



Barnes Hospital
London Borough of Richmond upon
Thames

Framework Residential Travel Plan

For

South West London & St George's
Mental Health Trust

Document Control Sheet

Framework Residential Travel Plan

Barnes Hospital, London Borough of Richmond upon Thames

South West London & St George's Mental Health Trust

This document has been issued and amended as follows:

Date	Issue	Prepared by	Approved by
19/10/2018	Draft	James Werby	David Lewis
29/10/2018	Final	James Werby	David Lewis

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1.0 Introduction

- 1.1 Motion has been appointed by the South West London & St George's Mental Health Trust ('the Trust') to prepare this Framework Residential Travel Plan in relation to development proposals at the Barnes Hospital site within the London Borough of Richmond upon Thames (LBRuT).
- 1.2 The application site is situated within the Barnes area of LBRuT and is bound to the north by South Worple Way, to the east by South Worple Avenue, to the west by Old Mortlake Burial Ground and fronts residential properties to the south.
- 1.3 The site is currently occupied by Barnes Hospital which provides circa 6,950 square metres of C2 medical facilities. There are currently three vehicle accesses to the site. The eastern access operates as an inbound only entrance, the central access operates as an outbound only exit and the western access to the site is not currently in use.
- 1.4 The current proposals seek "outline planning permission for the demolition and comprehensive redevelopment (phased development) of land at Barnes Hospital to provide a mixed use development comprising a health centre (Use Class D1), a Special Educational Needs (SEN) School (Use Class D1), up to 80 new build residential units (Use class C3), the conversion of two of the retained BTMs for use for up to 3no. residential units (Use Class C3), the conversion of one BTM for medical use (Use Class D1), car parking, landscaping and associated works. All matters reserved save for the full details submitted *in relation to access points at the site boundaries.*"

Report Structure

- 1.5 The purpose of the Framework Travel Plan (FTP) is to provide a 'manual' for the Travel Plan Co-ordinator (TPC) who will be appointed to oversee the implementation and development of the measures set out in the document, which will seek to provide a long-term strategy for encouraging residents and visitors to reduce their dependency on travelling as single occupancy car drivers in favour of more sustainable modes.
- 1.6 At this stage of the planning process, a Framework Residential Travel Plan has been prepared. This will be updated to a Final Residential Travel Plan at the time of occupation and it is envisaged that this will be secured by planning condition.
- 1.7 The remainder of this report is structured as follows:
 - ▶ Section 2 – Baseline Conditions;
 - ▶ Section 3 – Objectives;
 - ▶ Section 4 – Management Strategy;
 - ▶ Section 5 – Targets
 - ▶ Section 6 – Travel Plan Measures;
 - ▶ Section 7 – Monitoring and Review; and
 - ▶ Section 8 – Action Plan.

2.0 Baseline Conditions

- 2.1 The application site is situated within the Barnes area of LBRuT and is bound to the north by South Worple Way, to the east by South Worple Avenue, to the west by Old Mortlake Burial Ground and fronts residential properties to the south.
- 2.2 The site location in relation to the surrounding area is shown in **Figure 2.1**.

Local Highway Network

- 2.3 South Worple Way is a two-way carriageway operating in an east-west alignment and runs parallel to the railway line. To the east of the site South Worple Way connects with White Hart Lane and a railway level crossing is located directly north of the junction between South Worple Way and White Hart Lane. At the junction between South Worple Way and White Hart Lane, the left turn movement out of South Worple Way is restricted such that all vehicles are required to turn right out of onto White Hart Lane (southbound).
- 2.4 White Hart Lane is a two-way carriageway operating in a north-south alignment and connects to Mortlake High Street (A3003) to the north and with Upper Richmond Road West (A205) via Priests Bridge to the south. Mortlake High Street creates a link between the A316 to the west and Hammersmith Bridge to the north east.
- 2.5 The streets in the immediate vicinity of the site are not currently subject to any parking controls and the site is not situated within a controlled parking zone. However, the streets to the north of the railway are within LBRuT Controlled Parking Zone (CPZ) M. In addition, the streets to the west of the site, west of Trehern Road are part of CPZ ES.
- 2.6 It is also noteworthy that LBRuT are bringing forward proposals for a CPZ on the streets in the vicinity of the site, including South Worple Way and will be introduced as Zone B2.

Sustainable Transport Accessibility

- 2.7 It is generally accepted that walking and cycling provide important alternatives to the private car, and should also be encouraged to form part of longer journeys via public transport. The Chartered Institution of Highways and Transportation (CIHT) have prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:
- ▶ Most people will walk to a destination that is less than one mile (Planning for Walking, 2015);
 - ▶ The bicycle is a potential mode of transport for all journeys under five miles (approximately 8 kilometres) (Planning for Cycling, 2015); and,
 - ▶ Walking distances to bus stops should not exceed 400 metres, whilst people are prepared to walk twice as far to rail stations (Planning for Walking, 2015).

