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Messom Mews, Twickenham, TW1 4DP

Transport Statement

July 2024

A report prepared on behalf of Fishguard & Goodwick United Limited

Contents

Appendices

1 Introduction

1.1 Background

1.1.1 This report has been prepared by Transport Planning & Highway Solutions (TPHS) on behalf of Fishguard & Goodwick United Limited in support of a prior notification application under permitted development rights for conversion of the office floorspace across the ground and first floors of the extant building unit at Messom Mews, Twickenham, to provide six (6) residential dwellings – two (2) residential houses and four (4) residential flatted units.

1.1.2 The scheme would come forward with associated car parking to the front of the southern end of the mews block, with cycle parking and waste storage provisions primarily within an extant approved stand-alone building across from the mews again to the southern end of the site.

1.1.3 The extant building unit comprises two floors (ground and first) and comprises a gross floor area (GFA) of around 575 sqm. The site is currently supported by six (6) off-street car parking spaces and with scope for some off-street servicing also but with refuse collection on-street.

1.1.4 The proposed residential development as a result of the conversion of the extant office floorspace would provide six (6) residential units, comprising two (2) 2-bed houses, two (2) 2-bed flats and 2 (2) 3-bed flats. Separate access would be retained at ground floor for each of the two houses, with a separate communal access retained at ground floor for the four flats. The scheme would retain the existing six off-street car parking spaces and scope for servicing.

1.1.5 The scheme would retain similarly the extant stand-alone building unit across from the mews block and the separate secure and enclosed areas that this provides for both the storage of waste receptacles and long-stay cycle parking, as approved previously for such use, with the former part to provide a series of storage receptacles better suited to the residential requirements and the latter part to provide long-stay cycle parking for ten (10) cycles.

1.1.6 In assessing the impacts of the proposal, given the scale of the proposed residential development, preparation of a Transport Statement is considered appropriate to support the submission. This is supported by current Policy LP44 *'Sustainable Transport Choices'* of London Borough of Richmond upon Thames' Local Plan (adopted July 2018) which references:

'In assessing planning applications the cumulative impacts of development on the transport network will be taken into account. Planning applications will need to be supported by the provision of a Transport Assessment if it is a major development, and a Transport Statement if it is a minor development.'

1.1.7 London Borough of Richmond's Transport SPD (adopted June 2020) links to TfL guidance with regard the thresholds of development for the production of Transport Assessments, which in turn links back to national guidance issued by the Department for Transport (DfT) in 2007 (and since withdrawn). This earlier guidance sets a typical threshold of 80 units for the production of a Transport Assessment, but also of 50 units for the production of a Transport Statement.

1.1.8 However, at the local level it is acknowledged that the current *'Local Validation Checklist (Version 2.1)'*, last updated in April 2021, confirms that a Transport Statement is appropriate for *'all schemes involving 1-9 residential units or commercial floor space over 100m²'*, thus confirming the suitability of preparing a Transport Statement in support of this scheme.

1.1.9 The Transport SPD also references that *'where a residential development has the potential to result in an increased demand for on street parking, an application may need to be supported by a parking survey'*, but the updated *'Local Validation Checklist'* confirms this to be applicable for *'all schemes outside town centre boundaries involving 1 or more residential units'* only. The site sits within the defined Twickenham town centre area.

1.1.10 The purpose of this report is to demonstrate that there would not be any material impacts on the local travel networks, highways and other modes of travel, as a result of the proposed conversion of office floorspace into residential units, and that the operational requirements of the scheme would be satisfactorily accommodated without significant or material impact.

1.2 Scope of the Report

1.2.1 The scope of work outlined provides a broad description of the technical areas considered within this Transport Statement, namely:

- appraisal of the existing travel conditions and transport opportunities in the local area and in terms of access to and from the site, review of these for all modes of travel and with an audit of the local area identifying key desire lines for those travelling to and from the site;

- confirmation of the key facilities which can be practically accessed from the site by the full range of travel modes, including local schools, health centres, local retail and leisure facilities in line with current guidance, as well as of potential walk and cycle catchments;

- provision of a description and appraisal of the arrangements in terms of accessing the development scheme, including commentary relating to the strategies to be adopted and promoted as they relate to car parking, cycle parking and servicing (including waste);

- provision of a multi-modal trips assessment of the proposed residential development within the building unit, based primarily on research from the TRICS database, noting also the tripmaking characteristics which could be associated with the extant office floorspace;

- assessment of the likely level of net impacts on all modes of travel associated with the proposed conversion of the extant office floorspace into residential unts, with an overview in relation to potential servicing to be associated with the scheme.

1.2.2 Against the background of the scope, the following sections are presented in this report:

- Section 2, which presents commentary relating to the existing travel conditions at and around the site, considering all modes of travel and including reference to key facilities and services which are practically accessible from the site.

- Section 3, which provides further details of the development proposals for the site including access arrangements and supporting infrastructure.

- Section 4, which presents the assessment of the likely tripmaking characteristics of the proposed residential units, with reference to the extant office use, to consider the likely impacts of the proposed conversion scheme upon the range of local travel networks.

- Section 5, which presents the conclusions of the assessment.

1.2.3 It is acknowledged that data from the 2021 census have been released with regard key parameters such as travel to work and car ownership.

1.2.4 With regard travel to work, this release has come forward with a flag that caution should be undertaken when utilising the data. This census was undertaken during the period of the COVID-19 pandemic and whilst extra guidance was provided to assist those either on furlough or temporarily working from home, it cannot be determined how much this was followed; this flag seems to be validated by reference of around 60% of residents then working from home.

1.2.5 Given this, data from the earlier 2011 census continue to be used in terms of mode of travel.

2 Existing Travel Conditions

2.1 Background

2.1.1 The site is located within the defined Twickenham Town Centre area, with access of a wide range of employment and leisure opportunities within and around the town centre itself as well as access of ample public transport facilities for connections further afield.

2.1.2 Vehicular access of Messom Mews is by means of separate ingress and egress arrangements from and to Grosvenor Road, with the ingress route coming through towards the southern end of the site and the egress route running out from towards the northern end of the site. These vehicular access arrangements are shared with those accessing the site on foot, with the connection points with Grosvenor Road separated by around 30m.

2.1.3 Public transport opportunities accessible from the site include both bus and rail services.

2.1.4 Bus services running through the town centre include those initially via stops along London Road around 230m of the site, equivalent to a typical walk time of around 3 minutes, but also via further stops along York Street around 300m of the site, equivalent to a typical walk time of close to 4 minutes. Twickenham Railway Station is located to the north of the site at a distance of around 350m, with an equivalent typical walk time of around 4-5 minutes.

2.1.5 A comprehensive network of footways is to be found around the Twickenham town centre area, including a network of wide footways along the key corridors of London Road and King Street to the east and south of the site respectively. Footways run along both sides of Grosvenor Road, connecting the site with the surrounding town centre area and thus a wide range of key local facilities and amenities by means of practical and convenient walking routes.

2.1.6 Similarly, the Twickenham town centre area provides access of key cycle routes forming part of the London-wide network, with Grosvenor Road forming part of the local route network and accommodating promoted cycle travel in both directions. This immediate infrastructure connects locally with an east-west on-street route running to the north between St Margarets and Whitton, as well as further north-south and east-west routes in the town centre.

2.1.7 An initial overview of the census population data for the local area, based on the 2021 census, suggests that around 59% of households have access to at least one car, though with the rate of ownership differing materially between flats (around 44% of households) and houses (around 82% of households). Additionally, the earlier 2011 census data suggest around 26% of residents travelling to work outside of the home travel by car as a driver, with around 53% using public transport and around 18% using the 'active' modes (walking and cycling).

2.1.8 An overview plan illustrating the location of the site in the context of the surrounding town centre area is included at **Appendix A**.

2.2 Existing Pedestrian Environment

2.2.1 Messom Mews forms a small and private loop of around 80m in length running from and to Grosvenor Road and along which pedestrian access of the site is shared with vehicular access.

2.2.2 Grosvenor Road runs north-south between Station Yard and Holly Road and is supported by a pedestrian footway along each side, each with varying widths but at no less than 1.1m along the site side immediately either side of the ingress and no less than 1.2m on the opposite side. Beyond these stretches there is typically an effective footway width of no less than 1.35m.

2.2.3 Such footway widths provide appropriate capacity to accommodate typical local pedestrian demands, as there continues to be sufficient space for pedestrians to pass each other in opposing directions or for either a pram user or a wheelchair user to travel in a single direction; this comes forward with an additional degree of comfort with a width of 1.35m.

2.2.4 Within the context of the local Twickenham town centre area, public realm enhancement works have brought forward a network of wider footways to the east of the site along London Road and to the south of the site along King Street, with repaved footways along Holly Road a short distance to the south connecting Grosvenor Road and the site area to the London Road corridor. These wider footways run through to and link with Twickenham Railway Station to the north and with the retail facilities along King Street to the south.

2.2.5 There is a stand-alone signal-controlled shared-use pedestrian and cyclist crossing along London Road immediately to the north of the Holly Road junction, with signal-controlled crossings incorporated into the junction operations at London Road / Arragon Road to the north (along the route to / from the railway station) and at London Road / King Street / York Street to the south (along the route to / from the riverside area). There are further stand-alone signal-controlled pedestrian crossings on London Road and King Street.

2.2.6 The provision of the local footway network and the pedestrian crossing facilities at key locations along local desire lines support a high level of pedestrian connectivity both between the site and the public transport facilities (bus and railway) operating in the local area and between the site and the range of facilities and amenities, such as employment opportunities and retail and leisure outlets, within the local Twickenham town centre area.

2.2.7 The local footway network is well-lit and well-maintained, as expected of a town centre area. With the footway network and crossing facilities available within the vicinity of the site the pedestrian environment is considered to be of an overall good level, when also considering accommodation of key pedestrian desire lines (such as to the local public transport and amenities), quality of the pedestrian infrastructure and maintenance of pedestrian facilities.

2.2.8 The quality of the pedestrian environment is also highlighted because the census population data for the local area, based on the earlier 2011 census, identifies that around 11% of residents travelling to work outside the home do so on foot, with an additional 54% home-to-work trips undertaken by public transport and thus requiring a local walk journey to access the public transport services via the local bus stops and railway station..

2.2.9 Additionally, advice issued by The Institution of Highways & Transportation (IHT) within '*Guidelines for providing for journeys on foot*' suggests (at Table 3.2 of the document) acceptable walking distances for a number of different trip purposes. The corresponding reference from the IHT guidelines is attached at **Appendix B**.

