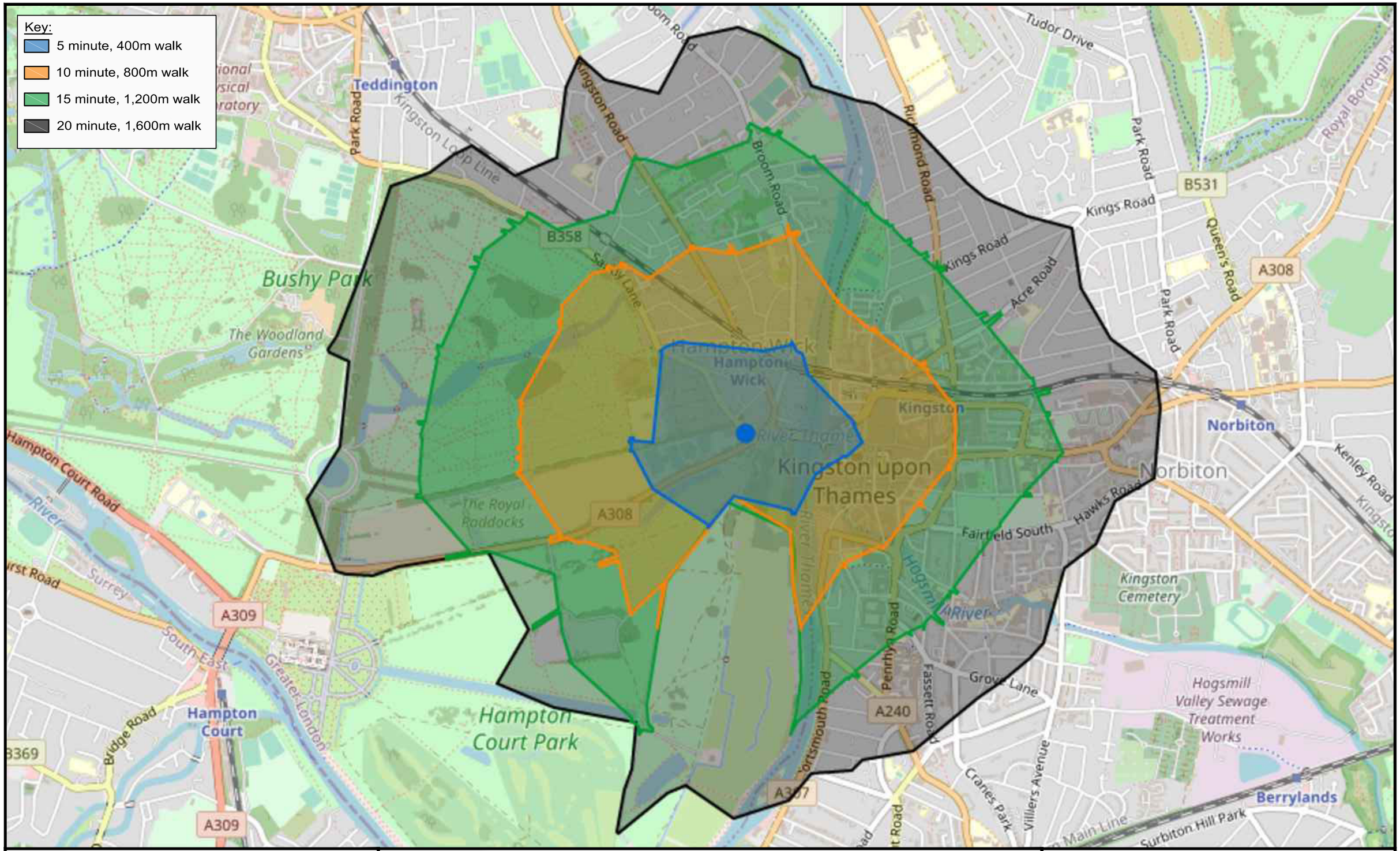
Calculation Parameters

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

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	HAMPTON WICK HIGH STREET	281	172.98	7.5	2.16	6	8.16	3.68	0.5	1.84
Bus	HAMPTON WICK HIGH STREET	285	172.98	6	2.16	7	9.16	3.27	0.5	1.64
Bus	HAMPTON WICK ROUNDABOUT	481	60.51	1	0.76	32	32.76	0.92	0.5	0.46
Bus	HAMPTON WICK ROUNDABOUT	411	60.51	4	0.76	9.5	10.26	2.93	0.5	1.46
Bus	HAMPTON WICK ROUNDABOUT	X26	60.51	2	0.76	17	17.76	1.69	0.5	0.84
Bus	HAMPTON WICK ROUNDABOUT	111	60.51	7	0.76	6.29	7.04	4.26	1	4.26
Bus	HAMPTON WICK ROUNDABOUT	216	60.51	3	0.76	12	12.76	2.35	0.5	1.18
Rail	Hampton Wick	'WATRLMN-SHEPRTN 2H09'	525.35	2	6.57	15.75	22.32	1.34	1	1.34
Rail	Hampton Wick	'SHEPRTN-WATRLMN 2H10'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'WDON-WATRLMN 2K03 '	525.35	0.33	6.57	91.66	98.23	0.31	0.5	0.15
Rail	Hampton Wick	'WATRLMN-WATRLMN 2K09'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'WATRLMN-WATRLMN 2O09'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'TEDNGTN-WATRLMN 2O90'	525.35	0.33	6.57	91.66	98.23	0.31	0.5	0.15
Rail	Hampton Wick	'TWCKNHM-WATRLMN 2O92'	525.35	0.67	6.57	45.53	52.09	0.58	0.5	0.29
									Total Grid Cell AI:	**15.62**

