MIDLAND CRESCENT PROJECT - STUDENT ACCOMODATION, RESIDENTIAL DEVELOPMENT AND MULTI-PURPOSE SPACE AT GROUND AND LOWER GROUND FLOORS

TRANSPORT ASSESSMENT

August 2014

Prepared for Stadium Capital Holdings

Prepared by

TimSpencer & Co

CONTENTS

1. Introduction

1.1 This Transport Assessment (TA) has been prepared on behalf of Stadium Capital Holdings in support of a revised planning submission for the development of land at Midland Crescent, Finchley Road, Camden. The application seeks permission for the erection of a 3 to 4-storey building above street level to provide 60 student bedrooms, 9 flats and multi-purpose at the lower ground levels and a small retail unit.

1.2 The site is situated on Finchley Road, adjacent to the junction with Blackburn Road, immediately to the north-west of the O2 Centre. The location of the proposed development is shown in Figure 1.1. In quantum terms (PTAL) the site has excellent accessibility to a range of public transport services. In quality terms, given the diversity and the complementary nature of the public transport services (being both radial and orbital with quick connections to the heart of the West End and the King's Cross area), the location can only be viewed as outstanding and entirely appropriate for a high intensity land use (in terms of daily trip generation).

1.3 In Figure 1.1 we show the immediate proximity of the tube and railway stations that surround the site within the local area.

1.4 In Figure 1.2 we show the geographic relationship between the site and a range of higher education institutions located in Camden and neighbouring boroughs in central London. This database only includes the primary campus locations (in effect the main postal addresses) and there are numerous other important higher education destinations within central London (e.g. the Euston Road campus of the University of Westminster near Baker Street station).

1.5 This Transport Assessment (TA) has been prepared by Tim Spencer & Co. The report examines the transport aspects of the development and has been prepared in accordance with Transport for London's (TfL) *Transport Assessment Best Practice Guidance* document (May 2006).

1.6 A key feature of the travel demand associated with student accommodation is that the arrival and departure time profiles are quite different from any other form of development. The majority of journeys, at 66%, will happen outside of the Transport for London peak (3-hour) periods. The busiest period for travel is 13.30 to 14.00 o'clock. The hourly travel demand in the 3-hour AM peak period (7 to 10 hours) is half that of the inter-peak and evening periods. Only 25% of the travel demand will occur in the PM peak period (16 to 19 hours) at an hourly rate only slightly higher than the average off-peak hour. These facts have significant implications for the capacity assessment of the forecast travel demand.

1.7 The development project is compliant with transport-related policy at every level from national to local. The site location is ideal and the car-free nature of the development is another important feature in maximising the sustainability of the project.

Structure of Report

1.8 This Transport Assessment is comprised of ten chapters, of which this chapter forms an introduction.

1.9 Chapter two provides a description of the site location, current access and usage, and looks at baseline conditions of the existing traffic and transport network. The site PTAL calculation is set out in Appendix B.

1.10 Chapter three describes the development proposals in terms of land uses, floor areas and parking, which will have a bearing on trip attraction and generation.

1.11 Chapter four reviews the relevant planning policy. The relevant Camden policies with respect to transport are set out in Appendix A.

1.12 Chapter five estimates the number of trips associated with the proposed development and assigns these to transport modes. The TRAVL-based trip generation calculation and associated background information is set out in Appendix D.

1.13 Chapter six assesses the impact the proposal would have on the public highway.

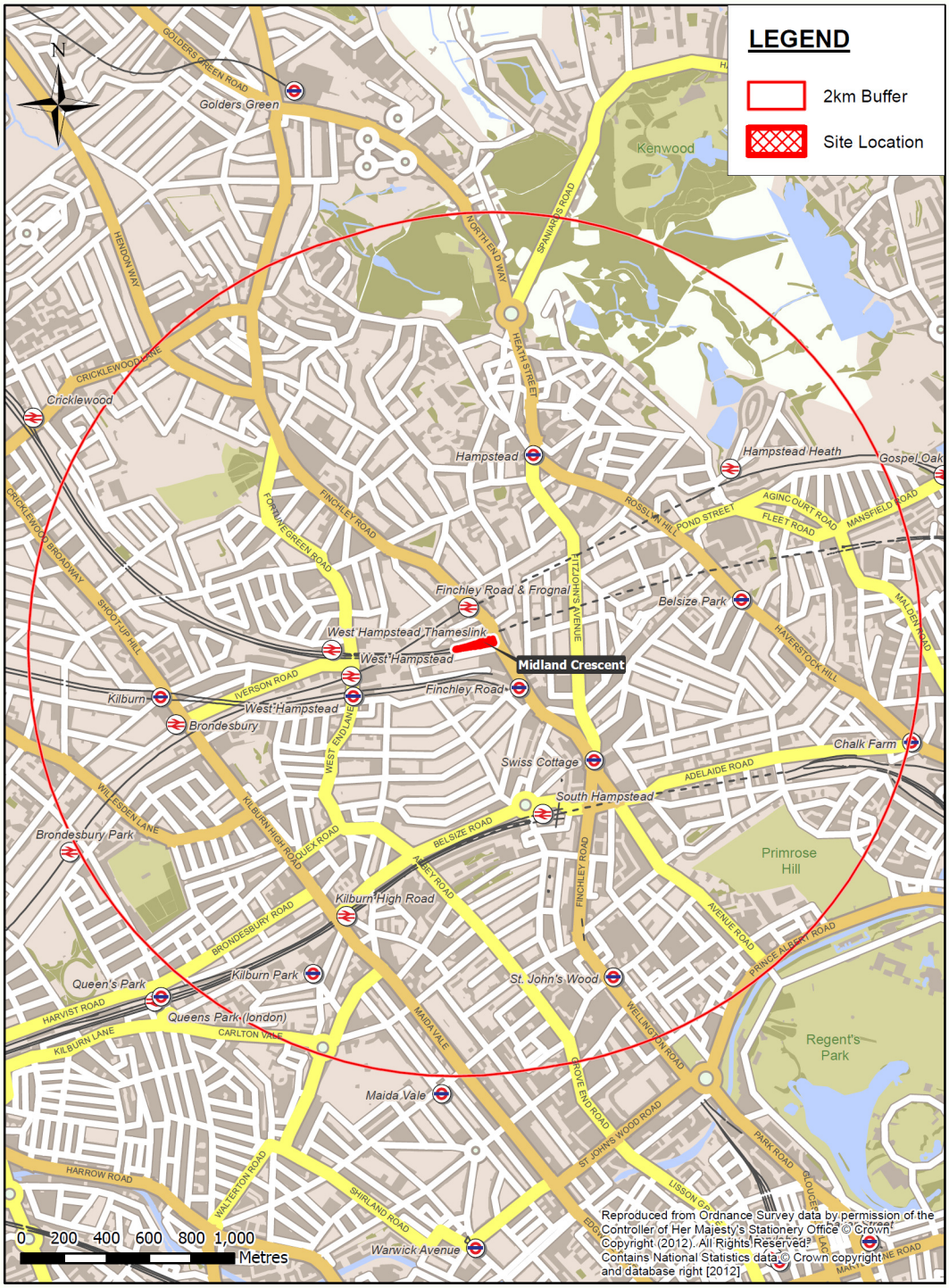
1.14 Chapter seven assesses the impact the development would have on the pedestrian and cycle network.

1.15 Chapter eight assesses the impact on the public transport network, including bus routes, services and stops, London Overground and London Underground.

1.16 Chapter nine examines the potential for measures to mitigate the local transport impacts and the proposed planning obligations. We also provide a framework for the future development of a Travel Plan that will control and influence future travel choices. The draft Travel Plan is presented in Appendix E.