2.2.10 For the purpose of commuting or travelling to and from school, which are key travel purposes particularly during peak periods, the acceptable walking distance is defined as 1 kilometre and the preferred maximum as 2 kilometres; these are also the walking distance thresholds for 'sightseeing', which could be used as a proxy for access to leisure and recreation facilities. Separately for trips to and from a town centre the acceptable walking distance is defined as a lesser 400m and the preferred maximum as 800m.

2.2.11 The initial kilometre catchment runs across the full extent of the Twickenham town centre area, including the local bus stops and the railway station, with indeed the defined town centre area typically falling within the separately-defined 400m threshold and including the range of amenities and facilities along London Road, King Street and York Street. The initial kilometre catchment provides access of a range of employment opportunities both locally and further afield, as well as local leisure and recreation facilities, and with similar local access also of nursery, primary school and secondary school education facilities.

2.3 Existing Cyclist Environment

2.3.1 Cycling is a key mode of travel, both for weekday commuting and for weekend leisure and recreational journeys, and has the scope to be used to undertake shorter-distance journeys otherwise undertaken by the car or by public transport; indeed, TfL has acknowledged in *'Travel in London'* reports that London Borough of Richmond upon Thames has a particularly high cycle mode share compared to other outer London boroughs.

2.3.2 The census population data for the local area, based on the earlier 2011 census, confirms this by identifying that around 6% of residents travelling to work outside the home do so by cycle.

2.3.3 Grosvenor Road and both Station Yard to the north and Holly Road to the south with which Grosvenor Road connects form part of the local route network immediate to the site, with corresponding road markings and signage confirming their suitability and promotion for cycling, including the permitted use of Grosvenor Road and Holly Road by contraflow cycling. Station Yard to the north of the site forms part of an east-west route running on-street, primarily along a series of quieter roads, between St Margarets to the east and Whitton to the west, with this route similarly supported by intermittent road markings and signage.

2.3.4 The London Road corridor around 125m to the east of the site, accessible via Grosvenor Road and Holly Road, forms part of a longer north-south signed route between the Twickenham town centre area and Kingston Bridge around 5km to the south, running locally southwards along the A310 London Road / King Street / Cross Deep. Stretches of demarcated advisory cycle lanes are in place along London Road / King Street / Cross Deep, with advanced stop lines for cyclists typically available upon the approaches to signal-controlled junctions.

2.3.5 Further to these formal routes there a number of other locally-mapped alternatives, presented through dedicated cycling groups and websites. These offer a number of leisure cycling routes to explore Twickenham and its surrounding area.

2.3.6 Literature published by Sustrans suggests that whilst the definition of an acceptable cycle distance cannot be fixed, a sound guide for a comfortable cycling distance could be up to 5 miles (about 8 kilometres) over a half-hour period, as this ties in with the recommended minimum amounts of weekly physical activity of five units of thirty minutes for an adult.

2.3.7 This distance is greater than that put forward in the superseded Planning Policy Guidance 13 *'Transport'*, which had suggested a travel time practical to cycle on a regular basis being within fifteen minutes (or about a distance of 5 kilometres), although acknowledging that it is not uncommon for greater timed and lengthier journeys to be undertaken on regular occasions, in particular to and from a place of work.

2.3.8 Within the lesser threshold of five kilometres, in addition to encompassing the full extent of the Twickenham area, the cycle catchment would extend northwards through the Hounslow and Isleworth areas to Brentford and the A4 Great West Road corridor; eastwards through the Richmond area to East Sheen; southwards through the Teddington area to Hampton and the centre of Kingston; and westwards through to Hanworth.

2.3.9 Further afield within the full threshold of eight kilometres, the cycle catchment would extend northwards through to Chiswick High Road and South Ealing; eastwards along the Upper Richmond Road corridor towards Putney; southwards through to and across the Surbiton area; and westwards through both the Feltham and Sunbury Cross areas.

2.3.10 Such catchment areas would evidently encompass several key centres, within which there are many local employment opportunities as well as other key facilities for residents such as leisure centres, open spaces and health facilities, with the area along the A4 Great West Road corridor to the north and Kingston to the south being key employment hubs, as well as local employment centres closer to the Twickenham site of both Richmond and Teddington.

2.4 Existing Public Transport Environment

2.4.1 Public transport routes, by bus and rail, provide realistic and viable means of travel to and from the site and surrounding area, both for the commuting purpose and for other trips such as for leisure. The measured public transport accessibility level for the site has a score of 5, which is considered to represent *'Very Good'* accessibility by public transport. The corresponding online PTAL calculation is attached for reference at **Appendix C**.

2.4.2 The PTAL confirms practical and convenient access of the regular bus routes running firstly along London Road and secondly via alternative town centre stops and of the rail services from and to London Waterloo via Twickenham railway station.

2.4.3 The majority of work-related travel by public transport, according to the earlier 2011 census of the local area, is typically via rail with over a third (39%) of such trips, but with close to a tenth (8%) by local bus also; a further similar lesser percentage (7%) had been identified as travelling by underground, which given the nearest underground station being in Richmond is likely to involve a trip also by rail given the interchange but may be instead by local bus.

Bus Services

2.4.4 There are currently eight bus routes operating regularly via a range of stops within the town centre area within a practical walking distance of the site. These provide access to / from a range of destinations, including the key centres and areas of Richmond to the east, of Kingston to the south, and of Hounslow to the north. Census population data for the local area, based on the earlier 2011 census, identify 8% of residents typically travel to work by bus.

2.4.5 The closest bus stops to the site are along London Road, tagged as *'London Road Twickenham'* in each direction with Stops E and F, and York Street, tagged as *'York Street Twickenham'* in each direction with Stops G and H. The London Road bus stops are located around 230m from the site, equivalent to a typical walk time of around 3 minutes, and the York Street bus stops are located around 300m of the site, equivalent to a typical walk time of around 4 minutes.

2.4.6 Table 2.1 presents a summary of the eight regular bus routes operating via the local stops, identifying typical daytime frequency and closest stops for access. These stops are well within the acceptable walk distance as defined by the PTAL methodology of 640m and equivalent to a typical walk time of eight (8) minutes.

2.4.7 The summary table providing details of the range of bus services accessible of the site and the frequencies of these illustrates that this mode of travel is both practical and convenient for those travelling to and from the site for a range of trip purposes. With around forty buses by direction hourly during the daytime period, as an average there is practical access to two services every three minutes typically in each general direction of travel.

Route Number	Route Summary	Closest Bus Stop	Typical Hourly Freq.
267	Fulwell – Twickenham – Isleworth – Brentford – Kew Bridge – Gunnersbury – Ravenscourt Park – Hammersmith	*London Road (Stops E / F)*	6
281	Tolworth – Surbiton – Kingston – Hampton Wick – Teddington - Fulwell – Twickenham – Whitton – Hounslow		6
H22	Hounslow – Whitton High Street - Twickenham Green – Twickenham – Isleworth – West Middlesex Hospital		5
33	Castelnau – Barnes – East Sheen - Richmond – Twickenham – St. Mary's University – Teddington – Fulwell	*York Street (Stops G / H)*	7
490	Richmond Pools – Richmond – Twickenham – Hanworth – Feltham – Hatton X – Heathrow T4 – Heathrow T5		5
R68	Kew Retail Park – Richmond – East Twickenham - Twickenham – Teddington – Hampton – Hampton Court		4
R70	Manor Road - Richmond – East Twickenham - Twickenham – Fulwell – Hampton Hill - Nurserylands		6
290	Twickenham – Fulwell – Hampton – Sunbury Cross – Ashford - Staines	*London Road (Stop F) / York Street (Stop H)*	3
		CUM. HOURLY FREQ.	**42**

Table 2.1: Summary of Local Bus Services

2.4.8 Additionally, the range of bus services accessible from the site in terms of route coverage further illustrates the convenience of this mode of travel, including four of the eight routes running to and from the nearby centre of Richmond with a cumulative frequency close to a service every three minutes providing access for local employment and retail opportunities, as well as to leisure and recreational facilities, particularly in and around this nearby centre.

2.4.9 Outside of the immediate Twickenham area, direct bus services to and from Kingston, Richmond, and Hammersmith provide access for both employment and retail opportunities; these services also provide access to leisure and recreational facilities. Also, with bus services to and from West Middlesex and Teddington Memorial Hospitals there is practical and convenient access of strategic health facilities also, as well as again further employment.

2.4.10 Every London bus route is wheelchair accessible, with automatic ramps and designated wheelchair spaces, and additionally all buses on London routes have the facility to 'kneel' to reduce the step-up between the bus stop and the vehicle. These measures ensure that this key mode of travel is accessible to those with mobility difficulties and so fully inclusive.

National Rail Services

2.4.11 To further enhance the accessibility of the site, Twickenham railway station is located approximately 350m to the north of the site, equivalent to a typical walk time of 4-5 minutes. The most practical and convenient walking route between the site and the station is by heading north along Grosvenor Road through to Station Yard, then accessing London Road via the steps from St Mary's Terrace or from along Railway Approach.

2.4.12 The census population data for the local area, based on the earlier 2011 census, suggest that around 39% of those travelling to work outside of the home use rail services as their main mode of travel, illustrating the contribution of this non-car mode of travel for the local area.

2.4.13 South Western Railway operates services running via Twickenham station, with these being typically running along the mainline between London Waterloo and either Reading or Windsor & Eton Riverside and along the Kingston Loop service (with origin and destination of London Waterloo), with additional weekday peak period services along other routes also. Interchange with both London Underground and London Overground services is available via Richmond.

2.4.14 The rail services operating via Twickenham station not only provide direct access of central London via London Waterloo, but also interchange with other National Rail services similarly at London Waterloo but also along the main route at Clapham Junction.

2.4.15 Table 2.2 presents a summary of the regular daytime railway services which run through Twickenham station, again identifying the typical daytime frequency and route summary. These regular services operate throughout the day, weekdays and at weekends, with typical journey time to / from London Waterloo of around 25-30 minutes across the range of services.

Operator	**Route Summary**	**Typical Hourly Freq.**
South Western	London Waterloo – Clapham Jct – Wimbledon – Kingston – Twickenham – Richmond – Putney – Clapham Jct – London Waterloo	2
South Western	London Waterloo – Clapham Junction – Richmond – Twickenham – Staines – Ascot – Bracknell - Wokingham - Reading	2
South Western	London Waterloo – Clapham Junction – Richmond – Twickenham – Staines – Sunnymeads – Windsor & Eton Riverside	2
	CUM. HOURLY FREQ.	**6**

Table 2.2: Summary of Railway Services – Twickenham Station (as of June 2024)

2.4.16 The summary table providing details of the rail services accessible via Twickenham station demonstrates similarly this mode of travel to be both practical and convenient for a range of trip purposes. The availability of good public transport opportunities, as further supported by rail access, underpins the propensity of using such a mode of travel to undertake journeys for a range of purposes, as these trips can be undertaken practically for varying distances.