Drawing 201345/TS/01 – Walking Isochrones



Westcombe Group

Kingston Bridge House
Hampton Wick

Walking
Isochrones

SCALE	DRAWN BY	PRJ No.	DWG No.
NTS	MK	201345	201345/TS/01

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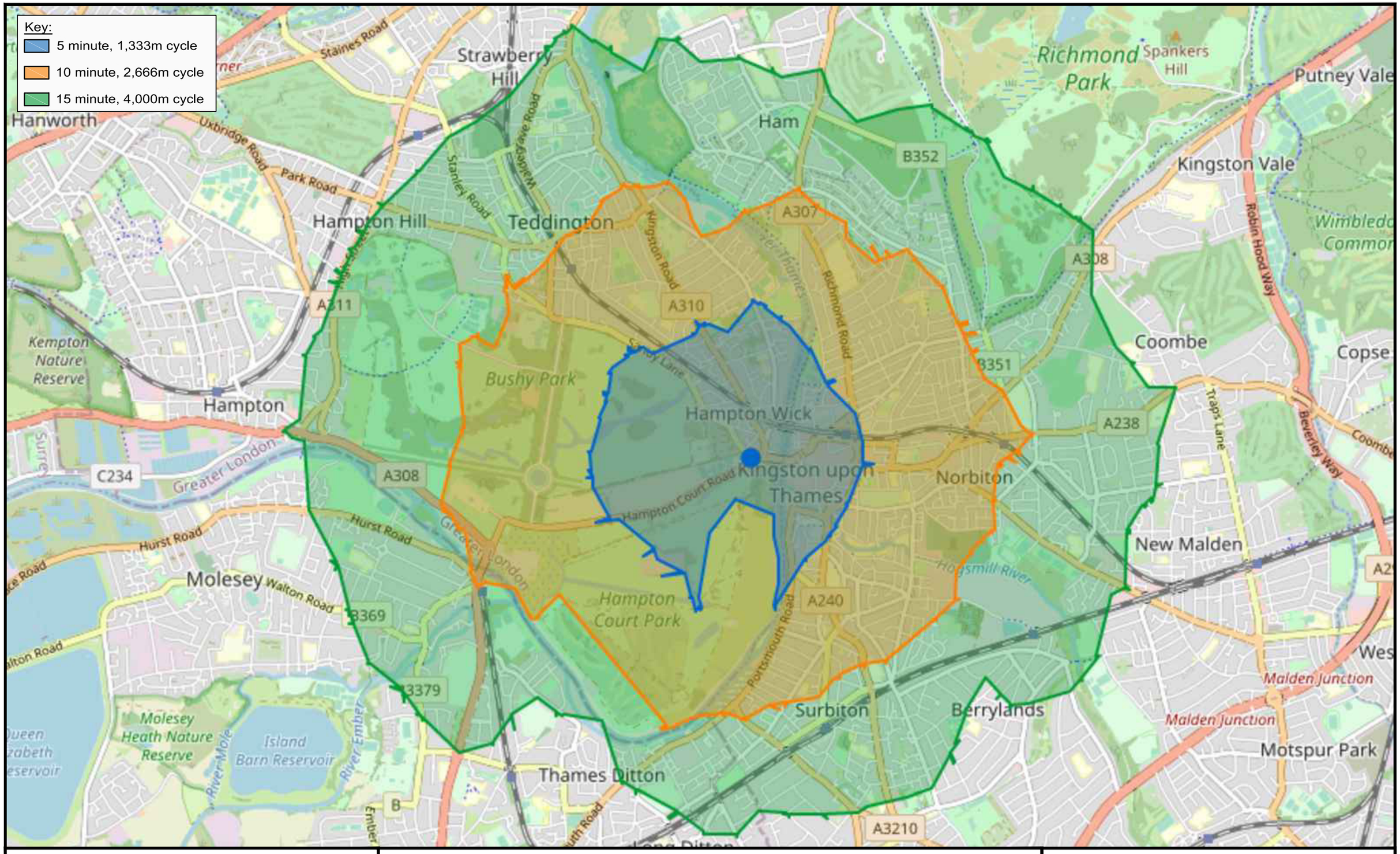
Drawing 201345/TS/02 – Cycling Isochrones



Westcombe Group

Kingston Bridge House
Hampton Wick

Cycling
Isochrones

SCALE	DRAWN BY	PRJ No.	DWG No.
NTS	MK	201345	201345/TS/02

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www.lanmor.co.uk

Cycle Route Map

RICHMOND UPON THAMES CYCLE NETWORK MAP

RICHMOND TOWN CENTRE

RICHMOND TOWN CENTRE

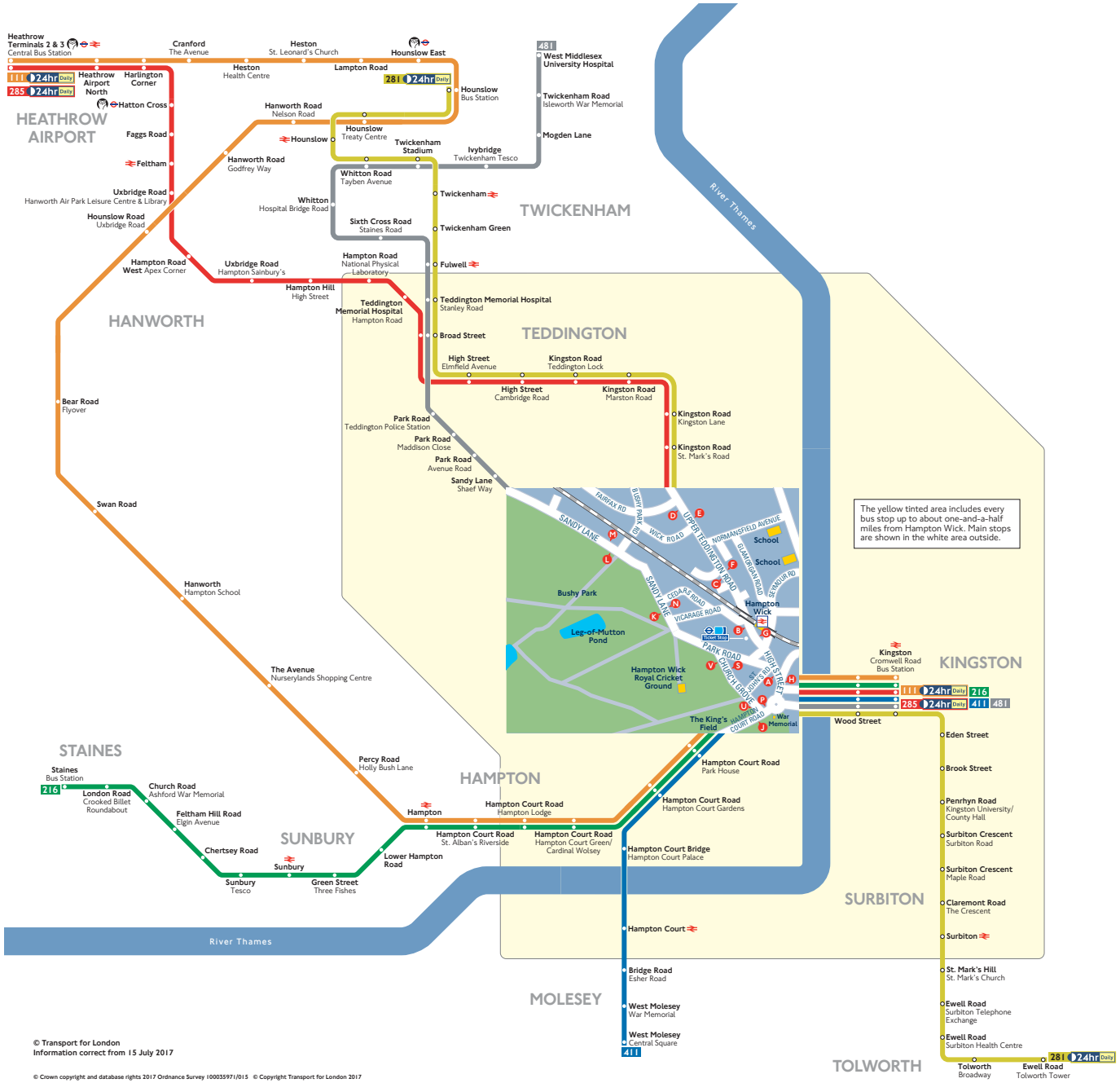
within the Borough of Richmond | BOROUGH BOUNDARY | outside the Borough of Richmond