1.17 Finally, Chapter ten provides a summary identifying key conclusions and recommendations.

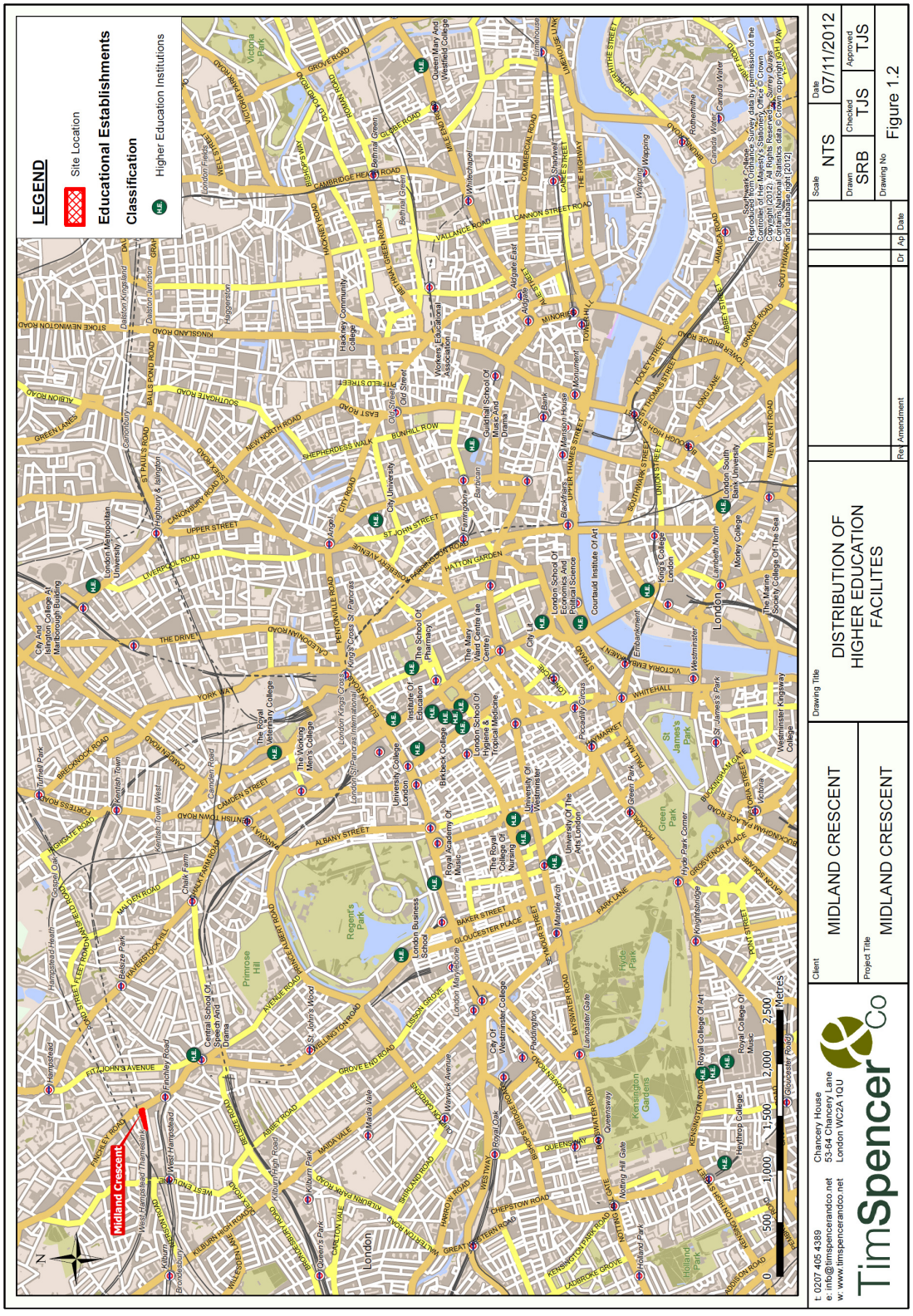
Figure 1.1. Site Location Plan



t: 0207 405 4389
e: info@timspencerandco.net
w: www.timspencerandco.net
Chancery House
53-64 Chancery Lane
London WC2A 1QU
TimSpencer & Co

Client	MIDLAND CRESCENT
Project Title	MIDLAND CRESCENT
Drawing Title	PROPOSED SITE LOCATION OF MIDLAND CRESCENT
Scale	NTS
Date	07/11/2012
Drawn	SRB
Checked	TJS
Approved	TJS
Drawing No	Figure 1.1

Figure 1.2. Locations of Higher Education Institutions in Central London



2. Baseline Conditions

Introduction

2.1 This section of the report describes the existing situation with regard to the site location, the surrounding highway network, pedestrian and cyclist environment, and the existing public transport networks.

Site Description

2.2 The site is bordered by Finchley Road which forms part of the Transport for London Road Network (TLRN) and two railway corridors.

2.3 Vehicular access was previously provided via a footway crossover on Finchley Road at the east side of the site close to the signalised Blackburn Road junction. The existing access arrangements are shown on Figure 2.1.

2.4 The previous vehicle access arrangements to and from the site can be seen with the retained drop-kerb as shown below.

Photo 1: Existing Site Entrance

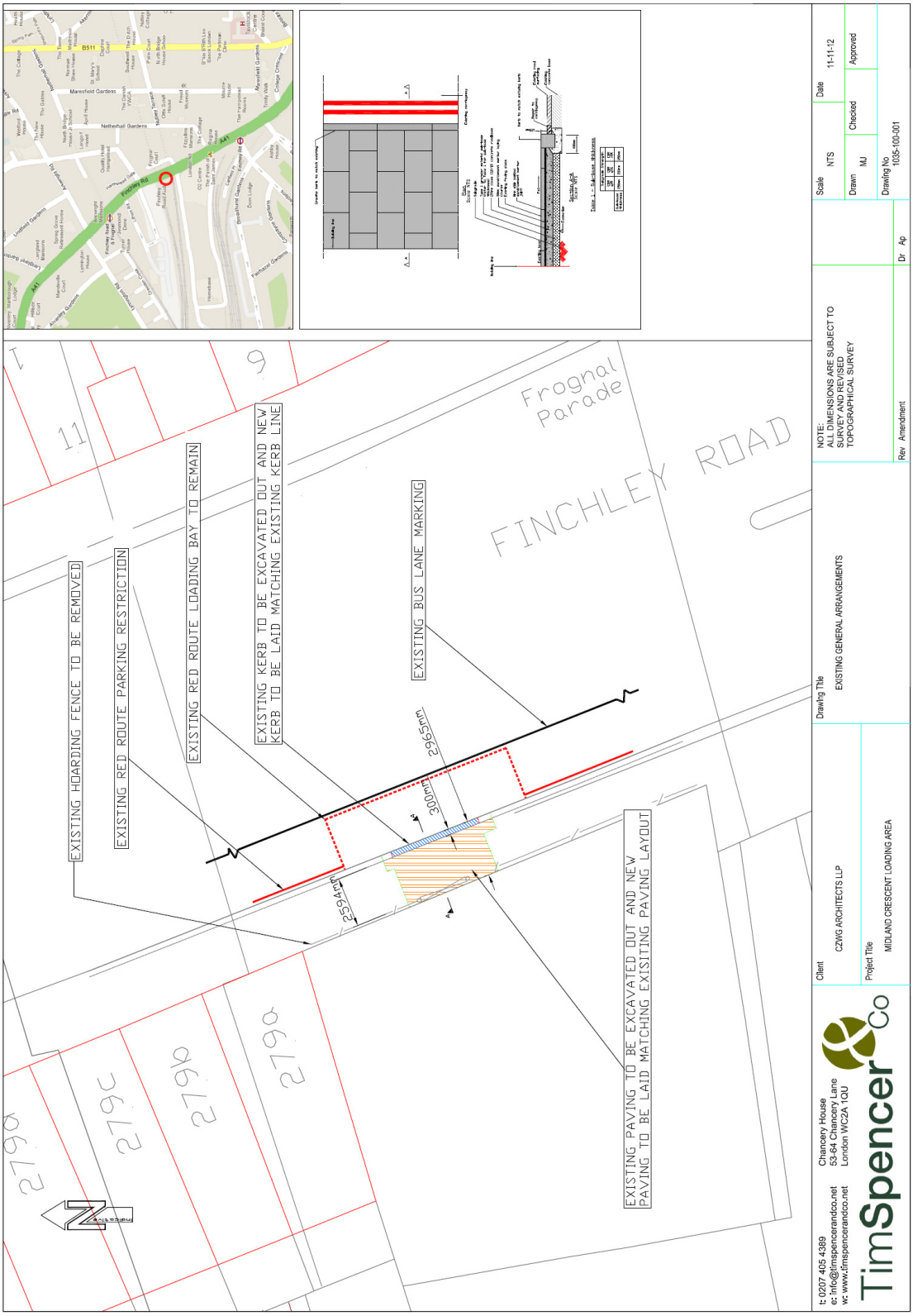
2.5 Finchley Road is a Red Route and as such is part of the Transport for London Road Network (TLRN). There is a red box located adjacent to the site which is a designated loading bay with time controls. See Appendix C for more photos.

2.6 There is also bus lane running alongside the eastern boundary of the site within Finchley Road. The bus lane is operational from 4pm to 7pm. At this time it is not permitted to use the Red Route loading bay.

2.7 The planning application envisages that the ground floor development will be set back from the property boundary but that there will be development above to the edge of the extended footway.

Photo 2: Building Access Point looking south from Finchley Road footway

Figure 2.1 General Arrangements in the Existing Situation



Pedestrians and Cyclists

2.8 There are footways along both sides of Finchley Road which vary in width between some 2m and 4m, and are generally in good condition. The site is very well served by pedestrian crossing facilities adjacent to the site. Signalised pedestrian crossing facilities are provided at Finchley Road/Blackburn Road junction.

2.9 There is a sign-posted strategic cycle route within the vicinity of the site. The LCN route 50, from Mill Hill East to St James's Park runs parallel and to the north of the A41 Finchley Road – and is accessed locally in Netherhall Gardens.