2.4.17 For the purpose of commuting, the available rail services connect the Twickenham area local to the site with the key employment area of central London, both via National Rail services directly and through connections with the underground network, as well as directly via National Rail services running to and from key local employment centres based around Richmond, Kingston and Wimbledon as well as those of Reading and Staines further afield.

2.4.18 Twickenham station affords step-free access of all platforms by means of lifts running from and to the main station concourse and with the availability of ramps for train access; staff are available typically 06:15-22:45 Monday to Saturday and 08:00-20:00 Sunday. Such measures supports this travel mode to be accessible to those with mobility difficulties and so inclusive.

2.5 Existing Highways Environment

2.5.1 Messom Mews runs as a private one-way loop from and to Grosvenor Road, with the ingress route coming through towards the southern end of the site with a width of around 2.6m at its narrowest and the egress route running out from towards the northern end of the site with a width of around 3.1m at its narrowest. These site access arrangements are shared with those on foot, with the connection points with Grosvenor Road separated by around 30m.

2.5.2 Grosvenor Road runs for a length of around 260m, from Holly Road around 75m to the south of the Messom Mews ingress through to Station Yard around 150m to the north of the Messom Mews egress, with motorised vehicular traffic permitted to travel northbound only. Grosvenor Road falls with the London Borough of Richmond controlled parking zone of Zone D for *'Central Twickenham'*, typically operational Monday to Saturday 08:30-18:30.

2.5.3 There are a number of different types of designated parking spaces along each side of Grosvenor Road. Whilst formally there are no restrictions on kerbside loading / unloading by means of the existing traffic regulations, the width of Grosvenor Road typically precludes such activity from being undertaken along one side of the carriageway, with the scope for such activity typically being accommodated on the same side and around the on-street parking.

2.5.4 Along the eastern side of Grosvenor Road, immediately to the north of the Messom Mews ingress the kerbside stretch is demarcated for use by Resident Permit Holders Only whilst immediately to the south the kerbside stretch is demarcated for shared-use Monday to Saturday 08:30-18:30 either by Permit Holders or as 'Pay by Phone' parking (with the latter with duration of stay limited to 4 hours). Outside of these hours there are no restrictions.

2.5.5 Further north along Grosvenor Road, north of the Messom Mews egress, along the eastern side there are further stretches demarcated for use by Resident Permit Holder Only parking, but also with a further stretch demarcated for shared-use with the same operational restrictions as the shared-use spaces along the southern stretch of the street and a further stretch demarcated for Permit Holders Only during the periods of restrictions (with a similar stretch demarcated along the opposite side for Permit Holders Only during the same periods).

2.5.6 The final kerbside space along the eastern side of Grosvenor Road to the north of the site, by the Station Yard junction, is designated for use as a car club parking space only, with this facility operated by Zipcar.

2.5.7 Further south along Grosvenor Road, close to and by the junction with Holly Road, along the eastern side there is a single demarcated space and along the western side there are two demarcated spaces operating as 'Pay by Phone' parking only Monday to Saturday 08:30-18:30 (with duration of stay limited to 2 hours), with no other use permitted during these hours. Again, outside of these hours there are no restrictions on use of the demarcated spaces.

2.5.8 Car ownership data from the 2021 census for the local area surrounding the site (Richmond upon Thames 014D) suggest that around 41% of households do not have regular access to a car, with the rate of ownership differing materially between flats (around 56% of households without access to a car) and houses (around 18% of households without access to a car).

2.6 Proximity to Local Amenities

2.6.1 The previous commentary has identified that there are significant catchments accessible from the site through use of the range of non-car modes, with a number of key facilities practically accessible for a number of trip purposes by both the 'active' modes and public transport.

2.6.2 The Building Research Establishment (BRE) has developed the Home Quality Mark (HQM) to form part of the BREEAM group of quality and sustainability standards. Assessment under the HQM measures a range of issues, including a number relating to *'Our Surroundings'* and with one of these being *'Transport and Movement'*. The scope to access a range of local amenities is considered a key contributor to the *'Transport and Movement'* characteristics of a site.

2.6.3 The *'Home Quality Mark – Technical Manual'* identifies the range of key local amenities which should be targeted firstly to be within a walking distance of 650m of a site, via a safe pedestrian route. These include administrative services (such as post office, bank and cash point), health services (such as GP surgery / medical centre and pharmacy) and food retail (such as supermarket or grocer). The assessment only requires for three different types of these facilities to be within the defined walk distance to achieve the first of the criteria.

2.6.4 The guidance then references the additional range of beneficial local amenities which should be targeted within a walking distance of 1.5 miles (around 2.4km), again via a safe pedestrian route, or a public transport travel time of thirty minutes. These include purpose-built recreation or leisure facilities (for the purpose of fitness or sports), childcare facility or school, large-scale retail and community facilities. The assessment only requires two of these facilities to be within the defined travel distance or travel time to achieve the additional criteria.

2.6.5 The following table, Table 2.3 overleaf, lists the full range of local amenities referenced in the *'Home Quality Mark – Technical Manual'*, demonstrating whether or not these are within the travel distance or travel time thresholds of the site.

2.6.6 This assessment demonstrates firstly that all key local facilities fall within the shorter distance threshold of 650m of the site, equivalent to a typical walk time of around eight minutes, and with these key local facilities typically within a walk time of the site of five minutes.

2.6.7 Additionally, this assessment demonstrates secondly that all additional beneficial local amenities fall within the longer distance threshold of around 2.4km, equivalent to a typical walk time of around thirty minutes, with all but one within a walk of the site of ten minutes.

2.6.8 This indicates that the *'Home Quality Mark'* criteria would be achieved, which supports demonstration of reducing dependency of travel on the private car. As such, it is evident that a full range of local facilities and amenities are accessible of the site by non-car modes, in the first instance by foot and not requiring the additional use of local public transport or the car. Additionally, none of the facilities considered would fall outside of a reasonable cycle journey.

	Distance / Time		Supporting Commentary
	650m.	2.4km / 30mins*	
Post Office	YES	NOT APPLICABLE	There is a Post Office located on London Road, approx. 270m from the site and a typical walk time of 3-4 minutes.
Bank	YES		The nearest bank, Nationwide, can be found on Heath Road, approx. 450m to the site's south-west and a typical walk time of 5-6 minutes.
Cash Point	YES		The nearest cash point can be found at the railway station, approx. 350m to the site's north and a typical walk time of 4-5 minutes.
Surgery / Health Centre	YES		The Acorn Group Practice on Holly Road is approximately 190m to the south, a typical walk time of 2-3 minutes.
Pharmacy	YES		C. Goode Pharmacy on London Road is approx. 140m east of the site, a walk of under 2 minutes.
Local Food Retail	YES		There is a Waitrose approx. 240m of the site, thus a typical walk time of around 3 minutes.
Leisure Centre	NOT APPLICABLE	YES	Isleworth Leisure Centre is approx. 2.3km to the site's north and a typical walk time of 29 mins.
Public Park		YES	Holly Road Gardens is around 140m south of the site along Grosvenor Road and Holly Road, thus a typical walk time of around 2 minutes.
Nursery / Pre-School		YES	Riverside Grosvenor House Nursery is around 100m south of the site along Grosvenor Road, thus a typical walk time of around 1 minute.
Primary School		YES	St Mary's C of E School, on Arragon Road, is about 400m of the site, equivalent to a typical walk time of around 5 minutes.
Secondary School		YES	St Richard Reynold's Catholic College, on Clifden Road, is about 700m west of the site, thus equivalent to a walk time of close to 9 minutes.
Main Food Retail		YES	In addition to the Waitrose on London Road, there is also a Tesco Extra about 1.8km to the north of the site, with a typical walk time of approximately 22-23 minutes
Main Non-Food Retail Outlets		YES	The site sits in the Town Centre area, including non-food retail stores along Church Str., Heath Rd , King Str., London Rd and York Str..
Community Centre		YES	St Mary's Church Hall on Church Street, approx. 450m east of the site and a walk time of 5-6 minutes provides a range of community services.
Library		YES	Twickenham Library, on Garfield Road, is approx. 300m east of the site, thus a typical walk time of close to 4 minutes.
**NOTE: Distance of 2.4km relates to walk threshold of 1.5 miles, with 30mins. referring to public transport travel time.*			

Table 2.3: Summary Assessment of Proximity to Local Amenities

3 Development Description & Scheme Appraisal

3.1 Background

3.1.1 The scheme proposal comprises the conversion of the office floorspace of around 575 sqm. gross floor area (GFA) across the ground and first floors of the extant building unit at Messom Mews, Twickenham, to provide six (6) residential dwellings – two (2) residential houses, each with two-beds, and four (4) residential flatted units, two as two-beds and two as three-beds.

3.1.2 The scheme would come forward with six (6) car parking spaces, based on an allocation of one space per dwelling. These are the same spaces currently supporting the extant office floorspace, with provision retained to the front of the southern end of the mews block.

3.1.3 Cycle storage for residents would be provided primarily within the part of the retained stand-alone building across from the mews block, again to the southern end of the site, currently supporting the extant office floorspace and as previously approved and subsequently built-out to provide the long-stay cycle parking for the extant office, with this secure and enclosed facility to continue to provide ten (10) cycle parking spaces by a series of Sheffield stands.

3.1.4 A further Sheffield stand for two cycles would be provided internally within a separate secure and enclosed area by and for the use of residents of one of the two proposed house units, thus with an overall site-wide provision of twelve (12) long-stay cycle spaces for residents.

3.1.5 Separate to the long-stay cycle parking provisions, a single Sheffield stand for two cycles would be installed externally for short-stay use by visitors to the site, with this stand proposed to be located alongside the mews block directly opposite the ingress route.

3.1.6 Refuse storage for residents would be provided within the part of the retained stand-alone building across from the mews block currently supporting the extant office floorspace for such storage of waste streams, with this retained secure and enclosed facility as previously approved and built-out to provide the waste storage for the extant office, to accommodate 6 x 240l two-wheeled bins (one per household) for general waste, 12 x 55l boxes (two per household) for recyclables and 6 x 23l boxes (one per household) for food waste.

3.1.7 General access of Messom Mews is by means of separate ingress and egress arrangements from and to Grosvenor Road, with the ingress route coming through towards the southern end of the site and the egress route running out from towards the northern end of the site. These access arrangements are shared between those accessing the site by vehicle, including limited servicing and deliveries activity, and those accessing the site on foot.