- 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 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

0 1/4 1/2 1 Mile
0 1/2 1 Kilometre
Based on Ordnance Survey Street View
Drawn by FWT 27.1.11 www.fwt.co.uk

Bus Route Map

Buses from Hampton Wick



Route finder

Bus route	Towards	Bus stops
111 24hr Daily	Heathrow Terminals 2 & 3	J
	Kingston	P
216	Kingston	P
	Staines	J
281 24hr Daily	Hounslow	A B C D
	Tolworth	E F G H
285 24hr Daily	Heathrow Terminals 2 & 3	A B C D
	Kingston	E F G H
411	Kingston	P
	West Molesey	J
481	Kingston ✚	M N P S
	West Middlesex University Hospital ✚	K L U V

Other buses

Bus route	Towards	Bus stops
461	Addlestone	J
	Kingston	P
513	Downside ●	J
	Kingston ●	P
641 Sch	Teddington School	A B C D P
	West Molesey	F G H J
681 Sch	Hounslow	D

Key

	Connections with London Underground
	Connections with National Rail
	Tube station with 24-hour service Friday and Saturday nights
✚	Mondays to Saturdays except evenings
●	Monday to Friday daytime off-peak
Sch	School journeys

Ways to pay

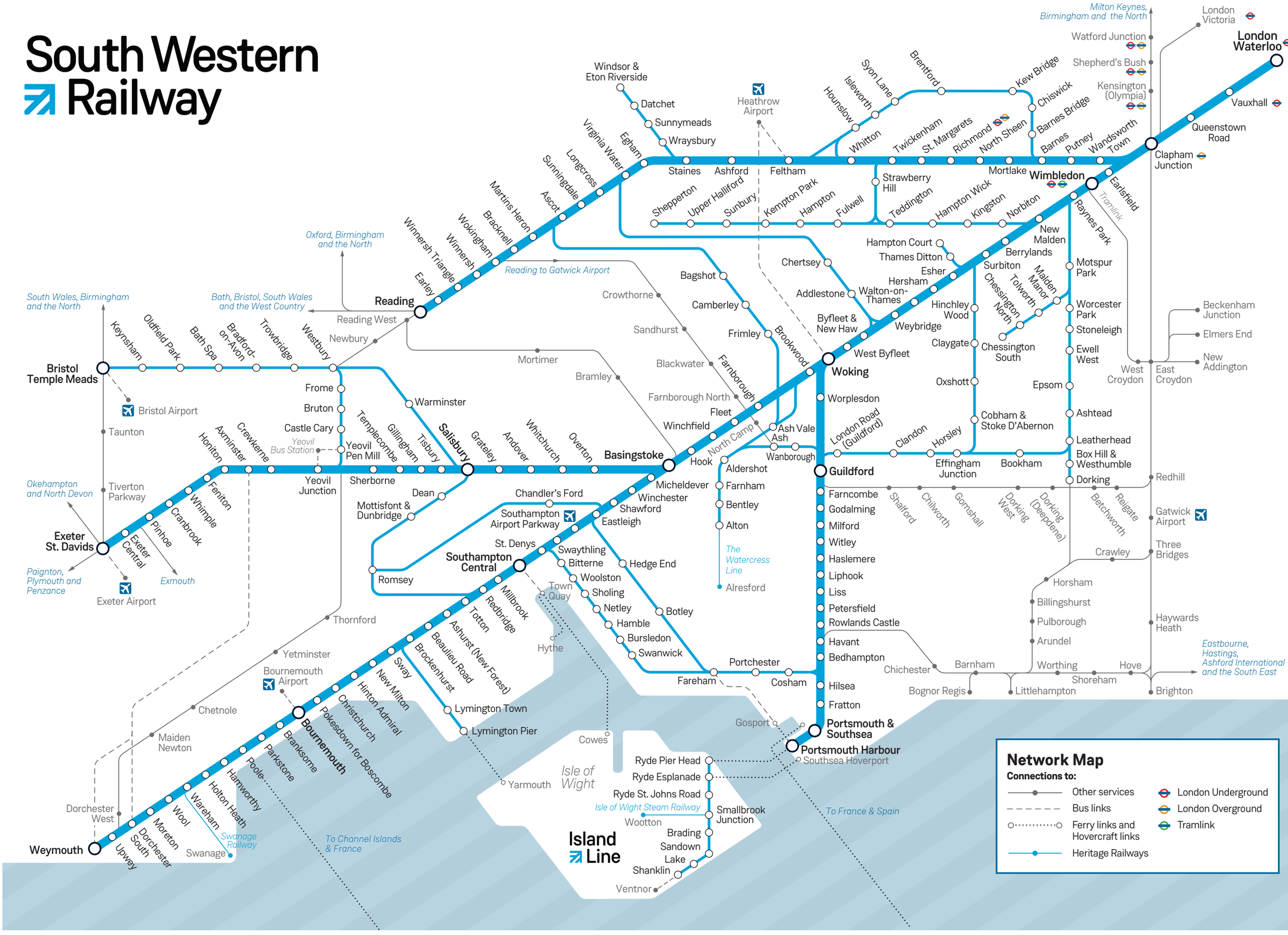
Use your contactless debit or credit card. It's the same fare as Oyster and there is no need to top up.

Top up your Oyster pay as you go credit or buy Travelcards and bus & tram passes at around 4,000 shops across London.

TFL33213.06.17 (P)

South Western Railway Network Map

South Western Railway



Network Map

Connections to:

- Other services
- Bus links
- Ferry links and Hovercraft links
- Heritage Railways
- London Underground
- London Overground
- Tramlink

APPENDIX C

TRICS Output (C4 Trip Rates – Student Accommodation)

Calculation Reference: AUDIT-162301-201029-1031

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : G - STUDENT ACCOMMODATION

TOTAL VEHICLES

Selected regions and areas:

01 GREATER LONDON

HM	HAMMERSMITH AND FULHAM	1 days
IS	ISLINGTON	1 days
KI	KINGSTON	2 days

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

Primary Filtering selection:

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

Parameter:	Number of residents
Actual Range:	146 to 300 (units:)
Range Selected by User:	100 to 500 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 09/03/20

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

Selected survey days:

Wednesday	2 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	4

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

Selected Location Sub Categories:

Residential Zone	2
Built-Up Zone	2

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

Secondary Filtering selection:

Use Class:

C3	4 days

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

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	3 days
50,001 to 100,000	1 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days

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

Travel Plan:

Yes	1 days
No	3 days

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

PTAL Rating:

4 Good	1 days
5 Very Good	1 days
6a Excellent	1 days
6b (High) Excellent	1 days

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

LIST OF SITES relevant to selection parameters

1 **HM-03-G-01** **STUDENT FLATS** **HAMMERSMITH AND FULHAM**
PADDENSWICK ROAD
HAMMERSMITH

Edge of Town Centre
Residential Zone
Total Number of residents: 235
Survey date: THURSDAY *31/10/19* *Survey Type: MANUAL*