Accessibility by Foot

- 2.8 South Worple Way benefits from a footway on the southern side of the carriageway, which connects east to White Hart Lane and west to Sheen Lane. This footway connects with streets from South Worple Way, which connect south towards the Upper Richmond Road West (A205). Dropped kerbs and tactile paving are provided at all junctions in the immediate vicinity of the site.
- 2.9 The site is bound by South Worple Avenue to the east, which is a public right of way (PROW). This provides a traffic free pedestrian route towards White Hart Lane to the south east of the site.
- 2.10 To the west of the application site there is a pedestrian footbridge across the railway line which provides a connection north towards the bus stops on Avondale Road to the north creating a safe route across the railway track. To the south, signalised pedestrian crossings connect Priests Bridge to Upper Richmond Road West (A205) and creates a safe crossing to local bus stops, shops and services.

- 2.11 There is currently no footbridge over White Hart Lane level crossing to the east of the site. However, recent proposals to implement a new footbridge over the crossing have been permitted, which will improve pedestrian safety and connectivity in the area.
- 2.12 It is evident that the existing pedestrian infrastructure in the vicinity of the site provides the opportunity for future residents to the site to undertake journeys on foot with connections to local shops, services and facilities as well as public transport opportunities and residential areas.

Accessibility by Cycle

- 2.13 The site is well located with regard to cycle opportunities with a range of signed and recommended cycle routes in the immediate vicinity as highlighted by TfL's Local Cycling Guide. Cycle routes are illustrated on **Figure 2.2**, along with further information on the routes detailed below.
- 2.14 The TfL Local Cycling Guide highlights South Worple Way as a quiet route recommended by cyclists. This connects with further recommended routes on White Hart Lane, Rosslyn Avenue and Woodlands Road which connect east towards Barnes station. East of Barnes station there are signed cycle routes on Upper Richmond Road towards Putney and Putney Bridge.
- 2.15 To the west of the application site, Sheen Lane is a signed cycle route and this connects south to off-road cycle routes through Richmond Park. Further signed cycle routes are provided along St Leonards Road and Tangier Road which link west towards North Sheen station.

Public Transport Accessibility Level (PTAL)

- 2.16 Public Transport Accessibility Levels (PTALs) provide a guide to the relative accessibility of a site. PTAL scores range from 1 to 6b, where 6b is the highest score and 1 is the lowest.
- 2.17 The Transport for London online PTAL calculator, WebCAT, indicates that the application site achieves a PTAL of 2. However, from a review of the WebCAT PTAL output report it is evident that the analysis does not include consideration of all pedestrian routes in the vicinity of the site and therefore underestimates the PTAL score and public transport accessibility of the site. In particular, the WebCAT assessment does not include consideration of the pedestrian footbridge across the railway line to the west of the site, which provides a connection north towards bus stops on Avondale Road and Mortlake High Street.
- 2.18 In addition, a new footbridge is to be provided by LBRuT/Network Rail/TfL, which will enhance pedestrian connectivity and improve the pedestrian links to nearby public transport facilities.
- 2.19 On that basis a manual PTAL assessment has been undertaken in order to accurately assess the PTAL score of the application site. The full manual PTAL assessment is attached at **Appendix A** and demonstrates that the site achieves a PTAL of 4, indicating a good level of accessibility to public transport services.

Accessibility by Bus

- 2.20 The nearest bus stops to the site are located approximately 300 metres to the south east of the site on Upper Richmond Road West (A205). These stops are served by routes 33, 337 and 493 and provide a regular connection towards Hammersmith, Richmond, Clapham Junction and Tooting.
- 2.21 Further bus stops are located north of the site on Avondale Road and Mortlake High Street which are served by services 209, 419, 609, 969 and N22. The bus stops to the north can either be accessed via the railway level crossing to the east of the site or via the pedestrian footbridge to the west of the site.
- 2.22 A copy of the TfL local bus route spider map is attached at **Appendix B**.

Accessibility by Rail

- 2.23 Mortlake railway station is located approximately 750 metres to the west of the site and is managed by South Western Railway. Services from Mortlake station operate to London Waterloo every 15 minutes and to both Wimbledon and Chiswick every 30 minutes during peak periods.
- 2.24 Barnes Bridge station is located approximately 750 metres to the north east of the site and is also managed by South Western Railway. Services from here operate to London Waterloo every 15 minutes and to both Weybridge and Hounslow every 30 minutes.
- 2.25 In addition, the bus services which call within the vicinity of the site provide connections to both Mortlake and Barnes Bridge stations, along with a connection to North Sheen, Barnes, Richmond, Southfields and Wimbledon stations. The connections to Richmond, Southfields and Wimbledon provide access to the London Underground District Line.
- 2.26 It is evident that the site is well placed for future residents to undertake journeys by rail with a number of train stations in the vicinity of the site providing access to a range of destinations. Furthermore, local bus services provide access to further rail stations, providing the opportunity for interchange between public transport and access to a wider range of destinations.