Bus Routes and Stops

2.10 The proposed site at Midland Crescent is well served by bus routes with high frequency bus services along Finchley Road. Figure 2.2, 'Bus Routes from Finchley Road' shows bus services in the local vicinity. Figure 2.3 shows the routes and services of buses within the vicinity of the site and in Figure 2.4 we show the locations of local bus stops.

2.11 The six scheduled bus services shown in Figure 2.3 are all high frequency routes with scheduled waiting times of between 4.4 and 6.2 minutes – in which translates into a scheduled frequency of 10 to 14 services per hour in each direction.

2.12 The aggregated services frequency is some 70 services an hour in each direction.

Figure 2.2: Bus Routes in the Local Area

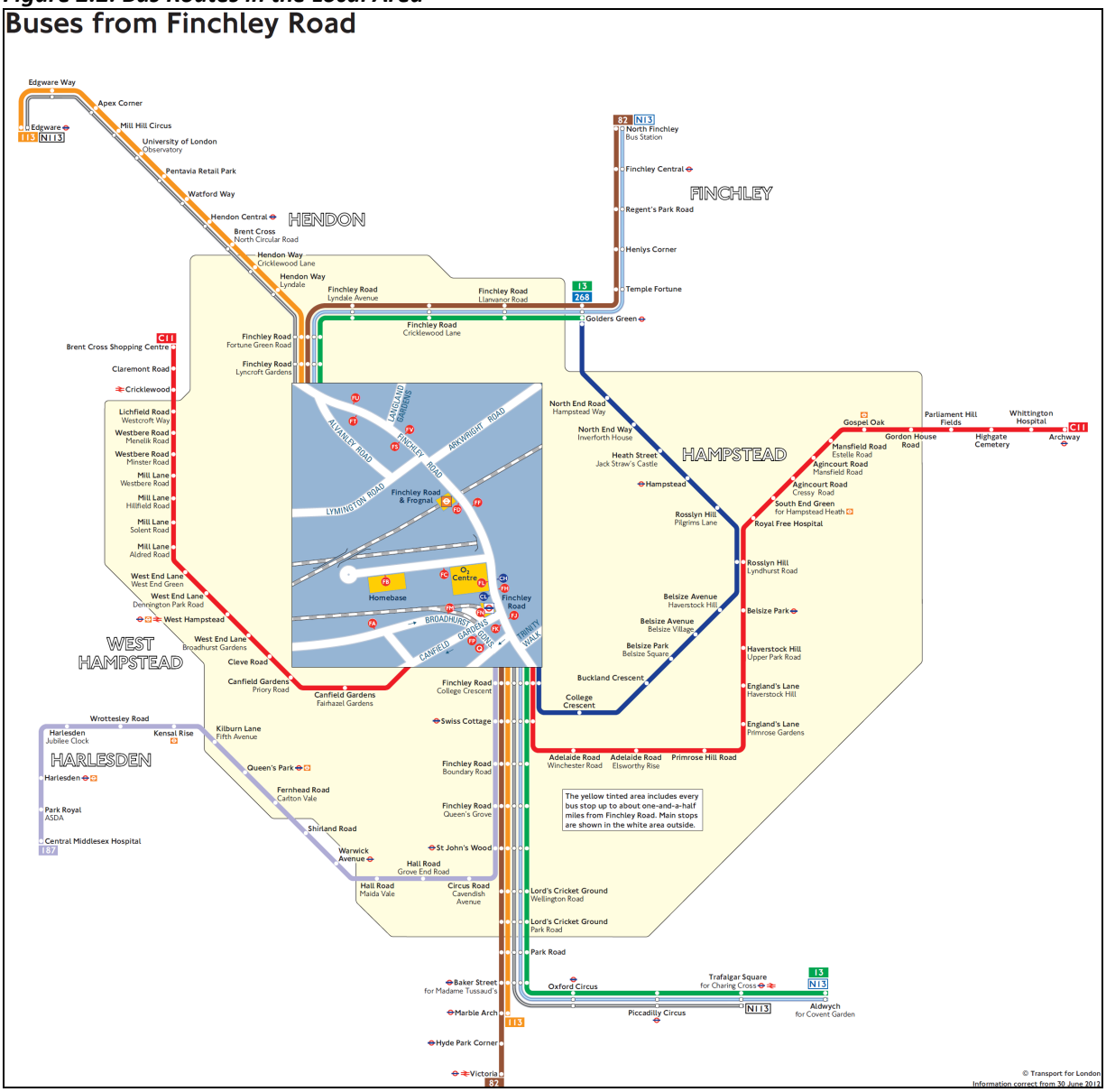


Figure 2.3 – Local Bus Services

Key

13 Day buses in black

N13 Night buses in blue

Connections with London Underground

Connections with London Overground

Connections with National Rail

Red discs show the bus stop you need for your chosen bus service. The disc A appears on the top of the bus stop in the street (see map of town centre in centre of diagram).

Route finder

Day buses

Bus route	Towards	Bus stops
13	Aldwych	FF FH FJ FU FV
	Golders Green	FD FK FL FS FT
82	North Finchley	FD FK FL FS FT
	Victoria	FF FH FJ FU FV
113	Edgware	FD FK FL FS FT
	Marble Arch	FF FH FJ FU FV
187	Central Middlesex Hospital	FB FC FH FJ
268	Golders Green	FB FC FH FJ
C11	Archway	FA FJ FM FN
	Brent Cross Shopping Centre	FP

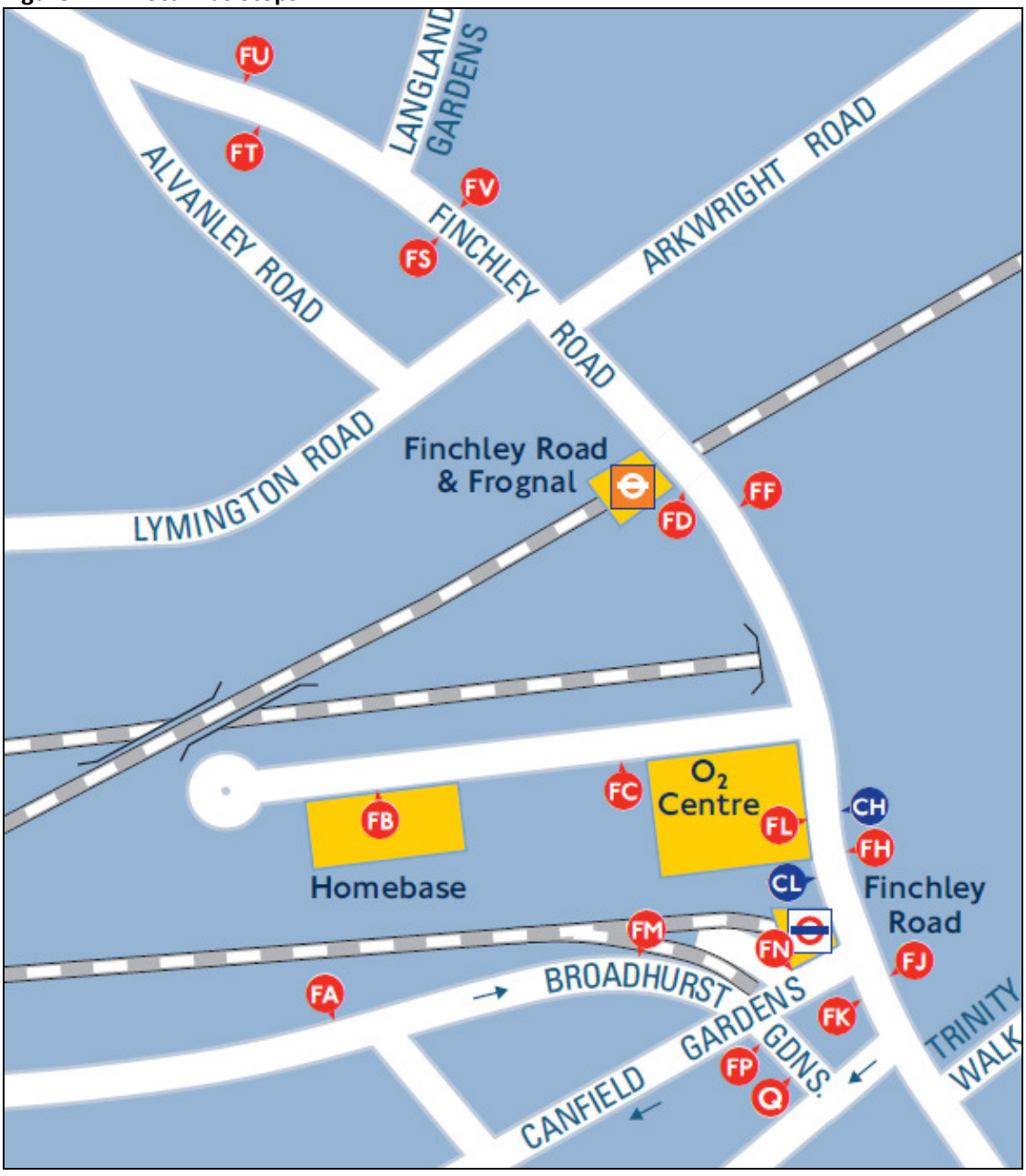
Night buses

Bus route	Towards	Bus stops
N13	Aldwych	FF FH FJ FU FV
	North Finchley	FD FK FL FS FT
N113	Edgware	FD FK FL FS FT
	Trafalgar Square	FF FH FJ FU FV

Coaches

Towards	Coach stops
Coaches northbound	CL
Coaches to central London	CH

Figure 2.4 – Local Bus Stops



London Underground Services and Stations

2.13 The proposed development is located within a 3 minute walk of Finchley Road Station. The Jubilee Line and Metropolitan Line services are very complementary in that the Jubilee Line bisects the West End, by way of Bond Street and Green Park, and the Metropolitan Line skirts around the central area and connects to the City of London by way of King's Cross St Pancras. Both services have seen important capacity improvements in recent times. The Metropolitan Line has new higher capacity trains and the Jubilee Line has seen the train lengths increased from 6 to 7 carriages per train. There are numerous important interchanges in central London that add to the high quality of the tube services.