3.1.8 Separate access within the news block would be retained at ground floor for each of the two houses, with a separate communal access retained at ground floor for the four flats.

3.1.9 The *'Proposed Site Plan'*, prepared by Genevieve Theriault Architecture & Interiors, which further illustrates these site and scheme arrangements, is attached at **Appendix D**.

3.2 Parking Provisions

Vehicle Parking

3.2.1 This section of the report further considers the proposed car parking provision for the residential apartment units to come forward as a result of the conversion of the office floorspace. As referenced, the proposed residential units within the scheme (four two-bed residential units and two three-bed residential units) would each be provided with a single off-street car parking space accessed directly via the mews loop from and to Grosvenor Road.

3.2.2 In terms of vehicular parking, current policy and guidance set by London Borough of Richmond upon Thames comes forward at Policy LP45 *'Parking Standards and Servicing'* of the Local Plan (July 2018) which references that:

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

1. Requiring new development to provide for car, cycle, 2 wheel and, where applicable, lorry parking and electric vehicle charging points, in accordance with the standards set out in Appendix 3…'

3.2.3 The guiding standards put forward within the 2018 Local Plan (Appendix 3) for residential development defer to the London Plan for sites with a PTAL of 4-6, which is commensurate with the site at Messom Mews, though with the supporting note that *'local circumstances, CPZ times and on-street parking conditions will need to be assessed*'. The current London Plan (March 2021) puts forward guidance for any site with a PTAL of 5-6 to be car free.

3.2.4 However, the justification commentary supporting the policy at the local borough level with regard parking (Policy LP 45 *'Parking Standards and Servicing'*) acknowledges that there are *'high levels of car ownership and use within fairly densely developed residential areas with some narrow streets'* and that the approach adopted is *'to ensure that excessive on-street parking demand is not created which could have an adverse impact on local highway / traffic conditions, street scene and impacts on making the best use of land*'.

3.2.5 This approach is further acknowledged within the borough's 'Transport SPD (June 2020)' in that an *'appropriate balance needs to be struck between minimising car use and ensuring development is able to operate efficiently, avoiding adding to street parking pressure'*.

3.2.6 To further appraise the local context, a review of car ownership data from the 2021 census for the local area surrounding the site (Richmond upon Thames 014D) has been undertaken, with this first identifying that around 59% of households have access to at least one car, with the rate of ownership differing materially between flats (around 44% of households) and houses (around 82% of households). Applying these trends to the residential units to come forward could suggest an initial typical parking demand of four car parking spaces.

3.2.7 Additionally, when considering all unit types together, the same data set suggest around a tenth (11%) of units may have access to two cars, which if further applied to the full complement of six (6) residential units within the scheme could suggest a marginally higher typical parking demand of five car parking spaces and close to the retained (6) six spaces.

3.2.8 As such, the strategy of retaining the extant six (6) on-site car parking spaces to support the six (6) residential units to come forward, based on a allocated strategy, is considered consistent with current policy and guidance in that it seeks to take account of *'local circumstances'* and mitigates against there being *'adverse impact on local highway / traffic conditions'* and against *'adding to street parking pressure'*.

Cycle Parking

3.2.9 This section of the report further considers the proposed cycle parking provision for the residential apartment units to come forward as a result of the conversion of the office floorspace. As referenced, the proposed residential units within the scheme (four two-bed residential units and two three-bed residential units) would be supported by twelve (12) long-stay cycle parking spaces for residents and two (2) short-stay cycle parking spaces for visitors.

3.2.10 In terms of cycle parking, similarly this is addressed in the current policy and guidance set by London Borough of Richmond upon Thames at Policy LP45 *'Parking Standards and Servicing'* of the Local Plan (July 2018), which again references the requirement for *'new development to provide for car, cycle, 2 wheel…electric vehicle charging points, in accordance with the standards set out in Appendix 3'*.

3.2.11 Appendix 3 of the Local Plan (July 2018) confirms that cycle parking for residential development should be provided in accordance with the London Plan requirements. The current London Plan (March 2021) puts forward minimum cycle parking space standards, with that for two-bed units or larger being no less than two long-stay cycle spaces per unit, then with no less than two short-stay spaces for schemes with between 5 and 40 units..

3.2.12 As such, firstly the level of residential cycle parking provision which would be brought forward with the scheme would be consistent with current policy and guidance at both the borough and London-wide levels, by meeting the current London Plan minimum requirements of two (2) cycle parking spaces per unit for long-stay residents' cycle parking and two (2) cycle parking spaces for the scheme overall for short-stay visitors' cycle parking.

3.2.13 With regard the form of cycle storage and parking for residents, the long-stay cycle parking solely for residents would be provided primarily within the retained secure and enclosed cycle parking unit, previously approved and subsequently built-out to provide the long-stay cycle parking for the office and comprising therein a series of five (5) Sheffield stands to support ten (10) cycle parking spaces. These existing secure and enclosed arrangements, as approved specifically for the purpose of cycle parking, would be retained without modification.

3.2.14 To ensure that all residents within the scheme have the same level of service as it comes to access to long-stay cycle parking, a further two (2) cycle parking spaces would be provided through installation of a stand-alone single Sheffield stand internally within a separate secure and enclosed area by and for the use of residents of one of the two proposed house units.

3.2.15 Similarly, a single Sheffield stand for two cycles would be installed externally for short-stay use by visitors to the site, with this stand proposed to be located alongside the mews block directly opposite the ingress route, which would maximise the convenience of access.

3.2.16 By virtue of the retained and expanded use of Sheffield stands for cycle parking, there would continue to be direct surface level access available of all spaces, again corresponding with two long-stay spaces per unit for residents and two short-stay spaces for visitors. Such means of cycle parking provision provides flexibility with regard the types of cycle to be accommodated.

3.2.17 The cycle parking arrangements as proposed are considered to be fit-for-purpose, secure and well-located, meeting the three overarching principles put forward in the LCDS, with such arrangements demonstrating also how the development would be providing facilities to encourage a safe cycling environment from initial occupation as referenced in the Local Plan.

3.3 Refuse & Servicing Strategy

3.3.1 As referenced, refuse storage for the proposed residential units within the scheme (four two-bed residential units and two three-bed residential units) would be provided within the retained secure and enclosed storage unit, previously approved and subsequently built-out to provide the waste storage for the extant office. This facility, as approved specifically for the purpose of waste storage, would be retained without modification in terms of access.

3.3.2 Each household would be provided with firstly 1 x 240l two-wheeled bin for general waste, meeting the minimum requirements set out in the *'Refuse & Recycling'* SPD (December 2022) of at least 30l capacity per household plus 70l capacity per bedroom – this would equate to a capacity requirement of 170l per each two-bed unit and of 240l per each three-bed unit.

3.3.3 Additionally, each household would be provided with 2 x 55l boxes, one each for mixed paper and mixed containers, and 1 x 23l box for food waste. Again, such provisions would meet the minimum requirements set out in the *'Refuse & Recycling'* SPD (December 2022).

3.3.4 All waste storage receptacles, both two-wheeled bins and recycling boxes, would be accommodated and stored within the retained secure and enclosed storage unit, other than ahead of collection for which residents would be guided to manoeuvre their range of waste storage receptacles to a temporary 'holding' area by the site-end of the ingress route (and similarly guided to return the receptacles to the storage unit following collection).

3.3.5 This approach of using individual two-wheeled bins and boxes is to maximise convenience for waste operatives, instead of personnel having to manoeuvre four-wheeled communal Eurobins, as is similarly the use of a temporary 'holding' area by the site-end of the ingress route to reduce the distance that operatives would have to manoeuvre the receptacles. This allows collection to continue to be by means of vehicle by the Grosvenor Road frontage.

3.3.6 The proposed refuse storage strategy for the residential units would support inclusion within the existing collection patterns of service along Grosvenor Road and the surrounding local streets, as well as not being materially different to those currently in place at the site.

3.3.7 There would continue to be the scope for general servicing and deliveries by smaller-sized vehicles to be undertaken directly on the site, utilising the same retained ingress and egress arrangements as for general vehicular and non-vehicular access of the site. Such activity is considered to be limited in volume and distributed across the typical daytime (07:00-19:00) period instead of concentrated within peak periods, thus not materially impacting site access.

3.3.8 As referenced previously, whilst formally there are no restrictions on kerbside loading / unloading by means of the existing traffic regulations, the width of Grosvenor Road typically precludes such activity from being undertaken along one side of the carriageway, with the scope for such activity typically being accommodated on the same side and around the on-street parking. Such means of access would also be available to the Messom Mews units.

3.3.9 The overarching principles of the proposed arrangements for general servicing and deliveries would be no different again to the extant office floorspace at the site.

4 Development Trips Characteristics & Impacts

4.1 Background

4.1.1 This section of the report considers the likely trip patterns and impacts of the scheme to convert the extant office floorspace of around 575 sqm GFA (gross floor area) into six (6) residential apartments (with a mix of houses and flatted units). The site is currently supported by six (6) dedicated off-street car parking and scope for site servicing, with the proposed residential units similarly coming forward with the retained six (6) car parking spaces.

4.1.2 To undertake the appraisal of the likely trip patterns of both the extant office floorspace and the proposed residential units, the potential trip generation by all modes has been undertaken. In projecting the trips for each of these uses an objective assessment can be undertaken of the net changes in tripmaking behaviour associated with the site and the corresponding magnitude of the impacts of the proposed change of use.

4.1.3 To determine these likely trips associated with each of the extant and proposed land-uses, a review of the industry-recognised TRICS database has been undertaken and the information available from that database considered against the background of any site-specific characteristics. Additionally, a review of the local census data has been undertaken to bring forward an objective understanding of travel characteristics with regard the local context.

4.1.4 This approach to the determination and appraisal of the tripmaking potential of both the extant office floorspace and the proposed residential units supports a bespoke assessment, which fully takes account of local travel characteristics and opportunities

4.2 Extant Office Floorspace Trip Generation

4.2.1 The extant office use floorspace at the site across ground and first floors amounts to approximately 575 sqm. GFA, with this floorspace supported by six off-street parking spaces.

4.2.2 Data from the TRICS 7.11.2 database have been used in order to determine the trip generation associated with the extant office floorspace, seeking to consider within this review both the locational characteristics of the town centre site and the provision of dedicated off-street car parking to support an objective assessment with regard typical day-to-day activity.