Car Club

- 2.27 Car Clubs can help to reduce car ownership by offering the convenience of a car, without the costs of repairs, servicing, insurance and parking.
- 2.28 The nearest car club car to the site is located on Thorne Street, approximately 380 metres north-east of the application site and is operated by ZipCar. Further car club cars, operated by ZipCar, are located on Avondale Road, Mortlake High Street and Vernon Road within a short walk of the site.

Baseline Travel Behaviour

- 2.29 In order to establish the existing baseline travel behaviour for residents, reference has been made to Census data extracted from the *Nomis* website. Details of the data extracted from the 2011 Census is summarised in Table 2.1 and provided in **Appendix C** for completeness.

Mode of Travel	Output Area <i>Richmond upon Thames 003 (%)</i>
Underground	15
Rail	30
Bus	11
Car/van driver	23
Car/van passenger	1
Taxi	0
Motorcycle	2
Pedal Cycle	10
On foot	8
TOTAL	100

Table 2.1: Method of travel to work (residents)

- 2.30 Table 2.1 indicates that 74% of residents travel to work via sustainable modes of transport (i.e. public transport, walking and cycling) and 23% travel by private car. This suggests that the existing infrastructure in the vicinity of the site will encourage future residents to travel by more sustainable modes of transport.

Summary

- 2.31 The above review demonstrates that, in accordance with local and national planning policy, the site is situated in an accessible location with a range of sustainable transport choices in the vicinity of the site.
- 2.32 The pedestrian and cycle facilities in the vicinity of the site provide the opportunity for future residents to undertake journeys by foot or cycle and provide access to a range of destinations. Furthermore, the pedestrian and cycle facilities provide a connection to the public transport infrastructure in the vicinity of the site,
- 2.33 The site achieves a PTAL of 4 which highlights good accessibility to public transport opportunities. There a number of bus services and train stations in the vicinity of the site providing a choice of public transport routes providing access to a range of destinations.

3.0 Objectives

3.1 The principle objectives of this FTP have been developed with references to relevant policy and guidance. These are set out below:

- ▶ To increase awareness of the use of sustainable modes of travel and to encourage their use;
- ▶ To increase awareness of the environmental impacts of travel by the private car;
- ▶ To promote walking and cycling as a health benefit to residents;
- ▶ To reduce the perceived safety risk associated with the alternatives of walking and cycling; and,
- ▶ To reduce car dependency.

3.2 To achieve the objectives of this FTP and overall management strategy has been developed for the introduction of a Travel Plan including potential measures to encourage sustainable travel choices and a process of monitoring and review to enable assessment of the success of the Travel Plan. This is detailed in the next sections of this report.

4.0 Management Strategy

- 4.1 A Travel Plan Coordinator will be appointed to implement and administer the Travel Plan. The Travel Plan Coordinator will take overall responsibility for the day-to-day operation of the Travel Plan and the implementation of associated measures.
- 4.2 The primary responsibilities of the Travel Plan Coordinator will therefore include:
- ▶ Establishing and maintaining a filing system for recording all correspondence relating to the Travel Plan;
 - ▶ Coordinating the travel survey questionnaire;
 - ▶ The implementation of measures as set out within the Travel Plan;
 - ▶ Report to and consulting with the London Borough of Richmond upon Thames and other relevant stakeholders regarding the implementation and progression of the Travel Plan;
 - ▶ Managing the development of the Travel Plan measures;
 - ▶ Promoting the objectives and benefits of the Travel Plan; and,
 - ▶ Acting as a point of contact for queries relating to the Travel Plan.
- 4.3 The contact details of the Travel Plan Coordinator will be included within the Travel Plan, once appointed.

Consultation

- 4.4 The success of the Travel Plan will rely on the support of residents. The Travel Plan Coordinator will be responsible for liaising with residents as well as external parties including offices of the London Borough of Richmond upon Thames, Transport for London and public transport operators.

Promotion

- 4.5 All residents will be made aware of the existence of the Travel Plan prior to occupation. The details of the Plan, its objectives in enhancing the environment and the role of individuals in achieving the objectives of the Plan, will be provided to all residents upon collection of keys.

5.0 Targets

- 5.1 Travel Plan targets can be used to assess the effectiveness of a Travel Plan and identify which areas require attention in terms of prioritising resources such as time, cost and labour.
- 5.2 Targets will be used to assess the effectiveness of the initiatives implemented and to focus attention on meeting the objectives identified in Section 3 of this document. The ultimate aim of the Travel Plan is to reduce car journeys to and from the site and to encourage use of sustainable travel. The targets will be Specific, Measureable, Achievable, Realistic and Time-Bound (SMART).
- 5.3 Upon 75% occupation of the development, a travel survey will be carried out to identify the modal split of residents. The survey will be distributed to residents by the Travel Plan Co-ordinator. The survey will be TRICS compliant.
- 5.4 As the travel behaviour and patterns of future residents are not yet known, an estimate of baseline travel patterns has been provided based on travel to work figures from the 2011 Census data for the middle layer super output area, which is Richmond upon Thames 003. These will be updated following occupation of the development and undertaking the baseline travel survey.