2 **IS-03-G-01** **STUDENT FLATS** **ISLINGTON**
OLD STREET
ST LUKE'S

Edge of Town Centre
Built-Up Zone
Total Number of residents: 146
Survey date: FRIDAY *07/12/12* *Survey Type: MANUAL*

3 **KI-03-G-01** **STUDENT FLATS** **KINGSTON**
PENRHYN ROAD
KINGSTON UPON THAMES

Edge of Town Centre
Built-Up Zone
Total Number of residents: 200
Survey date: WEDNESDAY *12/06/19* *Survey Type: MANUAL*

4 **KI-03-G-02** **STUDENT FLATS** **KINGSTON**
CAMBRIDGE ROAD
KINGSTON UPON THAMES
NORBITON
Edge of Town Centre
Residential Zone
Total Number of residents: 300
Survey date: WEDNESDAY *26/06/19* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION

TOTAL VEHICLES

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	194	0.000	3	194	0.000	3	194	0.000
08:00 - 09:00	3	194	0.003	3	194	0.005	3	194	0.008
09:00 - 10:00	3	194	0.000	3	194	0.000	3	194	0.000
10:00 - 11:00	3	194	0.005	3	194	0.005	3	194	0.010
11:00 - 12:00	3	194	0.003	3	194	0.007	3	194	0.010
12:00 - 13:00	3	194	0.009	3	194	0.007	3	194	0.016
13:00 - 14:00	3	194	0.007	3	194	0.003	3	194	0.010
14:00 - 15:00	3	194	0.009	3	194	0.010	3	194	0.019
15:00 - 16:00	3	194	0.003	3	194	0.002	3	194	0.005
16:00 - 17:00	3	194	0.005	3	194	0.002	3	194	0.007
17:00 - 18:00	3	194	0.003	3	194	0.002	3	194	0.005
18:00 - 19:00	**3**	**194**	**0.012**	**3**	**194**	**0.012**	**3**	**194**	**0.024**
19:00 - 20:00	2	218	0.009	2	218	0.009	2	218	0.018
20:00 - 21:00	2	218	0.005	2	218	0.005	2	218	0.010
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.073			0.069			0.142

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

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

Parameter summary

Trip rate parameter range selected:	146 - 300 (units:)
Survey date date range:	01/01/12 - 09/03/20
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRICS Output (C3 Trip Rates – Private Flats)

Calculation Reference: AUDIT-162301-201029-1037

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01 GREATER LONDON

BE	BEXLEY	1 days
HG	HARINGEY	1 days
HM	HAMMERSMITH AND FULHAM	1 days
HO	HOUNSLOW	1 days
KN	KENSINGTON AND CHELSEA	1 days
WF	WALTHAM FOREST	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 30 to 86 (units:)
Range Selected by User: 9 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 06/03/20

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

Selected survey days:

Tuesday	1 days
Wednesday	4 days
Friday	1 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	2
Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	1

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

Selected Location Sub Categories:

Residential Zone	4
Built-Up Zone	1
High Street	1

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

Secondary Filtering selection:

Use Class:

C3	6 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	2 days
100,001 or More	1 days

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

Population within 5 miles:

125,001 to 250,000	1 days
500,001 or More	5 days

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

Car ownership within 5 miles:

0.6 to 1.0	6 days

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

Travel Plan:

Yes	1 days
No	5 days

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

PTAL Rating:

3 Moderate	2 days
4 Good	1 days
5 Very Good	3 days

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

LIST OF SITES relevant to selection parameters

1 **BE-03-C-01** **BLOCKS OF FLATS** **BEXLEY**
CROOK LOG
BEXLEYHEATH

Edge of Town Centre
Residential Zone
Total No of Dwellings: 79
Survey date: WEDNESDAY *19/09/18* *Survey Type: MANUAL*

2 **HG-03-C-02** **BLOCK OF FLATS** **HARINGEY**
HIGH ROAD
WOOD GREEN
WOODSIDE PARK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 30
Survey date: WEDNESDAY *01/10/14* *Survey Type: MANUAL*

3 **HM-03-C-01** **BLOCK OF FLATS** **HAMMERSMITH AND FULHAM**
VANSTON PLACE
FULHAM

Town Centre
High Street
Total No of Dwellings: 42
Survey date: WEDNESDAY *16/07/14* *Survey Type: MANUAL*

4 **HO-03-C-02** **BLOCK OF FLATS** **HOUNSLOW**
HIGH STREET
BRENTFORD

Town Centre
Built-Up Zone
Total No of Dwellings: 86
Survey date: WEDNESDAY *03/09/14* *Survey Type: MANUAL*

5 **KN-03-C-03** **BLOCK OF FLATS** **KENSINGTON AND CHELSEA**
ALLEN STREET
KENSINGTON

Edge of Town Centre
Residential Zone
Total No of Dwellings: 72
Survey date: FRIDAY *11/05/12* *Survey Type: MANUAL*

6 **WF-03-C-01** **BLOCKS OF FLATS** **WALTHAM FOREST**
ERSKINE ROAD
WALTHAMSTOW

Edge of Town Centre
Residential Zone
Total No of Dwellings: 73
Survey date: TUESDAY *05/11/19* *Survey Type: MANUAL*

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.026	6	64	0.071	6	64	0.097
08:00 - 09:00	6	64	0.031	**6**	**64**	**0.092**	6	64	0.123
09:00 - 10:00	6	64	0.021	6	64	0.042	6	64	0.063
10:00 - 11:00	6	64	0.052	6	64	0.045	6	64	0.097
11:00 - 12:00	6	64	0.050	6	64	0.052	6	64	0.102
12:00 - 13:00	6	64	0.042	6	64	0.037	6	64	0.079
13:00 - 14:00	6	64	0.045	6	64	0.058	6	64	0.103
14:00 - 15:00	6	64	0.034	6	64	0.042	6	64	0.076
15:00 - 16:00	6	64	0.065	6	64	0.050	6	64	0.115
16:00 - 17:00	6	64	0.073	6	64	0.047	6	64	0.120
17:00 - 18:00	6	64	0.102	6	64	0.071	6	64	0.173
18:00 - 19:00	6	64	0.055	6	64	0.042	6	64	0.097
19:00 - 20:00	**2**	**76**	**0.112**	2	76	0.066	**2**	**76**	**0.178**
20:00 - 21:00	2	76	0.053	2	76	0.046	2	76	0.099
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.761			0.761			1.522