Figure 2.5 – Tube connections from Finchley Road and West Hampstead Stations

2.14 Despite the marked improvement in the tube services by way of Finchley Road station in recent years there has also been a marked decline in the use of the station from weekday entry/exit flows of some 32,000 in 2008 compared to 28,500 in 2011. This information is provided by London Underground. In 2011 the station was accessed, entry plus exit but excluding interchange, by some 9 million passengers.

2.15 The primary function of the station is as an interchange point between the Jubilee and Metropolitan Lines. This amounted to over 41,000 movements per weekday in 2008.

2.16 In the weekday AM peak 3-hour period (7 to 10 hours) the stations is used by 5,000 passengers for entry to the tube system and by 2,900 passengers for exit into the local area. In the weekday PM peak 3-hour period (16 to 19 hours) the entries and exits to and from the station are more balanced with flows of 3,800 and 4,800, respectively, in 2008.

2.17 The travel demand generated by the student accommodation at Midland Crescent will show very different journey time profiles to the background travel demand such that is impact on the network capacity becomes minimal and insignificant.

Mainline Rail Services & Stations

2.18 Finchley Road and Frognal station is also located within a 3 minute walk of the Midland Crescent development site.

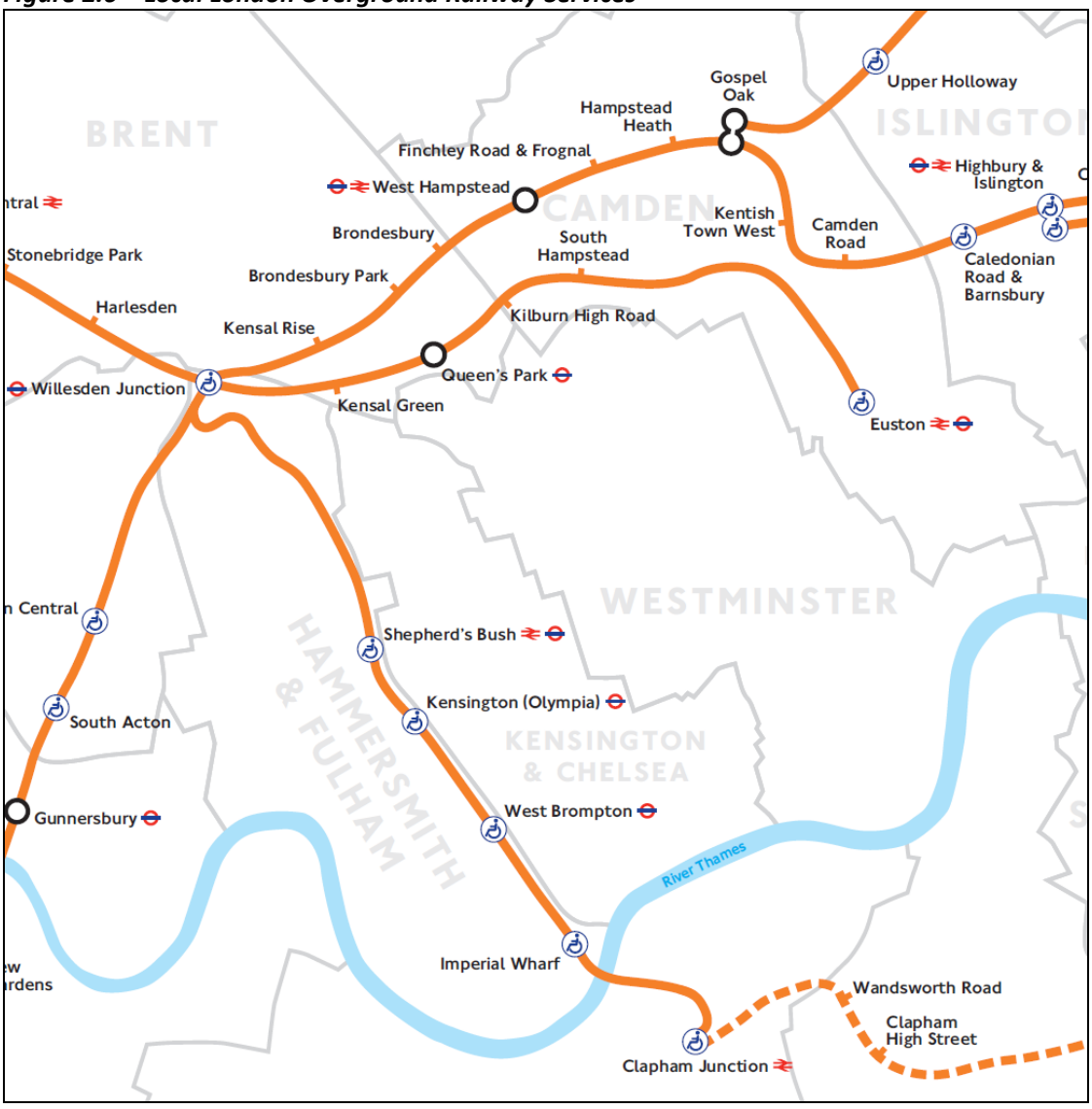
2.19 As has been the case with the tube services there have also been significant improvements to the quality and capacity of the mainline train service in recent years. There have also been significant improvements to the station facilities.

2.20 The station use is some 10% of the nearby Finchley Road tube station at some 0.9 million passengers (entry plus exit) per annum. The use of the station has increased dramatically with the advent of the London Overground improvements. However, like the tube station the passenger use has fallen in recent years from 0.94 million in 2006/07 to 0.9 million in 2010/11 – a fall of approximately 5%. This information is provided by the Rail Regulator. There is no equivalent information in the interim due to the lack of recording of Pay-As-You-Go Oyster card trips.

2.21 The reduction have well have been reversed in the last year or so given the enhanced service to Clapham Junction which has increased from 2 to 4 services per hour in each direction coupled with the openings of the two Westfield shopping centres at each end of the line. The Richmond service also operates at 4 trains per hour in each direction.

2.22 As is the case with the radial tube services there are also important interchange opportunities with the radial London Overground service such as at Clapham Junction, Shepherd's Bush, Willesden Junction and Highbury and Islington.

Figure 2.6 – Local London Overground Railway Services



Public Transport Accessibility Level

2.23 Public Transport Accessibility Levels (PTALs) are a detailed and accurate measure of the accessibility of a point to the public transport network, accounting for walk access time and service availability. The PTAL is categorised in levels from 0 to 6, where 0 represents poor access to public transport and 6, excellent accessibility. Level 6 has been further sub-divided into 2 sub-levels (6a and 6b) to provide greater clarity. The 6a PTAL figure has been confirmed by the on-line TfL PTAL calculator. This is based on a public transport service database from 2008 to it is quite likely that the recent frequency improvement will have elevated the Midland Crescent Accessibility Index into the 6b category – the highest possible rating.

Vehicular Access

2.24 There is no car parking proposed for the site so there has been no need to undertake traffic surveys in the local area. Similarly the car-free designation will mean that there will be (planning obligation) restrictions to the availability of CPZ permits for the residents of the development. The only exception to this is likely to relate to disabled person parking permits – and this is estimated by be one such permit per annum.

2.25 There is a DfT traffic monitoring site on the Finchley Road just to the north of Midland Crescent (reference A41 14364). This shows little change in (AADF – Annual Average Daily Flows) traffic flows over a 12 year period from the years 2000 to 2011.

AADF by Year	All HGVs	All Motor Vehicles
2000	1230	54911
2001	1029	50866
2002	1025	53777
2003	1087	52535
2004	1439	56060
2005	1709	56780
2006	2023	56568
2007	1280	55819
2008	1547	52306
2009	1367	58053
2010	1403	57219
2011	1351	53955

3. Development Proposals

3.1 This section of the report summarises the key elements of the development proposals that have a bearing on trip attraction and generation and the existing transport infrastructure.