Interim Targets

- 5.5 Given the development is not yet occupied and baseline travel surveys have not been undertaken, final targets for the Travel Plan cannot be identified. However, to provide an indication of likely targets Table 5.1 below provides indicative targets for the Travel Plan. These would be fully reviewed and amended following the baseline surveys after occupation of the development.

Method of Travel	Baseline (%)	Year 1 (%)	Year 3 (%)	Year 5 (%)
Underground	15	15	15	15
Rail	30	31	31.5	32
Bus	11	11	12	12
Car/van driver	23	21	19	16
Car/van passenger	1	1	1	1
Taxi	0	0	0	0
Motorcycle	2	2	2	2
Pedal Cycle	10	10	10.5	11
On foot	8	9	9	11
Total	100	100	100	100

Table 5.1: Interim Mode Share Targets

6.0 Travel Plan Measures

6.1 This section of the Travel Plan outlines the 'hard' infrastructural and 'soft' behavioural measures to be implemented at the site in order to encourage travel by more sustainable transport modes. As far as possible, the obligations below are designed to be suitable for review and monitoring.

'Hard' Measures

6.2 In accordance with national and local planning policy guidance the Applicant is committed to encouraging the use of more sustainable modes of transport. A number of 'hard' measures have been proposed to encourage sustainable travel:

- ▶ Residents will not be eligible to apply for parking permits within the local Controlled Parking Zone;
- ▶ Cycle parking will be in accordance with the London Plan;
- ▶ The provision of notice boards located in communal corridors of the residential areas, to encourage sustainable transport modes including:
 1. Details of website for car sharing and car club websites such as www.liftshare.com and www.como.org.uk, so as to provide easy access to joining such schemes.
 2. Journey planning tools such as those available on www.walkit.com and www.tfl.gov.uk to enable users to plan journeys using sustainable means.
 3. Information on the health benefits of walking and cycling.

'Soft' Measures

6.3 Following completion of the development the emphasis for encouraging sustainable travel behaviour will be focused on the on the implementation of a number of 'soft' measures.

Travel Information Pack

6.4 One of the most important measures to be introduced as part of this Travel Plan is the 'Travel Information Pack' which will be issued to residents when a property is first occupied.

6.5 The pack will contain information about all modes of transport available for journeys to and from the site. It will include information related to journeys to key amenities within walking and cycling distance of the development. It will also contain details of the health, financial and environmental benefits of using sustainable modes of transport. Furthermore, the pack will present information about car clubs and sharing schemes so that residents are made aware of the benefits of joining them and also how to register with the schemes. Additional information included within the pack will consist of:

- ▶ Information will be provided about the location of cycle parking and the cycle routes in the vicinity of the site, as well as advice for maintaining bicycles.
- ▶ Information and advice concerning safe cycle routes from the site to key locations such as schools, train stations and shops.
- ▶ Promotion of organisations that offer 'Bikeability' which is cycle training scheme for both adults and children.
- ▶ There will also be details of websites for car sharing and car club websites such as www.liftshare.com, so as to provide easy access to joining such schemes. Information to promote the schemes will be included to encourage use of these modes of transport.
- ▶ Journey planning tools such as those available on www.walkit.com and www.tfl.gov.uk will be provided to enable users to plan journeys using sustainable means.

- ▶ Promotion of national awareness events such as 'Walk to School Week', 'Walk to Work Week' and 'National Bike Week' to residents.

Cycling

6.6 Cycling is a cheap, quick and sustainable mode of transport that also provides benefits for personal health as well as reducing road congestion. The Travel Plan Coordinator will consider the following additional potential measures to promote cycling:

- ▶ Residents will be provided with information and advice concerning safe cycle routes from the site to key locations such as schools, train stations and shops;
- ▶ Cycle training days;
- ▶ Bicycles User Group (BUG) and,
- ▶ Promotion of organisations that offer 'Bikeability' which is cycle training scheme for adults and children.

Car Share

6.7 As part of the Travel Information Pack, details of the car sharing website <https://london.liftshare.com/> will be promoted. The service is free to register and provides the opportunity for residents to search for potential car sharing partners in the locality.

Car Clubs

6.8 As stated in Section 2, there are a number of car club cars in the vicinity of the site. The location of the car clubs along with the benefits of using them will be promoted the Travel Pack and noticeboards, which will be located in prominent positions on the site.