4.2.3 The initial search within the *'Office'* sub-category of the *'Employment'* category was of sites in the Greater London area with no more than 1,000 sqm. GFA (gross floor area) and a weekday multi-modal survey date from January 2016 onwards (the current TRICS default cut-off). As this did not identify any sites, the size parameter was then increased to no more than 5,000 sqm. GFA and from which four (4) sites were identified.

4.2.4 However, further review of these sites identified one (High Barnet) which had a PTAL rating of only 3 and two (Hammersmith and Streatham) which provided no car parking, for which day-to-day tripmaking may not be analogous with a general office development such as that at the site with a town centre location and both a PTAL rating of 5 and availability of car parking. Against this background, these sites were subsequently discounted.

4.2.5 With the retention of a single site only, to reflect general good practice the search criteria were further refined with the floor area threshold increased further to no more than 10,000 sqm. GFA. This identified a further two sites, but with one (Bethnal Green) then subsequently discounted for there again being no site car parking provided and thus not analogous.

4.2.6 Thus, the extant office trip generation has been projected utilising the data from the remaining two (2) sites, the key details of which are shown in Table 4.1 and for which the TRICS data are attached at **Appendix E**.

TRICS Ref.	Site Location	Survey Year	GFA (m^2)	Parking Spaces	PTAL Rating
EN-02-A-01	Genotin Road, Enfield	2022	6552	104	4
KN-02-A-01	Ladbroke Road, Kensal Green	2019	2255	15	5

Table 4.1: Summary of TRICS Sites – Extant Office Floorspace

4.2.7 Table 4.2 summarises the typical peak hour and daily (07:00-19:00) trip rates (all modes) for the extant office floorspace based on the TRICS assessment, to facilitate a direct comparison with the subsequent trip rates for the proposed residential units, then the equivalent trips for the full extant floorspace of around 575 sqm. GFA.

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (07:00-19:00)		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Person Trip Rate (per $100m^2$)	1.124	0.023	1.147	0.079	1.419	1.498	6.302	5.973	12.275
Person Trips (575 sqm.)	7	0	7	1	8	9	36	35	71
NOTE: Where appropriate, trips by direction have been rounded to ensure figures tally with total.									

Table 4.2: Extant Person Trip Generation Summary – Office Floorspace

4.2.8 With the majority of weekday trips being to and from work, the modal split identified through the *'journey to work'* data from the local census can provide an initial estimate of modal split. Whilst at the detailed local level collected for resident population, as the range of non-car travel services available for those travelling to and from the area are generally the same for residents and employees, the data can be considered for the extant office floorspace also.

4.2.9 The following table, Table 4.3, summarises the *'journey to work'* mode shares for the area surrounding the site (Richmond upon Thames 014D) from the earlier 2011 census, having first discounted those *'not in employment'* or *'work mainly at or from home'*, then shows the corresponding peak hour and daily trips by mode for the extant office floorspace at the site.

	MODE SHARE & PERSON TRIPS (TWO-WAY)			
	Local Area Mode Share	A.M. Peak Hour	P.M. Peak Hour	Daily 07:00-19:00
Car Driver	26%	2	2	18
Car Passenger	1%	0	0	1
Motorcycle	1%	0	0	1
Bus	8%	1	1	5
Underground	7%	0	1	5
Rail	39%	3	3	28
Bicycle	6%	0	1	4
Foot	11%	1	1	8
Other	1%	0	0	1
Total	100%	7	9	71
NOTE: Where appropriate, trips by mode have been rounded to ensure figures tally.				

Table 4.3: Summary of Extant Office Floorspace Trips by Mode

4.2.10 This assessment of the trips associated with the extant office floorspace based on an objective review of the corresponding data provides the benchmark against which to compare the proposed residential units, then consider the corresponding impacts on each travel mode.

4.3 Proposed Residential Units Trip Generation

4.3.1 The proposed conversion of the extant office floorspace would bring forward a residential scheme comprising six (6) units – two (2) residential houses and four (4) residential flatted units. These units would be supported by the same extant parking provision (6 car parking spaces) and with cycle parking facilities to accommodate no less than twelve (12) cycles.

4.3.2 Again, data from the TRICS 7.11.2 database have been used in order to determine the trip generation associated with the proposed residential units, similarly seeking to consider within this review both the locational characteristics of the town centre site and the provision of dedicated off-street car parking provision to support an objective assessment of tripmaking.

4.3.3 Given the majority of flatted units within the scheme, an initial search was undertaken within the *'Flats Privately Owned'* sub-category of the *'Residential'* category of sites in the Greater London area and with a weekday multi-modal survey date from January 2016 onwards (the current TRICS default cut-off), with schemes of no more than 100 units initially considered.

4.3.4 Whilst this search identified fourteen (14) sites, eight (8) were then discounted for having a PTAL rating of 3 or below and not considered analogous with a town centre location site with a PTAL rating of 5 and four (4) were then discounted for having a parking ratio either materially below or materially above that of the development scheme and not considered analogous with a scheme providing off-street car parking at a ratio of one space per unit.

4.3.5 However, both of the remaining two sites were surveyed at a time when there were some extent of restrictions in place as a result of the COVID-19 pandemic, thus with no certainty as to how typical the resultant trip making patterns could be of such a residential development. Given this, the search criteria were refined with no cap applied to the number of units. This full search identified thirty-four (34) sites in total.

4.3.6 Upon further review, nineteen (19) sites were then discounted for having a PTAL rating of 3 or below and not considered analogous with a town centre location site with a PTAL rating of 5, with a further two (2) then excluded for being surveys since superseded at a site, then a further nine (9) then discounted for having a parking ratio either materially below or materially above that of the development scheme and not considered analogous with a scheme providing off-street car parking at a ratio of one space per unit.

4.3.7 Further excluding the previously-identified two (2) sites for which the survey data were collected at a time when there some extent of restrictions in place as a result of the COVID-19 pandemic, two (2) sites remained based on both PTAL rating and parking ratios being considered as best analogous with the residential scheme at the site. Key details of these two sites are shown in Table 4.4 and for which the TRICS data are attached at **Appendix F**.

TRICS Ref.	Site Location	Survey Year	No. of Units	Parking Spaces	PTAL Rating
BN-03-C-02	Oakleigh Road, Whetstone	2023	115	93	4
BM-03-C-01	Ringer's Road, Bromley	2019	160	83	6a

Table 4.4: Summary of TRICS Sites – Proposed Residential Units

4.3.8 Table 4.5 summarises the typical peak hour and daily (07:00-19:00) trip rates (all modes) for the proposed residential units based on the TRICS assessment, to facilitate a direct comparison with the previous trip rates for the extant office floorspace, then the equivalent trips for the proposed residential scheme of six (6) units.

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily (07:00-19:00)		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Person Trip Rate (per Unit)	0.080	0.462	0.542	0.276	0.113	0.389	1.778	2.127	3.905
Person Trips (6 Units)	0	3	3	1	1	2	10	13	23
NOTE: Where appropriate, trips by direction have been rounded to ensure figures tally with total.									

Table 4.5: Proposed Person Trip Generation Summary – Residential Units

4.3.9 The following table, Table 4.6, again summarises the *'journey to work'* mode shares for the area surrounding the site (Richmond upon Thames 014D) from the earlier 2011 census, having first discounted those *'not in employment'* or *'work mainly at or from home'*, then shows the corresponding peak hour and daily trips by mode for the proposed residential units at the site.

	MODE SHARE & PERSON TRIPS (TWO-WAY)			
	Local Area Mode Share	A.M. Peak Hour	P.M. Peak Hour	Daily 07:00-19:00
Car Driver	26%	1	1	6
Car Passenger	1%	0	0	0
Motorcycle	1%	0	0	0
Bus	8%	0	0	2
Underground	7%	0	0	2
Rail	39%	1	1	9
Bicycle	6%	0	0	1
Foot	11%	1	0	3
Other	1%	0	0	0
Total	100%	3	2	23
NOTE: Where appropriate, trips by mode have been rounded to ensure figures tally.				

Table 4.6: Summary of Proposed Residential Units Trips by Mode

4.3.10 This assessment of the trips associated with the proposed residential units based on an objective review of the corresponding data provides those to compare against the extant office floorspace, then consider the corresponding impacts on each travel mode.

4.4 Scheme Impacts Assessment

4.4.1 Consideration of the impacts of the proposed residential development scheme comprising six (6) units across the ground and first floors of the extant building unit should be undertaken against the background of the extant office floorspace which would be converted. Table 4.7 presents the net change in trips on a mode-by mode basis which would come forward as a result of the corresponding proposed conversion of floorspace within the building.

	NET CHANGE – PERSON TRIPS (TWO-WAY)								
	A.M. Peak Hour			P.M. Peak Hour			Daily (07:00-19:00)		
	Extant	Prop.	Change	Extant	Prop.	Change	Extant	Prop.	Change
Car Driver	2	1	-1	2	1	-1	18	6	-12
Car Passenger	0	0	±0	0	0	±0	1	0	-1
Motorcycle	0	0	±0	0	0	±0	1	0	-1
Bus	1	0	-1	1	0	-1	5	2	-3
Underground	0	0	±0	1	0	-1	5	2	-3
Rail	3	1	-2	3	1	-2	28	9	-19
Bicycle	0	0	±0	1	0	-1	4	1	-3
Foot	1	1	±0	1	0	-1	8	3	-5
Other	0	0	±0	0	0	±0	1	0	-1
TOTAL	**7**	**3**	**-4**	**9**	**2**	**-7**	**71**	**23**	**-48**

Table 4.7: Summary of Net Change in Trips by Mode

4.4.2 The commentary presented in the preceding sub-sections putting forward 71 daily (07:00-19:00) person trips associated with the extant office floorspace use at the site and 23 daily (07:00-19:00) person trips associated with the proposed residential units at the site, as identified from the preceding summary table, demonstrates a material net decrease in tripmaking activity of 48 daily (07:00-19:00) person trips – a reduction of around two-thirds.

4.4.3 During the typical peak hours the net changes in person trips as a result of the proposed conversion scheme would equate to four (4) fewer person trips during the a.m. peak hour (a reduction of around 60%) and seven (7) fewer person trips during the p.m. peak hour (a reduction of around 80%). As averages these reductions equate to one less person movement every 15 minutes during the a.m. peak hour and every 8-9 minutes during the p.m. peak hour.

4.4.4 Without further consideration of scheme impacts on a mode-by-mode basis, these overall trips reductions demonstrate a positive impact of the extant office floorspace being converted to residential units. Also, the resultant day-to-day tripmaking of these residential units correspond with also a low level of hourly activity, thus similarly not of material local impact.