Development

3.2 The proposed development would consist of 60 student bedrooms, 9 residential units, a small 99 sq m retail unit and multi-purpose space at the LG-2 level. Only the student accommodation and residential units are expected to generate new journeys to the local area. The proposed total square footage GEA is 5,033 square metres. The GIA figure is 4,555 square metres.

3.3 The ground floor general arrangements, produced by CZWG Architects, are shown in Figure 3.1 which also shows the Red Route loading bay and the locally widened footway.

Access

3.4 There is currently a hoarded vehicular access at the east end of the development site from Finchley Road. This access would be would be removed and the footway would be fully reinstated as part of the planning obligations.

Parking

3.5 No car parking is proposed on site. The development has very good access, indeed excellent access, to public transport services. In view of the good transport links enjoyed at this location, the development is appropriate to be designated to be car free.

3.6 Residents in the student and residential accommodation will not be permitted to have CPZ permits unless they qualify as a consequence of a disability. Any visitors that are holders of Blue Badges can park on-street on a single yellow line (and free of charge for up to three hours) or in the designated CPZ parking bays within the local street network.

3.7 Enclosed and secure cycle storage would be provided for the student rooms and residential accommodation in 3 lower ground floor areas that have the capacity for 78 bicycles (i.e. 2 per unit for the residential and 1 per unit for the student accommodation). These spaces would be used by residents and their visitors. A further 10 cycle parking spaces would be provided in the Lower Ground Floor -2 for the benefit of the commercial staff and visitors. All these cycle parking provisions comply with LBC and GLA (Further Alterations to the London Plan) standards.

3.8 This cycle storage would have secure access arrangements and CCTV coverage to enhance levels of security and safety, a commitment also supported by TfL. The CCTV would be monitored from within the site.

Pedestrian Access

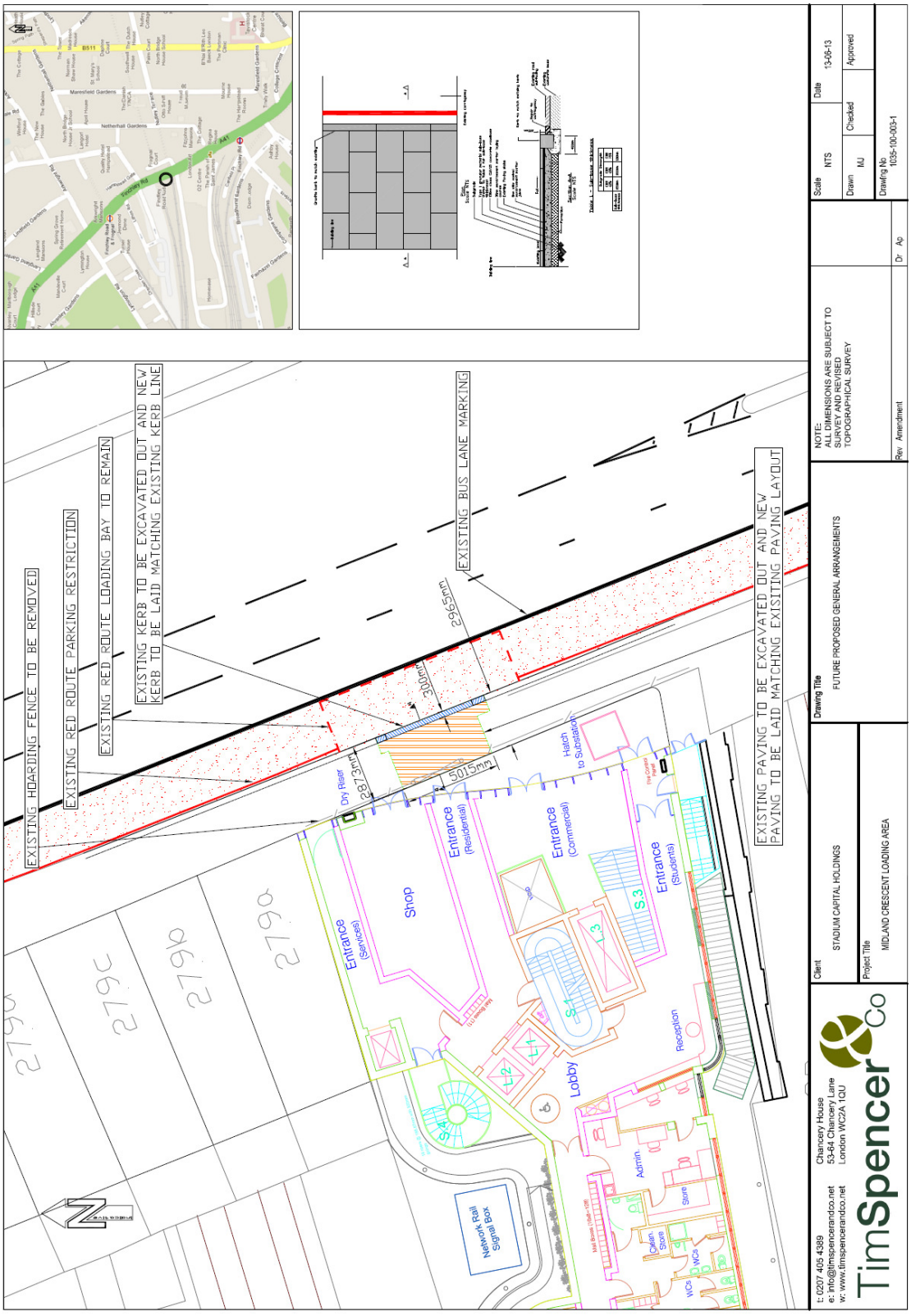
3.9 Pedestrian access to the development would be provided from the main building entrance at Finchley Road.

3.10 Figure 3.1 also shows the general arrangements at the Finchley Road with the permanent removal of the vehicle kerb-cut would be a benefit to all users of the Finchley Road.

Servicing

3.11 Servicing for the development would take place from the 'Red Route' loading bay within the Finchley Road. The time limitation to fit with the bus lane, with no loading between 16:00 and 19:00 hours is unlikely to cause any difficulties because all of the servicing activity would be expected to occur before that time period.

Figure 3.1 General Arrangements Post-Development



4. Policy Context

Introduction

4.1 This section will consider the following documents:

- **National Policy**
  -Transport White Paper 'The Future of Transport'
  -National Planning Policy Framework that has replaced PPG 13: Transport

- **Regional Policy**
  -The London Plan
  -The Mayor's Transport Strategy

- **Local Policy**
  -London Borough of Camden Core Strategy (as presented in more detail in Appendix A)
  -London Borough of Camden Development Policies
  -London Borough of Camden Transport Strategy

4.2 All transport and planning policy relevant to the proposed Finchley Road development has been examined and a summary is provided in the following sections:

National Policy

Transport White Paper 'The Future of Transport'

4.3 The Future of Transport White Paper was published in July 2004. This paper sets out a long term strategy for a modern, efficient and sustainable transport system backed up by investment over the following 15 years. It looked at the factors that will shape travel and transport over the next 30 years and set out how the Government will respond to the increasing demand for travel, maximising the benefits of transport while minimising the negative impact on people and the environment. It states that:

> *"We need a transport network that can meet the challenges of a growing economy and the increasing demand for travel, but can also achieve our environmental objectives. This means coherent transport networks with:*
>
> - *The **road** network providing a more reliable and free-flowing service for both personal travel and freight, with people able to make informed choices about how and when they travel;*
> - *The **rail** network providing a fast, reliable and efficient service, particularly for interurban journeys and commuting into large urban areas;*
> - ***Bus** services that are reliable, flexible, convenient and tailored to local needs;*
> - *Making **walking** and **cycling** a real alternative for local trips; and*
> - ***Ports** and **airports** providing improved international and domestic links."*

National Planning Policy Framework (NPPF)

4.4 PPG 13 on Transport which was re-issued by the Government in 2001 was replaced by the NPPF in March 2012 - which re-established the policy background for this subject area, stating that Transport Assessments and Travel Plans should be submitted with all planning applications for developments likely to have significant transport implications.

4.5 Like PPG13 the NPPF encourages the integration of planning and transport at all levels, from national to local, and is underpinned by three objectives:

- *to promote more sustainable transport choices for both people and for moving freight;*
- *to promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling; and*
- *to reduce the need to travel, especially by car.*

4.6 Like PPG13 the NPPF advises local authorities, inter alia, to:

- *ensure that developments comprising jobs…offers a realistic choice of access by public transport, walking and cycling, recognising that this may be less achievable in some rural areas;*
- *use parking policies, alongside other planning and transport measures, to promote sustainable transport choices and reduce reliance on the car for work and other journeys; and*
- *ensure that the needs of disabled people – as pedestrians, public transport users and motorists – are taken into account in the implementation of planning policies and traffic management schemes, and in the design of individual developments.*

4.7 PPG13 recognised that the availability of car parking had a significant influence on the means of transport people choose for their journeys. The NPPF states that Local Authorities should ensure that, as part of a package of planning and transport measures, levels of parking provided in association with development should promote sustainable transport choices, not require developers to provide more spaces than they themselves wish, other than in exceptional circumstances, require developers to provide designated parking spaces for disabled people in accordance with current good practice, require convenient safe and secure cycle parking in developments at least at levels consistent with the cycle strategy in the local transport plan and consider appropriate provision for motorcycle parking.