Continued Promotion

6.9 The Travel Plan Coordinator will continually promote all aspects of the Travel Plan with use of the following tools and initiatives:

- ▶ A site notice board will be erected in a predominant area and will be regularly updated to keep residents informed of available travel services and facilities and any related events.
- ▶ Site events (e.g. healthy living promotions and car share campaigns) will be organised to maintain awareness of the benefits of the Travel Plan to individuals, the local community and the environment.
- ▶ Participation in local and national sustainable travel events will be encouraged e.g. Bike Week (www.bikeweek.org.uk) and Mobility Week (www.mobilityweek.eu). The Travel Plan Coordinator will maintain contact with SCC so as to be aware of all relevant activities in the area.
- ▶ The Travel Plan Coordinator will offer Personalised Travel Planning (PTP) to residents. This involves meetings with residents in order to understand their regular travel habits; their overall travel needs in terms of destinations, distances and purpose for travelling; their awareness of the options for accessing the places they wish to reach; and their propensity to make changes to their travel habits. Information will be provided about travel options for their personal journeys in order to help them to incorporate active and/or sustainable modes in their travel.

7.0 Monitoring and Review

- 7.1 A programme of monitoring and review has been designed to generate information by which the success of the Travel Plan can be evaluated. Monitoring and review will be the responsibility of the Travel Plan Coordinator and will be carried out annually.
- 7.2 The major objective of the Travel Plan is to effect a reduction in the use of single occupancy vehicles to and from the site. Suitable indicators of the success of the Plan are therefore the number of car trips per household and modal split of residents.
- 7.3 Other less direct objectives of the Plan are to increase the awareness of residents about the environmental and health implications of travel mode choice. Awareness is less easy to monitor, although one indicator will be the general response to the existence of the Plan, measured by the volume and type of feedback from residents, both at the outset and as the strategy evolves. Residents' feedback will also be obtained on the usefulness of the Travel Pack.

Monitoring

- 7.4 The monitoring measures outlined below incorporate both the collection of 'hard' analytical data and 'soft' data in the form of general feedback and correspondence and will include;
- ▶ Monitor demand for additional cycle parking;
 - ▶ Monitor awareness of the Travel Plan; and,
 - ▶ Record comments received from residents and the Site Travel Forum relating to the operation and implications of the Plan.
- 7.5 Information gathered through the monitoring process will be recorded for input in the annual review (outlined below). The information will be submitted to the Local Planning Authority and shared with residents.

Review

- 7.6 An initial travel survey will be carried out following 75% occupation of the development. This will provide data including the modal split which will offer a base against which future data can be measured.
- 7.7 The Travel Plan Coordinator will undertake a review of the Travel Plan after the first year from anniversary of the travel survey and then on a biennial basis in years 3 and 5 of the Travel Plan. The objective of the review will be to assess the success of the Plan and to identify the potential for future refinement of the details of the Plan. The review will involve the monitoring as set out above.
- 7.8 Further monitoring travel surveys will be carried out after 1, 3 and 5 years from the anniversary of the first travel survey. These surveys will take the form of resident questionnaires. Should the Travel Plan fail to meet its identified targets then a further 5 year monitoring period will be introduced.
- 7.9 The Travel Plan Coordinator will compile a Review Report outlining the results of the travel surveys. The report will also incorporate the results of on-going monitoring throughout the preceding period. The report will be submitted to the LBRuT Travel Plan Officer. A summary of the results will also be made available to residents.

Remedial Measures

- 7.10 Should the Travel Plan fail to meet the targets identified within the Travel Plan then remedial measures will be reviewed to seek to address the shortfall in meeting targets. The nature of remedial measures would be dependent on the extent to which targets have not been met.