4.4.5 The following commentary considers the impacts of the proposed trips associated with the residential apartments over and above the extant trips associated with the office floorspace, in particular for the a.m. peak hour and p.m. peak hour in terms of the operational characteristics of the range of travel networks and of the infrastructure and service levels.

Highway Network

4.4.6 The projected net change in vehicle trips as a result of the proposed scheme could result in one fewer vehicle movement during each of the typical a.m. peak hour and p.m. peak hours, with a reduction of around two-thirds overall – twelve (12) fewer vehicle movements – across the full daytime (07:00-19:00) period. Indeed, there would continue to be a reduction of a third overall even if there were an arrival / departure trip pair for each of the retained spaces.

Bus

4.4.7 The projected net change in person trips as a result of the proposed scheme could result in one fewer person movement by bus during each of the typical a.m. peak hour and p.m. peak hours, with a similar one fewer person movement by bus across the remainder of full daytime (07:00-19:00) period, thus representative similarly of a positive impact of the scheme.

4.4.8 Acknowledging that the proposed change of use from office floorspace to residential units would typically change the lead direction of travel during a particular period, when considering solely the bus-related movements associated with the residential units and with these numbering two person trips across the full daytime (07:00-19:00) period, such level of activity could not at all be considered significant or material and would be against the background of around forty buses both arriving into and departing from the local area hourly.

Rail

4.4.9 The projected net change in person trips as a result of the proposed scheme could result in two (2) fewer person movements by rail during the typical a.m. peak hour and in three (3) fewer person movements by rail during the p.m. peak hour, with a further seventeen (17) fewer person movements by rail bus across the remainder of the full daytime (07:00-19:00) period, thus representative again of a positive impact of the scheme on local travel.

4.4.10 Acknowledging again that the proposed change of use from office floorspace to residential units would typically change the lead direction of travel during a particular period, when considering solely the rail-based movements associated with the residential units and with these numbering a single person trip during each peak hour, again such level of activity could not at all be considered significant or material and would be against the background of six rail services either departing from or arriving into Twickenham station hourly in the lead direction.

Active Modes

4.4.11 The projected net change in person trips as a result of the proposed scheme could result in no change in foot-based person movements during the typical a.m. peak hour and one fewer foot-based person movement during the typical p.m. peak hour, with a further four (4) fewer foot-based person movements across the remainder of the full daytime (07:00-19:00) period, thus representative again of a positive impact of the scheme on local infrastructure.

4.4.12 Acknowledging that trips to and from local public transport nodes (local bus stops and Twickenham railway station) would typically comprise a local trip on foot also, there could be a net reduction of three (3) pedestrian movements during the typical a.m. peak hour and a net reduction of five (5) pedestrian movements during the typical p.m. peak hour – equating to one less pedestrian movement every twenty (20) minutes during the former and every twelve (12) minutes during the latter. This further demonstrates the positive impact of the proposed scheme on the local infrastructure with regard typical pedestrian movements.

4.4.13 The trip generation exercise puts forward no peak hour cycle trips associated with the proposed residential units, compared with one such trip during the typical p.m. peak hour associated with the extant office floorspace. Such a change in activity would not be discernible, nor would it be if residential cycle mode share were to increase materially from that of the census data with any such demand having scope to be accommodated locally.

5 Summary & Conclusions

5.1.1 This report has been prepared on behalf of Fishguard & Goodwick United Ltd, to support a prior notification application under permitted development rights for conversion of office floorspace at ground and first floors of the extant building at Messom Mews, Twickenham, to provide six residential dwellings – 2 x 2-bed houses, 2 x 2-bed flats, and 2 x 3-bed flats.

5.1.2 Each of the six residential units would come forward with a single off-street car parking space, as retained from the extant office floorspace, as well as secure and covered cycle parking storage to accommodate the parking of two cycles, in accordance with policy and guidance set both borough-wide and London-wide in tandem with consideration of local context.

5.1.3 The site is highly accessible by eight regular bus services running through the Twickenham town centre area within no more than a walk of four minutes, providing connectivity with key local centres such as Hounslow, Kingston and Richmond, as well as by rail via services running through Twickenham railway station which is no more than a walk of five minutes of the site and which provides connectivity with both local centres and also central London.

5.1.4 These access opportunities by public transport are in addition to a range of cycle and walking routes available, with the full range of key local amenities being typically within a walk of five minutes of the site and the full range of beneficial local facilities being typically within a walk of ten minutes of the site. Such local amenities and facilities include those related to leisure and recreation, education, retail, community services and professional services.

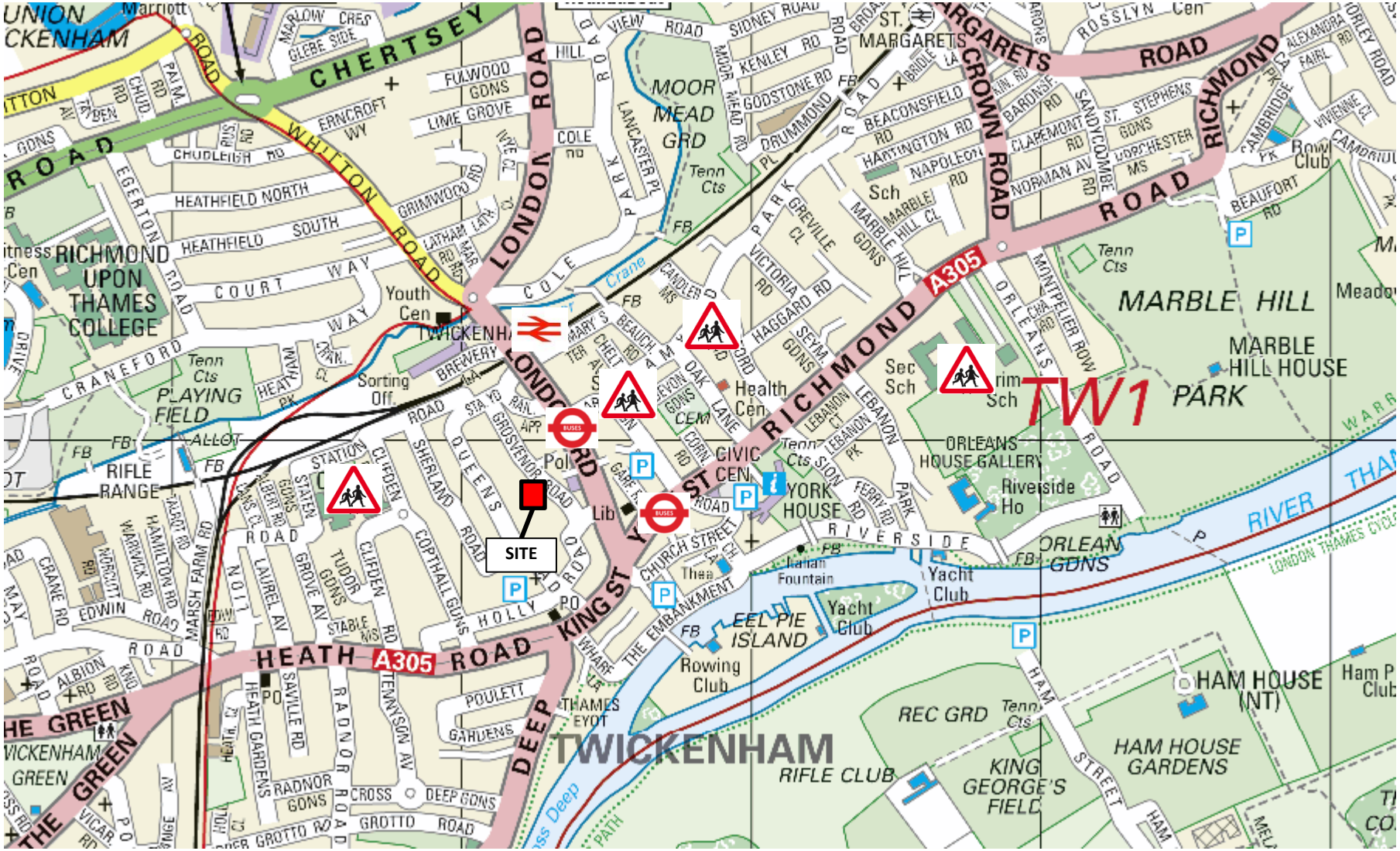
5.1.5 An assessment of tripmaking characteristics, comparing proposed residential trip generation for the site with extant office trip generation for the site, identifies typically positive impacts, with net reductions in both typical peak hour and daily (07:00-19:00) movements overall and by mode, with potentially around two-thirds fewer trips across the day.

5.1.6 As referenced in the current version of the National Planning Policy Framework (NPPF, December 2023), *'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'*. Such impacts are not considered to have arisen.

5.1.7 Therefore, against this background, it is considered that there should be no highways and transport reasons not to support the prior notification application under permitted development rights for conversion of the extant office floorspace at Messom Mews, Twickenham, to provide six (6) residential dwellings.