Regional Policy

The London Plan

4.8 The Mayor is responsible for Strategic Planning in London. One of his duties is to produce a Spatial Development Strategy for London, called the London Plan. In accordance with the Greater London Authority Act 1999 the London Plan deals only with matters of strategic importance to Greater London.

4.9 The London Plan is the strategic plan setting out an integrated social, economic and environmental framework for the future development of London, looking forward over a period of 15-20 years. It provides the basis for the 33 individual boroughs to develop their local planning policies as well as setting the policy framework for the Mayor's involvement in major planning decisions in London.

4.10 The London Plan adopted on 31st July 2011 sets out the Mayor's vision to drive policy across the Capital. The Mayor's six key objectives for the new London Plan are to ensure that London is:

1. A city that meets the challenges of economic and population growth to ensure a sustainable, good and improving quality of life for all Londoners and helps tackle the huge inequalities among Londoners, including inequality in health.

2. A globally competitive and successful city with a strong and diverse economy and an entrepreneurial spirit that benefits all Londoners and all parts of London - a city at the leading edge of innovation and research that makes the most of its rich heritage and cultural resources.

3. A diverse, strong and accessible city to which Londoners feel attached, that give all its residents, workers, visitors and students a chance to realise and express their potential and a high quality environment in which to enjoy, live together and thrive.

4. A city that delights the senses and takes care of its buildings and streets, with the best of modern architecture while making the most of its built heritage. A place that gets the best out of its wealth of open and green spaces and waterways, realising its potential for improving Londoners' health, welfare and development.

5. A world leader in improving the environment locally and globally, at the forefront of policies to tackle climate change, reduce pollution, develop a low carbon economy and consume fewer resources and use them more effectively.

6. A city where everyone can access jobs, opportunities and facilities with an efficient and effective transport system that actively encourages walking and cycling and makes better use of the Thames, and supports all the objectives of this plan.

4.11 The policies contained within the London Plan which are relevant to the proposed development are as follows:

Policy 6.1 - The Mayor will work with all relevant partners to encourage the closer integration of transport and development by: a) encouraging patterns of development that reduce the need to travel, especially by car (boroughs should use the standards set out in Table 6.1 to set maximum car parking standards in DPDs), b) seeking to improve the capacity and accessibility of public transport, walking and cycling, particularly in areas of greatest demand (boroughs should use the standards set out in Table 6.2 to set minimum cycle parking standards in DPDs) and c) supporting development that generates high levels of trips only at locations with high levels of public transport accessibility, either currently or via committed, funded improvements.

Policy 6.3 - Development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Where existing transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans exist for an increase in capacity to cater for this, boroughs should ensure that development proposals are phased until it is known these requirements can be met, otherwise they may be refused. The cumulative impacts of development on transport requirements must be taken into account. Transport assessments will be required in accordance with TfL's Transport Assessment Best Practice Guidance for major planning applications. Workplace and/or Residential Travel Plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with, the relevant TfL guidance. Construction Logistics Plans and Delivery & Servicing Plans should be secured in line with the London Freight Plan and should be coordinated with Travel Plans.

Policy 6.9 - Developments should provide secure, integrated and accessible cycle parking facilities in line with the minimum standards set out in Table 6.2 and provide on-site changing facilities and showers for cyclists.

Policy 6.10 - The Mayor will work with all relevant partners to bring about a significant increase in walking in London, by emphasizing the quality of the pedestrian and street environment, including the use of shared space principles – promoting simplified streetscape, de-cluttering and access for all and ensuring pedestrian environments in and around new developments emphasize the quality of the pedestrian and street space.

Policy 6.13 - The Mayor wishes to see an appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use by applying maximum parking standards. In addition, developments must: a) ensure that 1 in 5 spaces (both active and passive) provide an electrical charging point to encourage the uptake of electric vehicles, b) provide parking for disabled people, c) meet minimum cycle parking standards and d) provide for the needs of businesses for delivery and servicing.

Local Development Frameworks and transport-related Local Implementation Plans

4.12 Plans should:

- adopt on and off street parking policies that encourage access by sustainable means of transport, assist in limiting the use of car and contribute to minimising road traffic;
- adopt the maximum parking standards set out in the London Plan where appropriate, taking account of local circumstances and allowing for reduced car parking provision in areas of good transport accessibility;
- reduce the amount of existing, private, non-residential parking, as opportunities arise;
- recognise the needs of disabled people and to provide adequate parking for them;
- encourage good standards of car parking design; and
- additionally, the approach seeks to regulate parking in order to minimise additional car travel.

The Mayor's Transport Strategy

4.13 The Mayor's Transport Strategy (MTS) published in May 2010 is a statutory document, developed alongside the London Plan and Economic Development Strategy as part of a strategic policy framework to support and shape the economic and social development of London over the next 20 years. It sets out the Mayor's transport vision and describes how Transport for London (TfL) and its partners, including the London boroughs, will deliver that vision.

4.14 The Mayor's transport vision is that '*London's transport system should excel among those of world cities, providing access to opportunities for all its people and enterprises, achieving the highest environmental standards and leading the world in its approach to tackling urban transport challenges of the 21st century.*'

4.15 The MTS sets out six goals for achieving this overarching vision which are:

1. Support economic development and population growth by supporting sustainable population and employment growth, improving transport connectivity and delivering an efficient and effective transport system for people and goods.

2. Enhance the quality of life for all Londoners by improving journey experience, enhancing the built and natural environment, improving air quality and reducing noise and health impacts.
3. Improve the safety and security of all Londoners by reducing crime, fear of crime and anti-social behaviour and improving both road and public transport safety.
4. Improve transport opportunities for all Londoners by improving accessibility, supporting regeneration and tackling deprivation.
5. Reduce transport's contribution to climate change and improve its resilience by reducing CO2 emissions and adapting to climate change.
6. Support delivery of the London 2012 Olympic and Paralympic Games and its legacy by developing and implementing a viable and sustainable legacy for the 2012 Games.

4.16 In the section titled 'Improving transport opportunities for all Londoners', the MTS states that better integration of land use and transport planning will also ensure that new housing and employment is supported by good public transport accessibility and adequate capacity.

4.17 These goals are supported by a range of policies. The policies most relevant to this development are:

Policy 9 - The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other transport stakeholders, will use the local and strategic development control processes to seek to ensure that: a) All high trip generating developments are located in areas of high public transport accessibility, connectivity and capacity (either currently or where new transport schemes are committed); b) The design and layout of development sites maximise access on foot, cycle and to public transport facilities, for example, via safe walking and cycling routes and provision of secure cycle parking and c) Access for deliveries and servicing that maximise the opportunities for sustainable freight distribution where possible.

Policy 11 - The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to reduce the need to travel, encourage the use of more sustainable, less congesting modes of transport (public transport, cycling, walking and the Blue Ribbon Network), set appropriate parking standards, and through investment in infrastructure, service improvements, promotion of smarter travel initiatives and further demand management measures as appropriate, aim to increase public transport, walking and cycling mode share.

Policy 17 - The Mayor, through TfL, and working with the DfT and other government agencies, the London boroughs, health authorities and other stakeholders, will promote healthy travel options such as walking and cycling.

4.18 The MTS includes a range of proposals for delivering the six goals which include:

Proposal 57 - The Mayor will seek to use his planning powers and work with the London boroughs to encourage cycling by supporting development that a) Provides cycle parking to an appropriate standard and b) Integrates the needs of cyclists into the design.

Proposal 60 - The Mayor, through TfL, and working with the London boroughs and other stakeholders, will improve the walking experience by enhancing the urban realm and taking focused action to ensure safe, comfortable and attractive walking conditions, including, supporting developments that emphasise the quality and permeability of the pedestrian environment

Proposal 116 - The Mayor, through TfL, and working with the London boroughs and other stakeholders, will use smarter travel initiatives across London to facilitate more efficient use of the transport system, achieve mode shift to cycling, walking and public transport and encourage the take-up of healthier travel options.

Local Policy

London Borough of Camden Local Development Framework

4.19 The Planning and Compulsory Purchase Act (2004) established a new plan-making system which requires each Local Planning Authority to prepare a Local Development Framework (LDF), described as a portfolio of planning policy documents, to replace Unitary Development Plans.

4.20 The key transport-related planning policy is presented in Appendix A of this Transport Assessment. These policies are entirely consistent with the requirements of the London Plan and the Mayor's Transport Strategy. The 'top down' policy is led by the objectives set out in policy CS1 which would support high density development of the Midland Crescent site. The headline transport policy is set out in CS11 – Promoting sustainable and efficient travel.