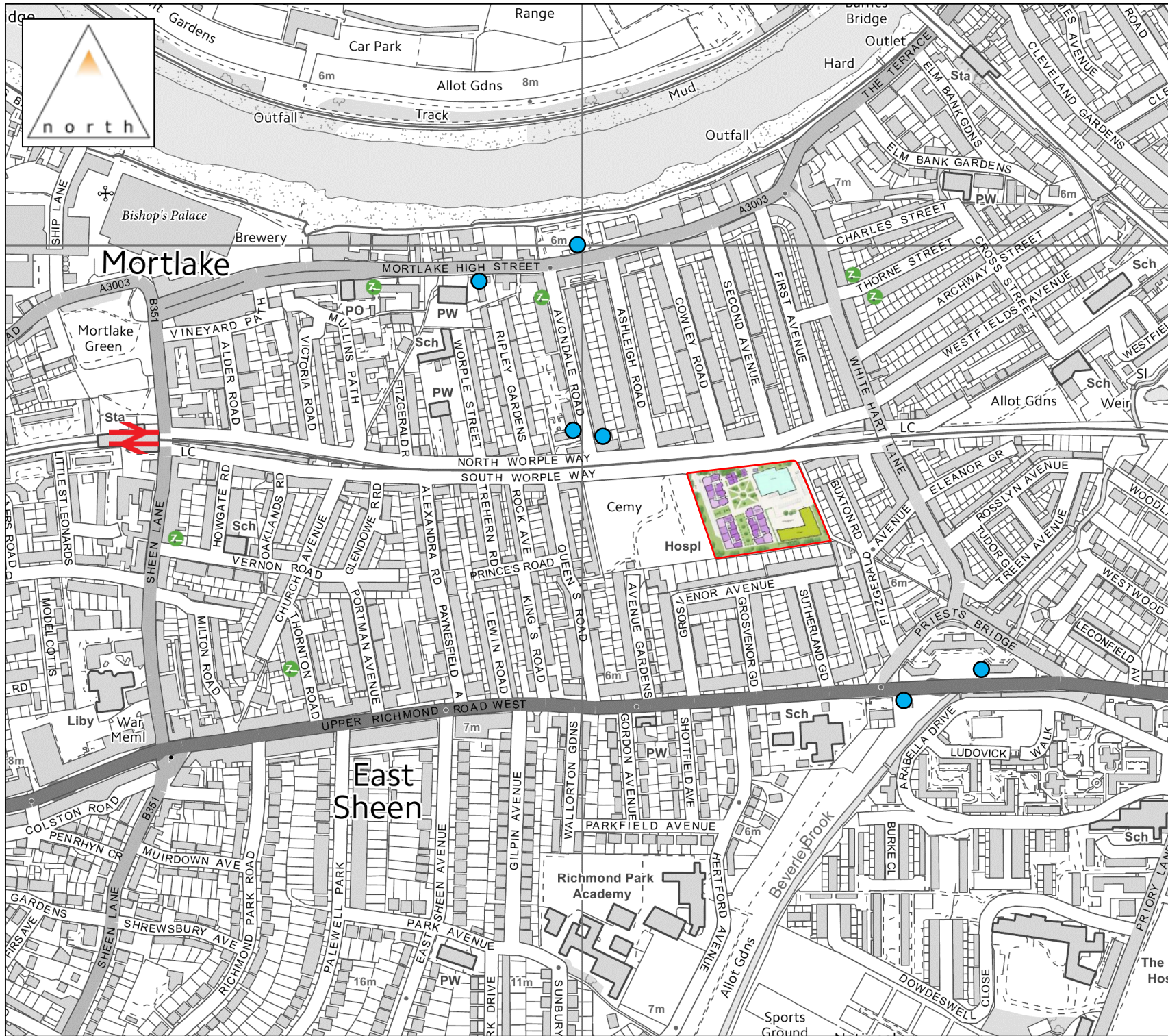
8.0 Action Plan





8.1 Table 8.1 below provides an Action Plan for the implementation of the Travel Plan at the site.

Action	Timescale	Responsibility
Install on-site cycle parking spaces	Prior to occupation	Developer
Appoint a Travel Plan Coordinator	Prior to occupation	Developer
Produce Travel Packs	Prior to occupation	Developer
Install noticeboards	Prior to occupation	Travel Plan Coordinator
Carry out travel survey	Following 70% occupation	Travel Plan Coordinator
Update Travel Plan	Within 1 month of receipt of travel survey	Travel Plan Coordinator
Promote the health benefits of walking and cycling	Ongoing from first occupation	Travel Plan Coordinator
Promote the use of public transport	Ongoing from first occupation	Travel Plan Coordinator
Monitor the use of on-site cycle parking	Ongoing from first occupation	Travel Plan Coordinator
Review the Travel Plan	Annually	Travel Plan Coordinator
Repeat travel survey	Years 1, 3 and 5 of Travel Plan	Travel Plan Coordinator