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

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

Parameter summary

Trip rate parameter range selected:	30 - 86 (units:)
Survey date date range:	01/01/12 - 06/03/20
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.000	6	64	0.000	6	64	0.000
08:00 - 09:00	6	64	0.000	6	64	0.000	6	64	0.000
09:00 - 10:00	6	64	0.003	6	64	0.003	6	64	0.006
10:00 - 11:00	6	64	0.000	6	64	0.000	6	64	0.000
11:00 - 12:00	6	64	0.000	6	64	0.000	6	64	0.000
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.003	6	64	0.003	6	64	0.006
14:00 - 15:00	6	64	0.000	6	64	0.000	6	64	0.000
15:00 - 16:00	6	64	0.000	6	64	0.000	6	64	0.000
16:00 - 17:00	6	64	0.000	6	64	0.000	6	64	0.000
17:00 - 18:00	6	64	0.000	6	64	0.000	6	64	0.000
18:00 - 19:00	6	64	0.000	6	64	0.000	6	64	0.000
19:00 - 20:00	**2**	**76**	**0.007**	**2**	**76**	**0.007**	**2**	**76**	**0.014**
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.013			0.026

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.005	6	64	0.005	6	64	0.010
08:00 - 09:00	6	64	0.000	6	64	0.000	6	64	0.000
09:00 - 10:00	6	64	0.000	6	64	0.000	6	64	0.000
10:00 - 11:00	6	64	0.003	6	64	0.000	6	64	0.003
11:00 - 12:00	6	64	0.005	**6**	**64**	**0.008**	**6**	**64**	**0.013**
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.000	6	64	0.000	6	64	0.000
14:00 - 15:00	**6**	**64**	**0.008**	6	64	0.005	6	64	0.013
15:00 - 16:00	6	64	0.000	6	64	0.003	6	64	0.003
16:00 - 17:00	6	64	0.000	6	64	0.000	6	64	0.000
17:00 - 18:00	6	64	0.003	6	64	0.003	6	64	0.006
18:00 - 19:00	6	64	0.000	6	64	0.000	6	64	0.000
19:00 - 20:00	2	76	0.000	2	76	0.000	2	76	0.000
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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

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

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

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.000	6	64	0.005	6	64	0.005
08:00 - 09:00	6	64	0.003	**6**	**64**	**0.008**	6	64	0.011
09:00 - 10:00	6	64	0.003	6	64	0.003	6	64	0.006
10:00 - 11:00	6	64	0.003	6	64	0.003	6	64	0.006
11:00 - 12:00	6	64	0.000	6	64	0.000	6	64	0.000
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.008	6	64	0.000	6	64	0.008
14:00 - 15:00	6	64	0.000	6	64	0.000	6	64	0.000
15:00 - 16:00	6	64	0.000	6	64	0.000	6	64	0.000
16:00 - 17:00	6	64	0.005	6	64	0.005	6	64	0.010
17:00 - 18:00	6	64	0.003	6	64	0.003	6	64	0.006
18:00 - 19:00	**6**	**64**	**0.010**	6	64	0.008	**6**	**64**	**0.018**
19:00 - 20:00	2	76	0.000	2	76	0.000	2	76	0.000
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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

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

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

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.034	6	64	0.092	6	64	0.126
08:00 - 09:00	6	64	0.039	**6**	**64**	**0.162**	6	64	0.201
09:00 - 10:00	6	64	0.029	6	64	0.050	6	64	0.079
10:00 - 11:00	6	64	0.063	6	64	0.052	6	64	0.115
11:00 - 12:00	6	64	0.065	6	64	0.063	6	64	0.128
12:00 - 13:00	6	64	0.052	6	64	0.045	6	64	0.097
13:00 - 14:00	6	64	0.063	6	64	0.081	6	64	0.144
14:00 - 15:00	6	64	0.042	6	64	0.042	6	64	0.084
15:00 - 16:00	6	64	0.131	6	64	0.073	6	64	0.204
16:00 - 17:00	6	64	0.102	6	64	0.058	6	64	0.160
17:00 - 18:00	6	64	0.128	6	64	0.086	6	64	0.214
18:00 - 19:00	6	64	0.058	6	64	0.052	6	64	0.110
19:00 - 20:00	**2**	**76**	**0.138**	2	76	0.086	**2**	**76**	**0.224**
20:00 - 21:00	2	76	0.059	2	76	0.053	2	76	0.112
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.003			0.995			1.998

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

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

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

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.029	6	64	0.076	6	64	0.105
08:00 - 09:00	6	64	0.037	**6**	**64**	**0.178**	6	64	0.215
09:00 - 10:00	6	64	0.026	6	64	0.079	6	64	0.105
10:00 - 11:00	6	64	0.045	6	64	0.073	6	64	0.118
11:00 - 12:00	6	64	0.060	6	64	0.063	6	64	0.123
12:00 - 13:00	6	64	0.050	6	64	0.029	6	64	0.079
13:00 - 14:00	6	64	0.063	6	64	0.076	6	64	0.139
14:00 - 15:00	6	64	0.058	6	64	0.047	6	64	0.105
15:00 - 16:00	6	64	0.170	6	64	0.063	6	64	0.233
16:00 - 17:00	6	64	0.094	6	64	0.081	6	64	0.175
17:00 - 18:00	6	64	0.128	6	64	0.110	6	64	0.238
18:00 - 19:00	6	64	0.107	6	64	0.073	6	64	0.180
19:00 - 20:00	**2**	**76**	**0.171**	2	76	0.072	**2**	**76**	**0.243**
20:00 - 21:00	2	76	0.092	2	76	0.053	2	76	0.145
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.130			1.073			2.203

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

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

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

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.005	6	64	0.136	6	64	0.141
08:00 - 09:00	6	64	0.013	**6**	**64**	**0.154**	**6**	**64**	**0.167**
09:00 - 10:00	6	64	0.013	6	64	0.055	6	64	0.068
10:00 - 11:00	6	64	0.021	6	64	0.034	6	64	0.055
11:00 - 12:00	6	64	0.021	6	64	0.018	6	64	0.039
12:00 - 13:00	6	64	0.024	6	64	0.018	6	64	0.042
13:00 - 14:00	6	64	0.018	6	64	0.029	6	64	0.047
14:00 - 15:00	6	64	0.016	6	64	0.026	6	64	0.042
15:00 - 16:00	6	64	0.092	6	64	0.029	6	64	0.121
16:00 - 17:00	6	64	0.071	6	64	0.029	6	64	0.100
17:00 - 18:00	6	64	0.102	6	64	0.031	6	64	0.133
18:00 - 19:00	6	64	0.099	6	64	0.037	6	64	0.136
19:00 - 20:00	**2**	**76**	**0.125**	2	76	0.033	2	76	0.158
20:00 - 21:00	2	76	0.039	2	76	0.020	2	76	0.059
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.659			0.649			1.308

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

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

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

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.008	6	64	0.076	6	64	0.084
08:00 - 09:00	6	64	0.010	**6**	**64**	**0.097**	6	64	0.107
09:00 - 10:00	6	64	0.010	6	64	0.045	6	64	0.055
10:00 - 11:00	6	64	0.021	6	64	0.034	6	64	0.055
11:00 - 12:00	6	64	0.016	6	64	0.026	6	64	0.042
12:00 - 13:00	6	64	0.010	6	64	0.008	6	64	0.018
13:00 - 14:00	6	64	0.016	6	64	0.024	6	64	0.040
14:00 - 15:00	6	64	0.016	6	64	0.016	6	64	0.032
15:00 - 16:00	6	64	0.042	6	64	0.013	6	64	0.055
16:00 - 17:00	6	64	0.042	6	64	0.018	6	64	0.060
17:00 - 18:00	6	64	0.055	6	64	0.031	6	64	0.086
18:00 - 19:00	**6**	**64**	**0.123**	6	64	0.042	**6**	**64**	**0.165**
19:00 - 20:00	2	76	0.086	2	76	0.033	2	76	0.119
20:00 - 21:00	2	76	0.059	2	76	0.007	2	76	0.066
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.514			0.470			0.984