4.21 The relevant Development Policies are set out in DP16, DP17, DP18 (and associated parking standards), DP20, the West Hampstead Interchange and Growth Area policies, the DP9 policy related to Student housing and Objective 1 of the Transport Strategy as detailed in paragraph 5.364 below.

5.364 Camden's transport policies outlined in the LDF promote sustainable travel and integration of development with transport provision and seek to:

- Promote development that will encourage travel by walking, cycling and public transport and not permit development that will depend on travel by private motor vehicles;
- Locate development that generates high numbers of additional person trip in locations with good to excellent access to public transport;
- Encourage mixed use development to reduce the need and extent of travel;
- Ensure that the amount of parking provided as part of development is the minimum necessary. In areas that have good to excellent access to public transport, the Council expects new developments to be car-free (i.e., they will not include off-street parking and occupiers would not be eligible for on-street parking permits). Car-free development can still provide off-street parking for disabled drivers who are also eligible for on-street parking permits;
- Ensure all impacts of development are mitigated through appropriate management of servicing, construction and travel behaviour;
- Ensure that there is sufficient capacity in the transport network to accommodate any additional trips generated by a development; and
- Ensure development is properly integrated into the surrounding highway and wider transport network.

Parking & Restraint

4.22 Camden's strategic policy for parking is to control on and off-street parking as part of the Council's traffic reduction strategy by restraining the unnecessary use of vehicles, especially private cars, and to allocate parking to residents, shoppers and essential users in accordance with an established hierarchy of need.

4.23 The Council will review existing waiting and loading restrictions in light of local road safety and traffic management. The existence of some waiting and loading restrictions will require review as the need for them may have changed as a result of new developments, land use changes and local traffic management schemes.

Cycle Parking

4.24 Policy DP18 requires adequate secure parking or storage space for cycles in all new developments, as set out in the Council's Planning Standards Guidelines. The Council will also encourage the provision of adequate cycle parking within existing developments, particularly those likely to attract significant cycle use. In addition, the London Borough of Camden has strategic policy to significantly increase cycle use, and to make Camden a cycle friendly borough with improved facilities, safety and journey conditions.

4.25 Adequate parking or storage space for cyclists should be provided where practical in all new developments for employees and users. Cycle parking provision should normally be by 'Sheffield' type stands (each of which provide two spaces). However secure lockers may be suitable at workplaces, stations and in residential developments.

Public Transport

4.26 The Camden strategic policy for public transport is to promote the greater use of public transport, and to actively seek measures to improve the quality, reliability, and accessibility of public transport services.

Pedestrians

4.27 The strategic policy regarding pedestrians is to increase walking as a means of travel within Camden, and to improve the overall environment for pedestrians in terms of safety, security, amenity, and convenience.

Cyclists

4.28 The Council's strategic policy for cyclists is to significantly increase cycle use, and to make Camden a cycle friendly borough with improved facilities, safety and journey conditions.

Transport & New Development

4.29 Camden wish to ensure that all new development maximises accessibility by sustainable modes of transport, meets relevant highways and access standards and is properly related to the borough's transport and highways network.

4.30 The Council will consider whether traffic generated by a development is likely to have an adverse impact on public transport, on the local environment, or on the borough's traffic problems as a whole.

4.31 The first results from the 2011 census clearly indicate that the long-term traffic restraint policies implemented by Camden Council have produced very positive results. Despite a significant increase in the number of occupied households in the Borough (at +5,931 units – a 6.5% increase) the number of cars per household has reduced to the extent that there has been a significant reduction overall to the number of vehicles possessed by Camden residents (at -3,360 – a 6.7% reduction overall).

4.32 This has been achieved by way of a 12.4% reduction to the average numbers of cars per household which has fallen from 0.55 to 0.48 per unit. The number of car free households in the Borough has increased from 55% to 61%. These results clearly validate the long term transport planning policies implemented by both Camden Council and the Mayor of London.

4.33 Camden will consult with the public transport authorities in order to determine the appropriate level of public transport provision and will negotiate with developers to secure this provision through legal agreements in the following circumstances:

- Where development imposes additional transport demand;
- Where development requires new facilities to be provided; and
- Where development offers the opportunity to improve existing public transport.

5. Trip Generation and Modal Share

Introduction

5.1 This section of the report provides an assessment of the number of trips and travel characteristics associated with the proposed development.

5.2 The estimated number of vehicle trips has been calculated using trip rates taken from the trip rate database, TRAVL (Version 8). The development trips have been estimated for an average weekday AM (0800-0900 hours) and PM (1700-1800 hours) peak hour.

Student Residence Trips

5.3 Peak hour trip rates for the proposed student development, the dominant land use containing 60 bedrooms have been derived from a comparable site selected from the TRAVL database. Table 5.1 shows the site selected from the TRAVL database and key site characteristics. Further information on the site details are contained within Appendix B.

TABLE 5.1: TRAVL STUDENT ACCOMODATION SITE

Site Location	London Borough	GFA (sq m)	Bedrooms	Parking Spaces	PTAL
Arcade Hall	Islington	tbc	365	6	6

5.4 This student residence site selected from TRAVL was chosen because of the low level of parking at the site and the high level of public transport accessibility (PTAL 6a). Additionally, there are some other similarities with the proposed Finchley Road development. Arcade Hall is in the heart of Holloway and is well served by bus services. It is close to Holloway Road Underground station and the London Metropolitan University (LMU) North Campus (at an eight minute walk time in both cases). Shops, entertainment and other amenities are close by. These factors are important to understand the number of person trips that are likely to be associated with the proposed Finchley Road development.

5.5 The Arcade Hall site is now known as Opal 3, The Arcade, London. It is located next to the Nag's Head junction in the heart of the town centre. It is a large and modern purpose built development. The letting of the accommodation is not expressly linked to LMU but it is probable that a significant number of residents are students at the university – perhaps more so when the survey was undertaken in 2001.

5.6 The survey provides an accurate benchmark of the intensity of travel demand generated by new student accommodation and the likely travel time patterns. This information is presented below in Table 5.2.

TABLE 5.2 – TRIP RATES AND TRAVEL TIMES

TRAVL - Average Trip Rate by Mode and Time

Report ID 9

List of Surveys:

Name	Address	Postcode	Survey Date
Arcade Hall	385-401 Holloway Rd	N7 0RT	18/10/2001

Number of sites considered 1

Counts By Mode:

Mode: All Modes

Time Band	No of Sites	Trip Rate In	Trip Rate Out	Total Trip Rate	Predicted Trips In	Predicted Trips Out	Predicted Trips Total	
07:00-07:30	1	0.00272	0.00000	0.00272	0	0	0	total 7 to 10
07:30-08:00	1	0.00272	0.01090	0.01362	0	1	1	25
08:00-08:30	1	0.00000	0.01907	0.01907	0	1	1	9%
08:30-09:00	1	0.00817	0.09264	0.10082	0	6	6	per hour
09:00-09:30	1	0.01362	0.10354	0.11717	1	6	7	8
09:30-10:00	1	0.01090	0.14714	0.15804	1	9	9	
10:00-10:30	1	0.01090	0.08174	0.09264	1	5	6	total 10 to 16
10:30-11:00	1	0.00817	0.06812	0.07629	0	4	5	100
11:00-11:30	1	0.02452	0.06267	0.08719	1	4	5	35%
11:30-12:00	1	0.04360	0.07902	0.12262	3	5	7	per hour
12:00-12:30	1	0.05450	0.05450	0.10899	3	3	7	17
12:30-13:00	1	0.08719	0.11989	0.20708	5	7	12	
13:00-13:30	1	0.10082	0.06812	0.16894	6	4	10	
13:30-14:00	1	0.06812	0.19074	0.25886	4	11	16	
14:00-14:30	1	0.10082	0.06267	0.16349	6	4	10	
14:30-15:00	1	0.09264	0.02180	0.11444	6	1	7	
15:00-15:30	1	0.06267	0.04632	0.10899	4	3	7	
15:30-16:00	1	0.07357	0.08174	0.15531	4	5	9	
16:00-16:30	1	0.11717	0.08992	0.20708	7	5	12	total 16 to 19
16:30-17:00	1	0.08174	0.04360	0.12534	5	3	8	72
17:00-17:30	1	0.10627	0.09264	0.19891	6	6	12	25%
17:30-18:00	1	0.13351	0.08992	0.22343	8	5	13	per hour
18:00-18:30	1	0.12534	0.11172	0.23706	8	7	14	24
18:30-19:00	1	0.10082	0.10354	0.20436	6	6	12	
19:00-19:30	1	0.09537	0.05722	0.15259	6	3	9	Total 19 to 24
19:30-20:00	1	0.11444	0.05722	0.17166	7	3	10	92
20:00-20:30	1	0.07629	0.08447	0.16076	5	5	10	32%
20:30-21:00	1	0.11172	0.13624	0.24796	7	8	15	per hour
21:00-21:30	1	0.07902	0.05450	0.13351	5	3	8	18
21:30-22:00	1	0.12262	0.03542	0.15804	7	2	9	
22:00-22:30	1	0.11172	0.07902	0.19074	7	5	11	
22:30-23:00	1	0.10899	0.06267	0.17166	7	4	10	
23:00-23:30	1	0.10082	0.04905	0.14986	6	3	9	
Total		2.35149	2.45777	4.80924	141	147	289	

Peak Period For	All Modes	
In	17:30-18:00	0.13
Out	13:30-14:00	0.19
Total	13:30-14:00	0.26

5.7 A key feature of the travel demand associated with student accommodation is that the arrival and departure time profiles are quite different from any other form of development. The majority of journeys, at 66%, will happen outside of the Transport for London peak (3-hour) periods. The busiest period for travel, highlighted in Table 5.2, is 13.30 to 14.00 o'clock. The average hourly travel demand in the 3-hour AM peak period (7 to 10 hours) is half that of the inter-peak and evening periods. Only 25% of the travel demand will occur in the PM peak period (16 to 19 hours) at an average hourly rate only slightly higher than the average off-peak hour. These facts have significant implications for the capacity assessment of the forecast travel demand.