APPENDICES

APPENDIX A



TPHS
TRANSPORT PLANNING & HIGHWAY SOLUTIONS

SITE LOCATION

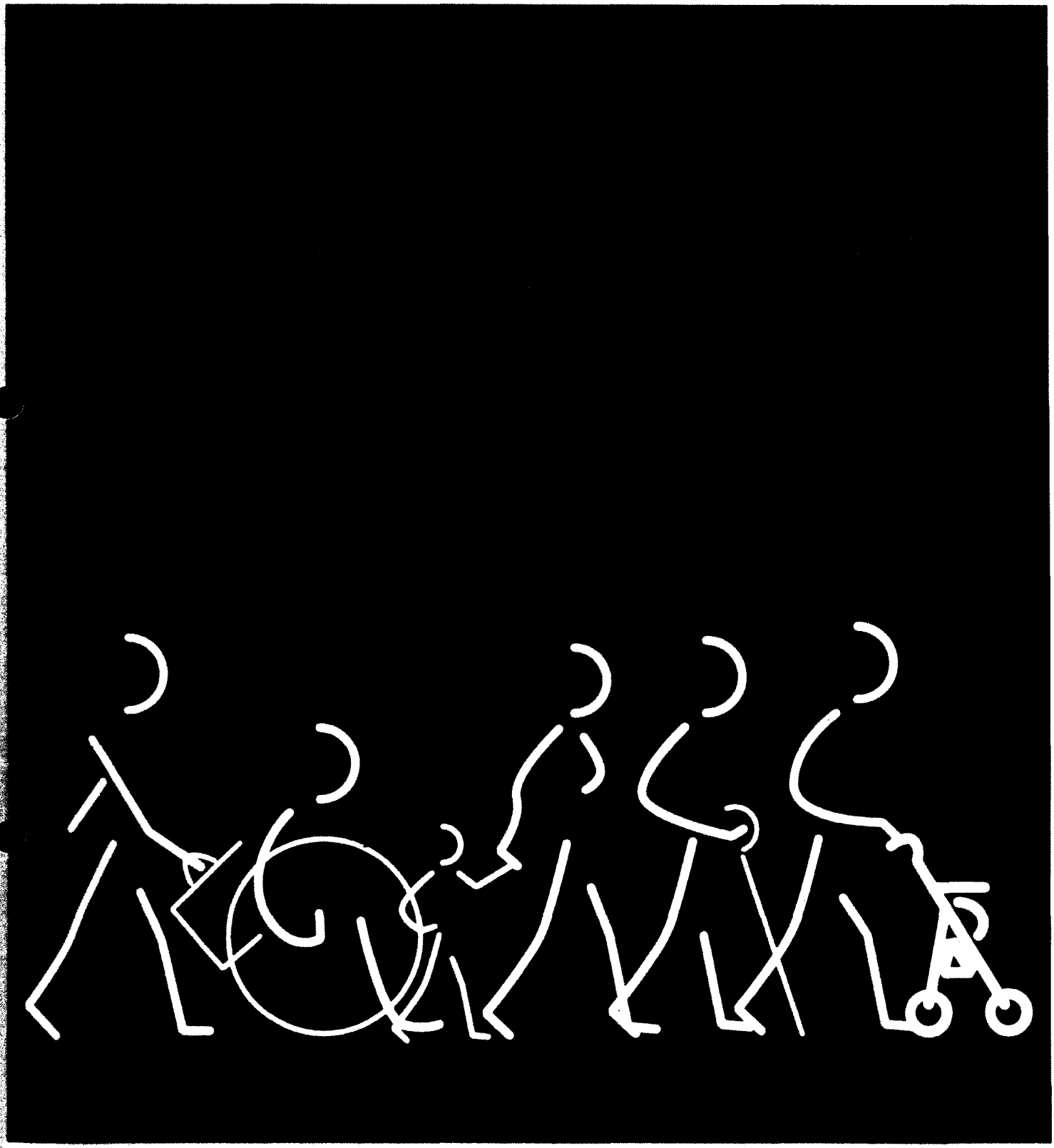
National Rail Station

Local Bus Stops

Local Schools

APPENDIX B

PROVIDING FOR JOURNEYS ON FOOT



THE INSTITUTION OF HIGHWAYS & TRANSPORTATION

Sainsbury's
making life taste better.

sustrans
ROUTES FOR PEOPLE

London Walking Forum

Table 3.2: Suggested Acceptable Walking Distance.

	Town centres (m)	Commuting/School Sight-seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

3.33. Planning Policy Guidance Note 6 states that the acceptable distance from a supermarket car park to the town centre is about 200–300m (DOE, 1996). Further sources of information on acceptable walking distances are provide by IHT (1997 and 1999) and DETR (1998).

3.34. For shopping, Carley and Donaldsons (1996) advise that that "acceptable" walking distances depend on the quality of the shops, the size of the shopping centre and the length of stay of the shopper. Specifically, they state that parking time governs the distance walked from parking. See Table 3.3) Higher quality and larger centres generate longer acceptable walking distances with up to 1250m of walking journey to 100,000m^2 of floor space.

Table 3.3: Acceptable walking distances for car–borne shoppers.

Parking time (hours)	Acceptable walking distance (metres)
30 mins	100
1	200
2	400
4	800
8	1000

Source: Carley and Donaldsons (1997).

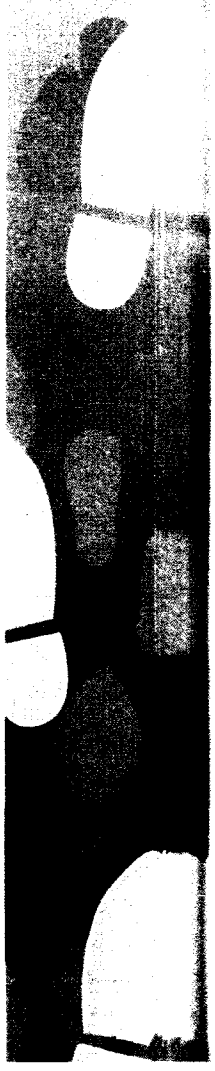
Individual Sites/Redevelopment

3.35. For smaller areas and individual new developments or redevelopment, usually within an existing urban area, origin /destination surveys and network planning may not be appropriate. It will be important to identify the anticipated desire lines, crossing locations, volume and type of pedestrian activity. The practicality and attractiveness of walking depend not only on the general location but also on the access details. The most important considerations are likely to be:

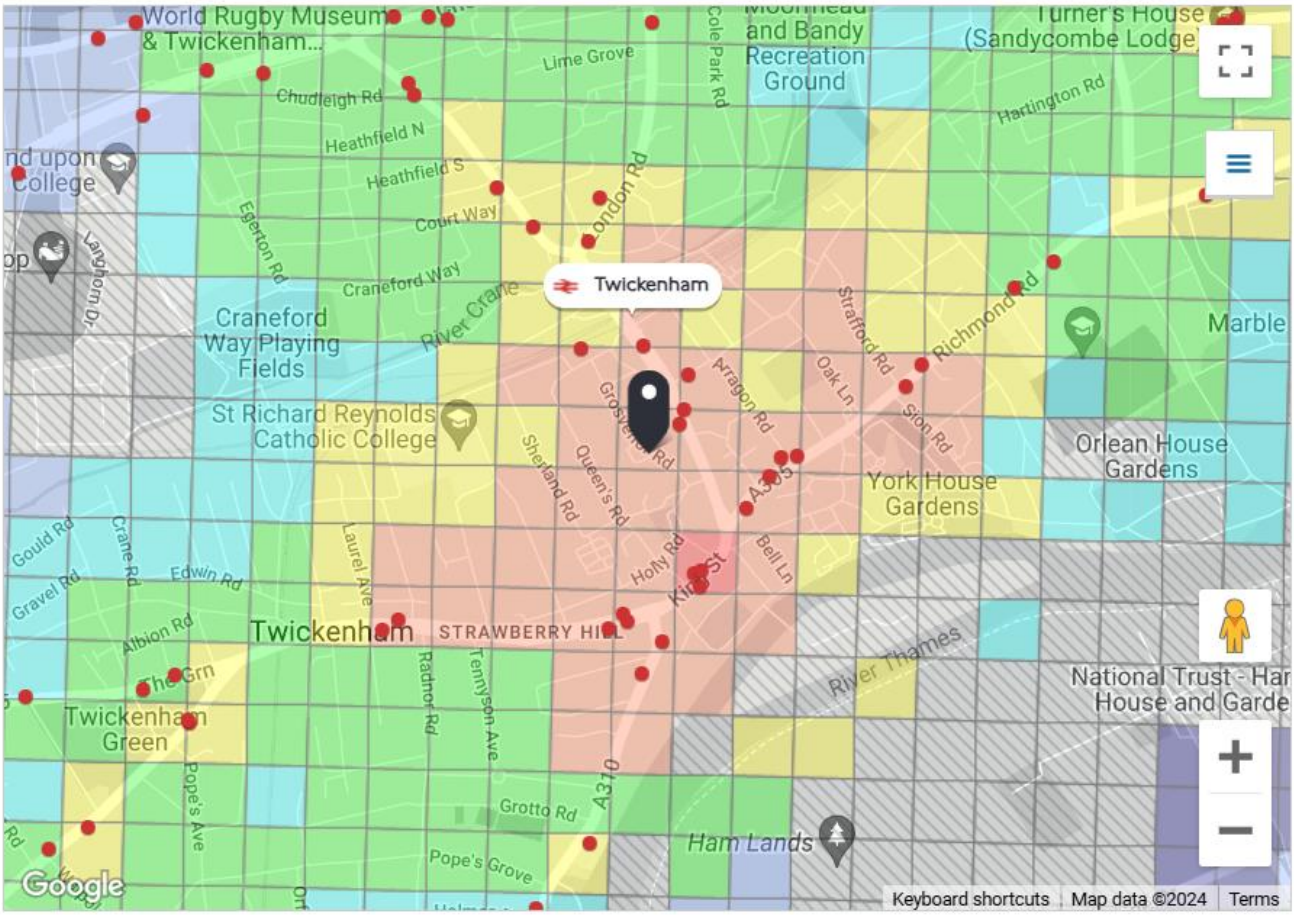
- the ease of pedestrian access to the site
- the orientation and location of buildings within the site
- the access arrangements within the site
- the architectural style of the development (car or pedestrian oriented).

3.36. Additional walking distances or gradients, can be crucial in determining whether a development is pedestrian friendly. Layouts that require pedestrians to walk through car parks or to follow indirect footpaths should be avoided as far as possible. These are issues that should be addressed jointly by planners and engineers involved in development control.

3.37. If the development is sufficiently large to warrant a Transport Impact Assessment, the local authority should ensure that this thoroughly addresses the issues of pedestrian access, both to the site and within it. Some guidance is provided in IHT *Guidelines for Providing for Public Transport in Developments* (IHT, 1999). Further Guidelines on Transport Assessments are expected from DETR.



APPENDIX C



You can click anywhere on the map to change the selected location.