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

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

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

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.013	6	64	0.212	6	64	0.225
08:00 - 09:00	6	64	0.024	**6**	**64**	**0.251**	6	64	0.275
09:00 - 10:00	6	64	0.024	6	64	0.099	6	64	0.123
10:00 - 11:00	6	64	0.042	6	64	0.068	6	64	0.110
11:00 - 12:00	6	64	0.037	6	64	0.045	6	64	0.082
12:00 - 13:00	6	64	0.034	6	64	0.026	6	64	0.060
13:00 - 14:00	6	64	0.034	6	64	0.052	6	64	0.086
14:00 - 15:00	6	64	0.031	6	64	0.042	6	64	0.073
15:00 - 16:00	6	64	0.134	6	64	0.042	6	64	0.176
16:00 - 17:00	6	64	0.113	6	64	0.047	6	64	0.160
17:00 - 18:00	6	64	0.157	6	64	0.063	6	64	0.220
18:00 - 19:00	**6**	**64**	**0.223**	6	64	0.079	**6**	**64**	**0.302**
19:00 - 20:00	2	76	0.211	2	76	0.066	2	76	0.277
20:00 - 21:00	2	76	0.099	2	76	0.026	2	76	0.125
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.176			1.118			2.294

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

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

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

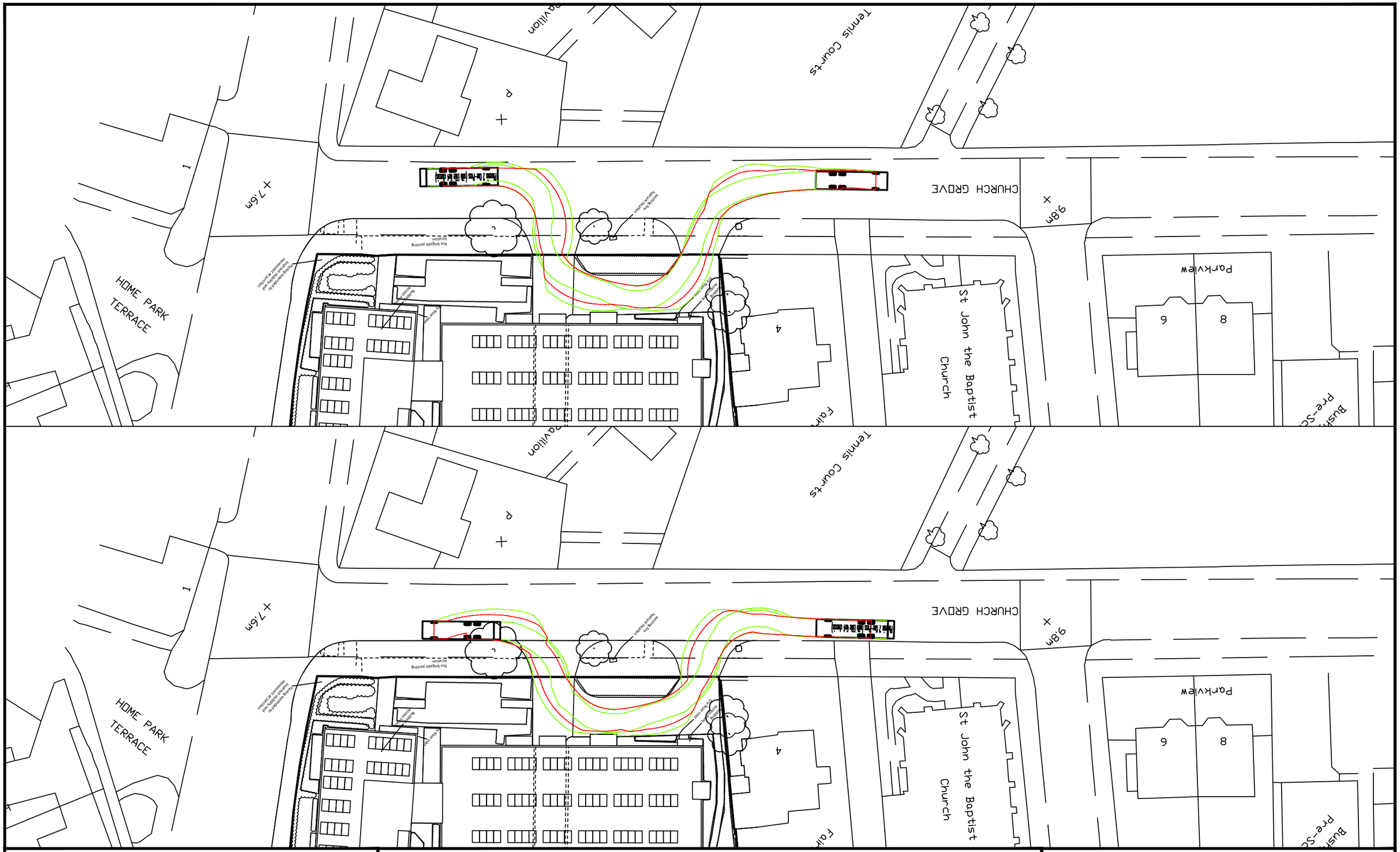
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.076	6	64	0.385	6	64	0.461
08:00 - 09:00	6	64	0.102	**6**	**64**	**0.599**	6	64	0.701
09:00 - 10:00	6	64	0.081	6	64	0.230	6	64	0.311
10:00 - 11:00	6	64	0.152	6	64	0.196	6	64	0.348
11:00 - 12:00	6	64	0.162	6	64	0.170	6	64	0.332
12:00 - 13:00	6	64	0.136	6	64	0.099	6	64	0.235
13:00 - 14:00	6	64	0.168	6	64	0.209	6	64	0.377
14:00 - 15:00	6	64	0.131	6	64	0.131	6	64	0.262
15:00 - 16:00	6	64	0.435	6	64	0.178	6	64	0.613
16:00 - 17:00	6	64	0.314	6	64	0.191	6	64	0.505
17:00 - 18:00	6	64	0.416	6	64	0.262	6	64	0.678
18:00 - 19:00	6	64	0.398	6	64	0.212	6	64	0.610
19:00 - 20:00	**2**	**76**	**0.520**	2	76	0.224	**2**	**76**	**0.744**
20:00 - 21:00	2	76	0.250	2	76	0.132	2	76	0.382
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.341			3.218			6.559