Table 8.1 Travel Plan Action Plan

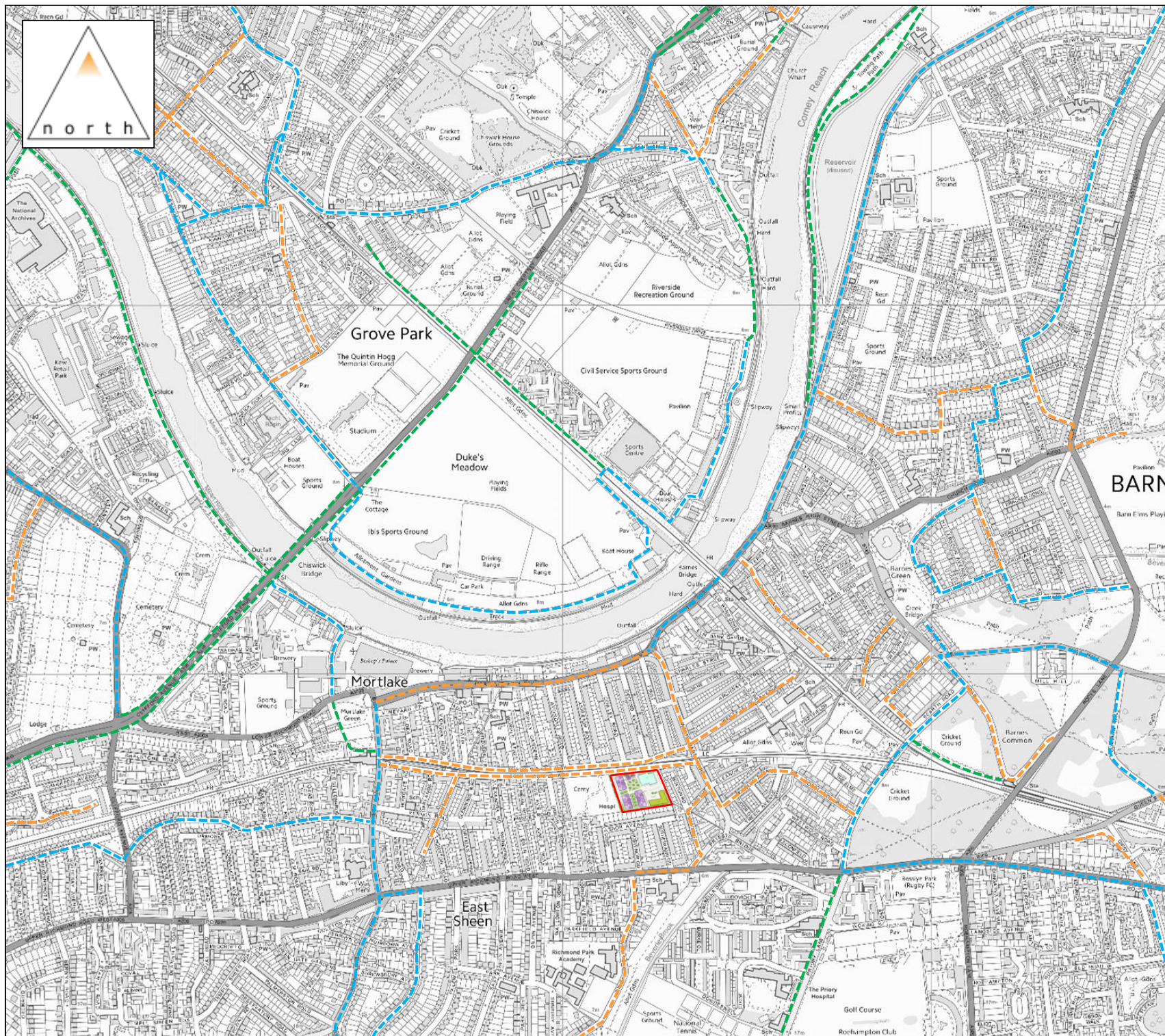
Figures



- Legend:
-  Mortlake Station
 -  Local Bus Stops
 -  ZipCar Car Club Locations
 -  Site Location

Barnes Hospital,
London Borough of Richmond upon
Thames

Figure 2.1 Site Location Plan
Not to Scale



- Legend:
- - - Signed Route
 - - - Recommended Route
 - - - Off-Road Route
 - Site Location