PTAL output for Base Year 5

Messom Mews

Messom Mews, Twickenham TWI, UK

Easting: **516145**, Northing: **173414**

WebCAT PTAL Report
==========
Site Details

Grid Cell: 46280

Easting: 516145
Northing: 173452

Report Date: 01/07/2024
Scenario: Base Year

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

Mode	Stop	Route	Distance (metres)		Frequency (vph)	Walk Time (mins)		SWT (mins)		TAT (mins)	EDF	Weight	AI
Bus	TWICKENHAM KING STREET	33	366.18	7.5	4.58	6	10.58	2.84	0.5	1.42			
Bus	TWICKENHAM KING STREET	490	366.18	5	4.58	8	12.58	2.39	0.5	1.19			
Bus	TWICKENHAM KING STREET	R68	366.18	4	4.58	9.5	14.08	2.13	0.5	1.07			
Bus	TWICKENHAM KING STREET	R70	366.18	6	4.58	7	11.58	2.59	0.5	1.3			
Bus	TWICKENHAM KING STREET	H22	366.18	5	4.58	8	12.58	2.39	0.5	1.19			
Bus	TWICKENHAM LONDON ROAD	110	248.42	3	3.11	12	15.11	1.99	0.5	0.99			
Bus	TWICKENHAM LONDON ROAD	290	248.42	3	3.11	12	15.11	1.99	0.5	0.99			
Bus	TWICKENHAM LONDON ROAD	281	248.42	7.5	3.11	6	9.11	3.29	1	3.29			
Bus	TWICKENHAM LONDON ROAD	267	248.42	6	3.11	7	10.11	2.97	0.5	1.48			
Rail	Twickenham	'RICHMND-GUILDFD	2N13'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'ALDRSHT-WATRLMN	1N90'	334.07	1	4.18	30.75	34.93	0.86	0.5	0.43		
Rail	Twickenham	'RDNG4AB-WATRLMN	2C10'	334.07	0.67	4.18	45.53	49.7	0.6	0.5	0.3		
Rail	Twickenham	'WATRLMN-RDNG4AB	2C13'	334.07	0.67	4.18	45.53	49.7	0.6	0.5	0.3		
Rail	Twickenham	'RDNG4AB-WATRLMN	2C14'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'RDNG4AB-WATRLMN	2C16'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'WATRLMN-RDNG4AB	2C17'	334.07	1.33	4.18	23.31	27.48	1.09	0.5	0.55		
Rail	Twickenham	'RDNG4AB-WATRLMN	2C18'	334.07	0.67	4.18	45.53	49.7	0.6	0.5	0.3		
Rail	Twickenham	'WATRLMN-RDNG4AB	2C85'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'WATRLMN-RDNG4AB	2C87'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'RDNG4AB-WATRLMN	2C90'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'SHEPRTN-WATRLMN	2H92'	334.07	1	4.18	30.75	34.93	0.86	0.5	0.43		
Rail	Twickenham	'WDON-WATRLMN	2K03 '	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'WATRLMN-WATRLMN	2K09'	334.07	2	4.18	15.75	19.93	1.51	1	1.51		
Rail	Twickenham	'WATRLMN-WATRLMN	2O09'	334.07	2	4.18	15.75	19.93	1.51	0.5	0.75		
Rail	Twickenham	'TWCKNHM-WATRLMN	2O92'	334.07	0.67	4.18	45.53	49.7	0.6	0.5	0.3		
Rail	Twickenham	'TWCKNHM-WATRLMN	2R03'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		
Rail	Twickenham	'WATRLMN-WATRLMN	2R09'	334.07	2	4.18	15.75	19.93	1.51	0.5	0.75		
Rail	Twickenham	'WSORAER-WATRLMN	2U10'	334.07	2	4.18	15.75	19.93	1.51	0.5	0.75		
Rail	Twickenham	'WATRLMN-WSORAER	2U13'	334.07	2	4.18	15.75	19.93	1.51	0.5	0.75		
Rail	Twickenham	'HOUNSLW-WATRLMN	2V05'	334.07	0.33	4.18	91.66	95.83	0.31	0.5	0.16		

Total Grid Cell AI: 21.49
PTAL: 5

APPENDIX D

EXISTING & PROPOSED

do not scale from this drawing.

verify all dimensions by site measurement.

errors and omissions to be reported to the architect.

drawing status: issued for planning

scale bar

0 2m 10m 20m

notes

Date	Rev	Description
01/07/2024	A	Amend Unit 1 layout
04/07/2024	B	Annotate bikes & bins store

title: EXISTING & PROPOSED SITE PLAN @ GROUND LEVEL

scale: 1:100@A1 / 1:200@A3

date: 13.05.24

client: Charles Richards

drawn: GT

checked:

project: Office Conversion
Messom Mews, 33 - 57 Grosvenor Road
Twickenham, Middlesex TW1 4AD

Genevieve Theriault Architecture & Interiors
19 Seymour Place, London W1H 5BG
t : 07904 974 066 e : mail@gtai.co.uk

drawing number: 2402.002.b

APPENDIX E

Calculation Reference: AUDIT-857401-240702-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

01	GREATER LONDON		
	EN	ENFIELD	1 days
	KN	KENSINGTON AND CHELSEA	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:	Gross floor area
Actual Range:	2255 to 6552 (units: sqm)
Range Selected by User:	408 to 10000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 07/06/22

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:

Monday	1 days
Tuesday	1 days

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

Selected survey types:

Manual count	2 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	1
Neighbourhood Centre (PPS6 Local 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:

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	1 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:

250,001 to 500,000	1 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:

0.6 to 1.0	2 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:

No	2 days

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

PTAL Rating:

4 Good	1 days
5 Very Good	1 days

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

LIST OF SITES relevant to selection parameters

1 EN-02-A-01 MICROSOFT OFFICES ENFIELD
GENOTIN ROAD
ENFIELD

Town Centre
Built-Up Zone
Total Gross floor area: 6552 sqm
Survey date: TUESDAY *07/06/22* *Survey Type: MANUAL*

2 KN-02-A-01 FRUIT DRINKS COMPANY KENSINGTON AND CHELSEA
LADBROKE GROVE
KENSAL GREEN

Neighbourhood Centre (PPS6 Local Centre)
Built-Up Zone
Total Gross floor area: 2255 sqm
Survey date: MONDAY *17/06/19* *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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BN-02-A-01	PTAL rating not considered analogous with development site.
HM-02-A-01	Lack of site car parking not considered analogous with development site.
LB-02-A-02	Lack of site car parking not considered analogous with development site.
TH-02-A-01	Lack of site car parking not considered analogous with development site.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 5.94

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	4404	0.102	2	4404	0.011	2	4404	0.113
07:30 - 08:00	2	4404	0.170	2	4404	0.023	2	4404	0.193
08:00 - 08:30	2	4404	0.363	2	4404	0.000	2	4404	0.363
08:30 - 09:00	2	4404	0.761	2	4404	0.023	2	4404	0.784
09:00 - 09:30	2	4404	1.249	2	4404	0.000	2	4404	1.249
09:30 - 10:00	2	4404	0.931	2	4404	0.068	2	4404	0.999
10:00 - 10:30	2	4404	0.284	2	4404	0.034	2	4404	0.318
10:30 - 11:00	2	4404	0.363	2	4404	0.023	2	4404	0.386
11:00 - 11:30	2	4404	0.091	2	4404	0.159	2	4404	0.250
11:30 - 12:00	2	4404	0.136	2	4404	0.193	2	4404	0.329
12:00 - 12:30	2	4404	0.136	2	4404	0.284	2	4404	0.420
12:30 - 13:00	2	4404	0.182	2	4404	0.647	2	4404	0.829
13:00 - 13:30	2	4404	0.307	2	4404	0.522	2	4404	0.829
13:30 - 14:00	2	4404	0.477	2	4404	0.363	2	4404	0.840
14:00 - 14:30	2	4404	0.307	2	4404	0.068	2	4404	0.375
14:30 - 15:00	2	4404	0.114	2	4404	0.182	2	4404	0.296
15:00 - 15:30	2	4404	0.068	2	4404	0.079	2	4404	0.147
15:30 - 16:00	2	4404	0.079	2	4404	0.114	2	4404	0.193
16:00 - 16:30	2	4404	0.057	2	4404	0.114	2	4404	0.171
16:30 - 17:00	2	4404	0.023	2	4404	0.159	2	4404	0.182
17:00 - 17:30	2	4404	0.045	2	4404	0.420	2	4404	0.465
17:30 - 18:00	2	4404	0.034	2	4404	0.999	2	4404	1.033
18:00 - 18:30	2	4404	0.000	2	4404	1.022	2	4404	1.022
18:30 - 19:00	2	4404	0.023	2	4404	0.466	2	4404	0.489
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			6.302			5.973			12.275

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 F

Calculation Reference: AUDIT-857401-240702-0737

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON		
	BM	BROMLEY	1 days
	BN	BARNET	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: 115 to 160 (units:)
Range Selected by User: 6 to 493 (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: 01/01/16 to 16/11/23

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:

Monday	1 days
Wednesday	1 days

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

Selected survey types:

Manual count	2 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	1
Neighbourhood Centre (PPS6 Local 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	1
Built-Up Zone	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	29 days - Selected
Servicing vehicles Excluded	5 days - Selected

Secondary Filtering selection:

Use Class:

C3	2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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	2 days

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

Population within 5 miles:

500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days

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	1 days

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

PTAL Rating:

4 Good	1 days
6a Excellent	1 days

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

LIST OF SITES relevant to selection parameters

1 BM-03-C-01 BLOCKS OF FLATS BROMLEY
RINGER'S ROAD
BROMLEY

Town Centre
Built-Up Zone
Total No of Dwellings: 160
Survey date: MONDAY *12/11/18* *Survey Type: MANUAL*

2 BN-03-C-02 BLOCKS OF FLATS BARNET
OAKLEIGH ROAD
WHETSTONE

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 115
Survey date: WEDNESDAY *13/09/23* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BT-03-C-02	Parking ratio not considered analogous with development site.
HG-03-C-01	Parking ratio not considered analogous with development site.
HM-03-C-02	Parking ratio not considered analogous with development site.
IS-03-C-05	Parking ratio not considered analogous with development site.
IS-03-C-06	Parking ratio not considered analogous with development site.
IS-03-C-08	Parking ratio not considered analogous with development site.
SK-03-C-03	Parking ratio not considered analogous with development site.
WF-03-C-02	Survey undertaken during period of pandemic restrictions.
WF-03-C-04	Survey undertaken during period of pandemic restrictions.
WF-03-C-05	Parking ratio not considered analogous with development site.

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
Total People to Total Vehicles ratio (all time periods and directions): 4.85

	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	2	138	0.029	2	138	0.389	2	138	0.418
08:00 - 09:00	2	138	0.080	2	138	0.462	2	138	0.542
09:00 - 10:00	2	138	0.084	2	138	0.218	2	138	0.302
10:00 - 11:00	2	138	0.069	2	138	0.149	2	138	0.218
11:00 - 12:00	2	138	0.098	2	138	0.109	2	138	0.207
12:00 - 13:00	2	138	0.109	2	138	0.069	2	138	0.178
13:00 - 14:00	2	138	0.102	2	138	0.116	2	138	0.218
14:00 - 15:00	2	138	0.102	2	138	0.120	2	138	0.222
15:00 - 16:00	2	138	0.247	2	138	0.142	2	138	0.389
16:00 - 17:00	2	138	0.251	2	138	0.105	2	138	0.356
17:00 - 18:00	2	138	0.276	2	138	0.113	2	138	0.389
18:00 - 19:00	2	138	0.331	2	138	0.135	2	138	0.466
19:00 - 20:00	2	138	0.295	2	138	0.098	2	138	0.393
20:00 - 21:00	2	138	0.138	2	138	0.040	2	138	0.178
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.211			2.265			4.476

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.*