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

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

APPENDIX D

Drawing 201345/TR/01 – Swept Path Assessment



Westcombe Group

Kingston Bridge House
Hampton Wick

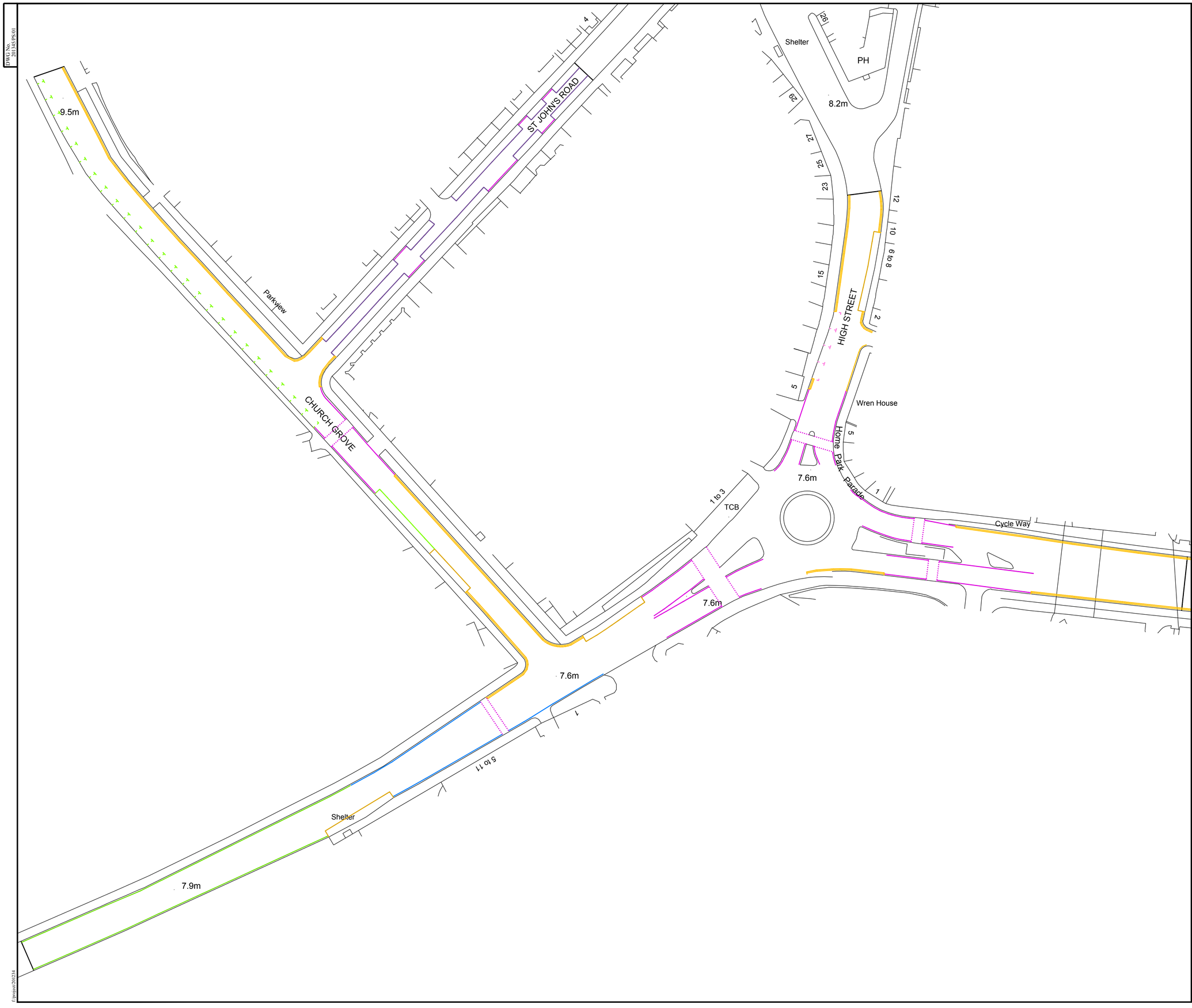
Swept Path Assessment
11.2m Long Refuse Vehicle

SCALE	DRAWN BY	PRJ No.	DWG No.
1:200	MK	201345	201345/TR/01

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
E-mail: info@lanmor.co.uk
www.lanmor.co.uk

Drawing 201345/PS/01 – Parking Survey (Base Layout)

DWG No. 201345/PS/01



NOTES

KEY

- Resticted "NO PARKING"
- Permit Holders Only (Zone X)
- Permit Holders or Pay at Machine (Max 10 hours)
- Pay at Machine
- Clearway (No Parking)
- Urban Clearway (8am to 6.30pm)
- Bus Stop
- Single Yellow Line
- Double Yellow Line

Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
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Westcombe Group