Barnes Hospital,
London Borough of Richmond upon
Thames

Figure 2.2 Local Cycle Routes
Not to Scale



Appendix A

PTAL Assessment

Manual PTAL Assessment

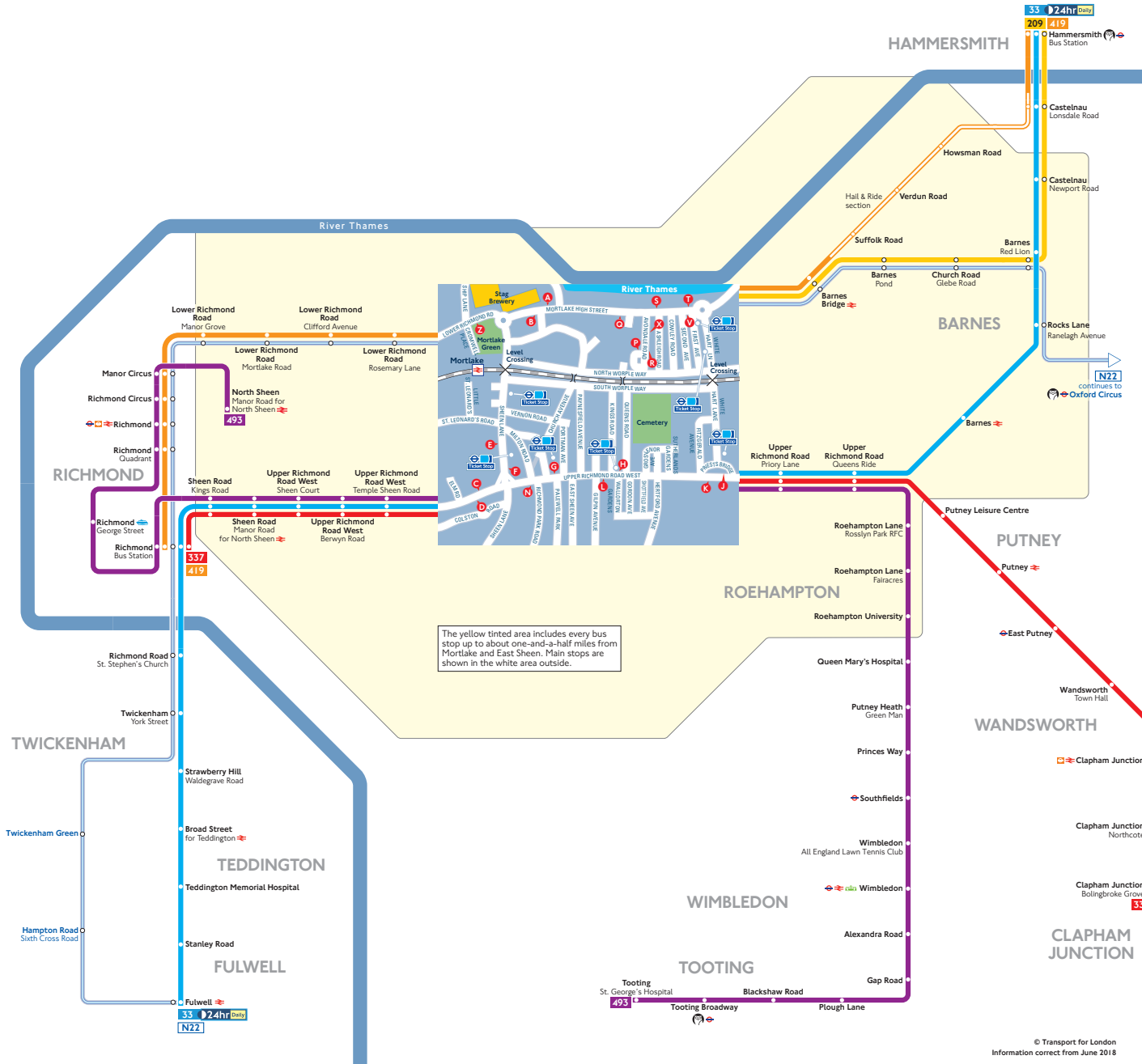
	service	distance	frequency/hr	walk time	swt	awt	tat	edf	weight	ai
bus	33	350	8.57	4.38	3.50	5.50	9.88	3.04	0.5	1.52
	209	400	13.33	5.00	2.25	4.25	9.25	3.24	1	3.24
	337	350	5.22	4.38	5.75	7.75	12.13	2.47	0.5	1.24
	419	600	4.00	7.50	7.50	9.50	17.00	1.76	0.5	0.88
	493	350	5.45	4.38	5.50	7.50	11.88	2.53	0.5	1.26
barnes bridge	bb-wey	800	2	10	1.00	1.75	11.75	2.55	0.5	1.28
	bb-wat	800	4	10	2.00	2.75	12.75	2.35	0.5	1.18
	bb-houn	800	2	10	1.00	1.75	11.75	2.55	1	2.55
mortlake	m-wat	800	4	10	2.00	2.75	12.75	2.35	0.5	1.18
	m-wim	800	2	10	1.00	1.75	11.75	2.55	0.5	1.28
	m-chi	800	2	10	1.00	1.75	11.75	2.55	0.5	1.28

Total	16.88	PTAL 4
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Appendix B

TfL Bus Spider Map

Buses from Mortlake and East Sheen



Route finder

Bus route	Towards	Bus stops
33 24hr Daily	Fulwell	D K L N
	Hammersmith	C G H J
209	Hammersmith	P S T
337	Clapham Junction	C G H J
	Richmond	D K L N
419	Hammersmith	A S T
	Richmond	B O V Z
493	North Sheen	D K L N
	Tooting	C G H J

Night buses

Bus route	Towards	Bus stops
N22	Fulwell	B O V Z
	Oxford Circus	A S T

Other buses

Bus route	Towards	Bus stops
969	Roehampton Vale ▼	A C E S T
	Whitton ▼	B D F O V

Key

- 33** Day buses in black
- N22** Night buses in blue
- Connections with London Underground
- Connections with London Overground
- Connections with National Rail
- Connections with London Trams
- Connections with river boats
- Tube station with 24-hour service Friday and Saturday nights
- Tuesdays and Fridays only

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.
- Sign up for an online account to top up online and see your travel history and spending.

Appendix C

2011 Census Data

QS701EW - Method of travel to work

ONS Crown Copyright Reserved [from Nomis on 24 October 2017]

population All usual residents aged 16 to 74
 units Persons
 date 2011
 rural urban Total

E02000786 :		Richmond upon Thames	
Method of Travel to Work		003	
All categories: Method of travel to work		5,415	
Underground, metro, light r:	839	15%	
Train	1,617	30%	
Bus, minibus or coach	578	11%	
Taxi	22	0%	
Motorcycle, scooter or mop	118	2%	
Driving a car or van	1,244	23%	
Passenger in a car or van	45	1%	
Bicycle	518	10%	
On foot	434	8%	
	Total	100%	