Kingston Bridge House
Hampton Wick

Parking Survey
Base Layout

DRAWN	CHECKED	APPROVED
JR	KBL	KBL
DATE Oct-20	DATE Oct-20	DATE Oct-20

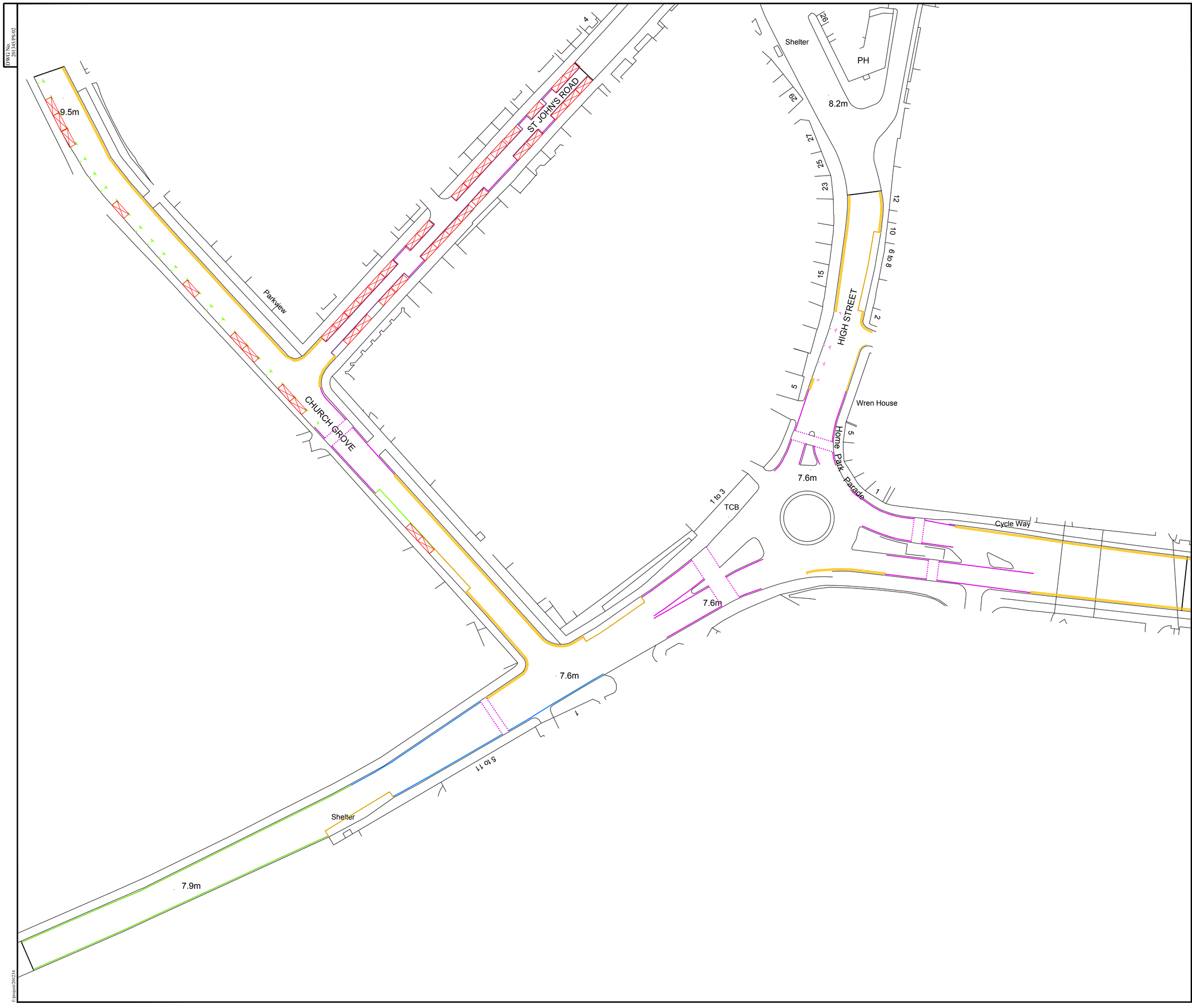
SCALE	JOB No.	SIZE	REV
1:500	201345	A1	

DWG No. 201345/PS/01

f:\projects\201234

Drawing 201345/PS/02 – Parking Survey (16/10/2020)

DWG No. 201345/PS/02



NOTES

KEY

- Resticted "NO PARKING"
- Permit Holders Only (Zone X)
- Permit Holders or Pay at Machine (Max 10 hours)
- Pay at Machine
- Clearway (No Parking)
- Urban Clearway (8am to 6.30pm)
- Bus Stop
- Single Yellow Line
- Double Yellow Line

Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
www.lanmor.co.uk

Westcombe Group

Kingston Bridge House
Hampton Wick

Parking Survey
Friday Morning16/10/20
1.15am to 1.45am

DRAWN JR		CHECKED KBL		APPROVED KBL	
DATE Oct-20		DATE Oct-20		DATE Oct-20	
SCALE 1:500	JOB No. 201345		SIZE A1	REV	
DWG No. 201345/PS/02					

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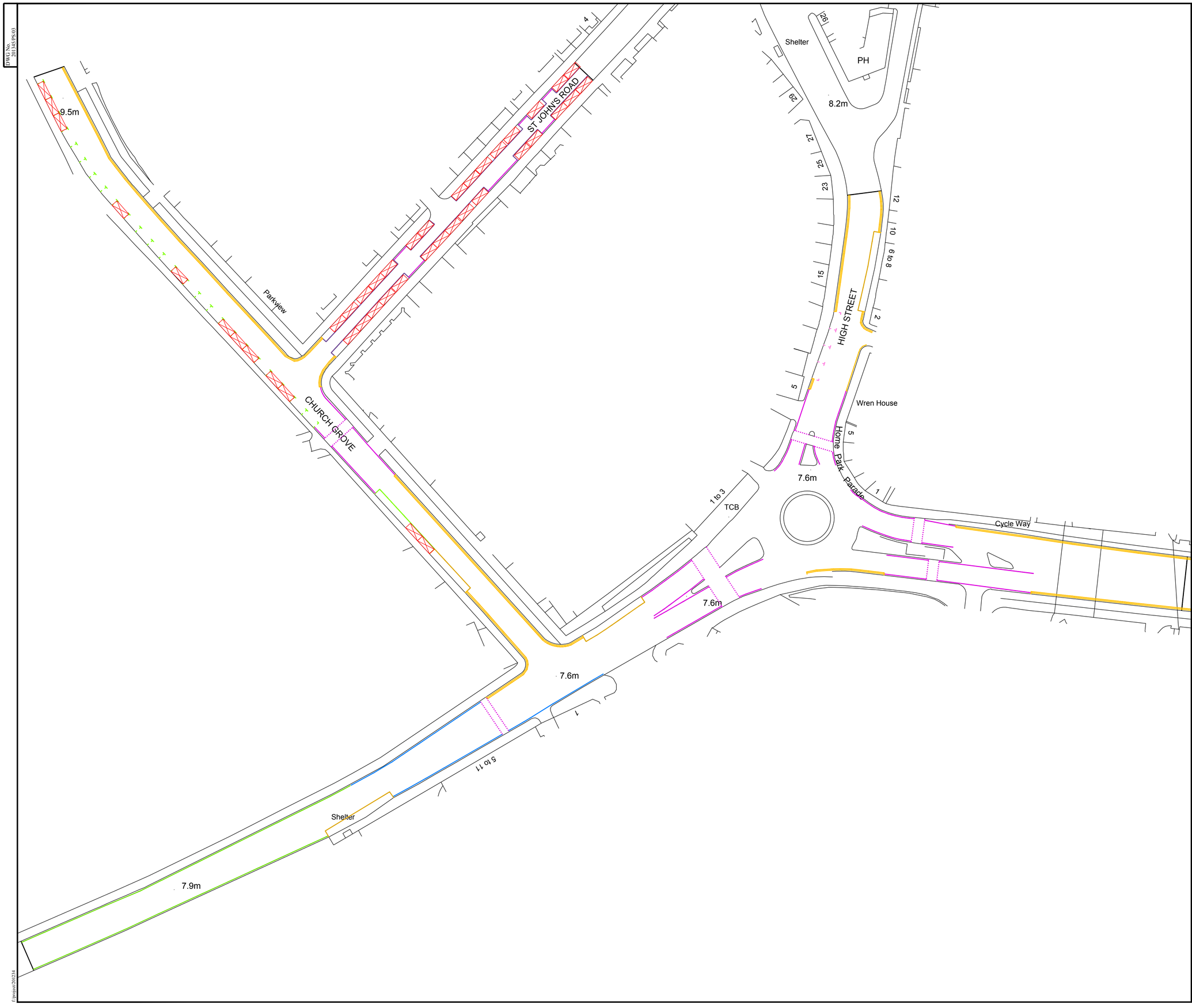
Drawing 201345/PS/03 – Parking Survey (21/10/2020)

DWG No. 201345/PS/03



NOTES

KEY

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Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
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Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
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Westcombe Group

Kingston Bridge House
Hampton Wick

Parking Survey
Wednesday Morning 21/10/20
1.30am to 2.00am

DRAWN JR		CHECKED KBL		APPROVED KBL	
DATE Oct-20		DATE Oct-20		DATE Oct-20	
SCALE 1:500	JOB No. 201345		SIZE A1	REV	
DWG No. 201345/PS/03					

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