5.8 The modal splits taken from the TRAVL site are shown in Table 5.3. The Arcade Hall site has more bus services than Midland Road but significantly less tube and rail capacity in what are more distant locations.

5.9 Perhaps more significantly the opportunities for walk trips are reduced because Midland Road is not located in close proximity to a major higher education institution. Those trips, by no means the majority generated by the student accommodation, are therefore less likely to be 'walk only' journeys.

5.10 The Arcade Hall site no longer has any car parking – the spaces were subsequently allocated to the ground floor retail activity.

5.11 The Midland Crescent development has a far higher availability of cycle parking in a much more secure location. Furthermore, cycle use has increased substantially in London during the last 13 years since the Arcade Hall transport survey.

5.12 The information in Table 5.4 redistributes trips from the walk mode to bus, tube, train and cycle use – to facilitate a worst case assessment of the impact on the local transport services.

5.13 Table 5.5 provides the AM and PM peak hour student trips for the proposed development at Finchley Road applying the localised mode splits modified from the TRAVL information to allow for locational circumstances.

5.14 The subsequent travel capacity assessment uses the modified modal split assumptions which are all higher other than for walk only trips – so this is a worst case assessment.

TABLE 5.3: ARCADE HALL MODE SPLIT INFORMATION

Mode	Modal Split
Car Drivers	1%
Car passengers	2%
Bus	10%
Coach	0%
Pedal Cycle	0%
Rail	0%
Underground	8%
Walk	79%
TOTAL	**100%**

TABLE 5.4: MIDLAND CRESCENT ALTERNATIVE TEST MODE SPLIT

TRAVL - Daily Trip Rate by Mode - Alternative Outcome Report ID 7

Surveys in Selection

Address	Arcade Hall 385-401 Holloway Rd Holloway N7 0RT	**Business** **Class** **Location** **No of Beds**	Student Hostel C1 - Hostel & Halls of Residence Inner 367
SurveyCode	336	**PTAL**	6
Survey Date	18/10/2001	**Parking Total**	6
Survey Hours	07:00-24:00	**Proposed Units**	60

TRAVL - Daily Trip Rate by Mode Report ID 7

Main Mode - Based on Arcade Hall

Mode	Mode Trips	Trip Rate	Base Percent	Predicted Trips
All Car Drivers	10	0.03	1	2
Bus	84	0.23	10	14
Car Passenger	17	0.05	2	3
Coach	4	0.01	0	1
Pedal Cycle	4	0.01	0	1
Rail	3	0.01	0	0
Underground	66	0.18	8	11
Walk	690	1.88	79	113
Total	878	2.39	100	144

Main Mode - Adapted for Midland Crescent Circumstances

Mode	Base AH Mode Trips	Base AH Trip Rate	Modified Percent	Amended Predicted Trips
All Car Drivers	10	0.03	1	1
Bus	84	0.23	15	22
Car Passenger	17	0.05	2	3
Coach	4	0.01	0	0
Pedal Cycle	4	0.01	10	14
Rail	3	0.01	5	7
Underground	66	0.18	25	36
Walk	690	1.88	42	60
Total	878	2.39	100	144

TABLE 5.5: FORECAST PEAK HOUR TRIPS FOR THE MIDLAND CRESCENT STUDENT RESIDENCES

Mode	AM Peak (0800-0900 hours)		PM Peak (1700-1800 hours)	
	Arrivals	Departures	Arrivals	Departures
Car Drivers	0	0	0	0
Car passengers	0	0	0	0
Bus	0	1	2	2
Coach	0	0	0	0
Pedal Cycle	0	1	1	1
Rail	0	0	1	1
Underground	0	2	4	3
Walk Only	0	3	6	5
TOTAL PEOPLE	**0**	**7**	**14**	**11**

Servicing, Delivery and Waste Trips

5.15 The Arcade Hall TRAVL data shows daily delivery trips associated with a student development. This is shown as 3 trips per day to and from the development. Despite the fact that Midland Crescent is much smaller we adopt the same level of trip generation as the base assumption for the Servicing Management Plan. The annual 'move in' management measures are set out in the CRM Ltd report.

5.16 At this stage the number of deliveries is only a best estimate. These vehicles are most likely to range from cars to box vans up to 7.5T, but may include a small number of larger service vehicles (say 10m). Servicing and delivery trips would not be permitted during the hours of operation of the adjacent bus lane.

Residential Trip Generation

5.17 The trip rate for residential development is some 50% higher per unit than for a student bedroom unit. The residential trip rate per student bedroom is 7 trips (half to and half from the development) compared to 4.8 trips for a student bedroom. This trip rate is based a five TRAVL sites in London (comprising 686 residential units). In all cases the developments included car parking so the modal split assumptions need to be varied to reflect the fact that the Midland Crescent development will be 'car free'.

5.18 The net effect is that the overall trip generation will be significantly less than the initial planning application for 138 units of student accommodation (as presented in Appendix D) – that was previously deemed to be satisfactory by the LBC Transport Planning officers in the pre-application advice.

5.19 The same modal splits are assumed for the residential development as have been applied to the student accommodation. These assumptions are set out above in Table 5.4. This assessment retains the previous trip generation estimates despite the decrease in the number of units within the development with this revised application. The residual also allows for a small number of non-local trips to the commercial development (which could be a community gym or similar use).

Responses to comments received from LBC Transport Planning Department

5.20 The move in and move out process for the student accommodation would be handled by the management company. However, TfL have requested clarification on how this would be organised. TfL may have concerns if the intention was to use the existing on street loading bay for this process as this could not be reserved for this specific purpose and therefore even if time slots are booked, students or their delivery vehicles could arrive and find the loading bay occupied.

5.21 The management of the 'move in' process is also set out in the Draft Travel Plan appendix of the Transport Assessment (TA) that would be updated as a planning obligation of the planning approval.

5.22 A common misconception regarding the operation of student housing projects is that all the students move in and out within tight timeframes. It is likely that accommodation will be mostly let by way of 51 week contracts which can start and finish at any time. Any seasonal peak will reduce with the passing of time. Leases can be as short as 4 weeks or might cover a semester (VAT is chargeable for leases under 13 weeks).

5.23 If the loading bay were to be occupied the designated short stay car parking to the north would be the next best option (similarly available except between 4pm and 7pm).

5.24 TfL are also concerned that the existing loading bay, which would be the only facility available to service the site, may not be sufficient for the proposed uses to operate, especially if its operating hours are reviewed in future. As such, they would request that the applicant provide an assessment of day to day servicing demand for the site, which would estimate the frequency of deliveries, the type of vehicle used and the duration of stay.

5.25 The best estimate of delivery vehicle trip generation was set out in paragraphs 5.15 and 5.16 of the TA at 3 trips per day (based on the TRAVL site survey). This level of activity is most unlikely to result in any congestion of the loading bay.

5.26 TfL would require a Section 278 agreement for the removal of the crossover and resurfacing of footways along the site frontage and for this work to be completed prior to first occupation of the development.

5.27 A Section 278 agreement would indeed be put in place by the applicant to be agreed and signed by TfL. The applicant is willing to offer up the footway for adoption by TfL. A Section 38 agreement would be put in place by the applicant to be agreed and signed by TfL.

5.28 Given the site's location, construction access is likely to be challenging. The applicant has indicated a willingness to accept a condition requiring submission of a Construction Logistics Plan (CLP) prior to works on site, which would be required by TfL.

5.29 However, even at this stage LBC have said that they would expect the applicant to clarify the traffic management measures that are likely to be required during construction so that the impacts can be assessed by TfL. It is assumed that the loading bay adjacent to the Finchley Road frontage would need to be suspended for the duration of the works. It is envisaged that TfL would insist on the footway adjacent to the Finchley Road frontage would need to remain open to pedestrians throughout the works (this might require a protective gantry system).

5.30 Please see the associated planning submission document, below.

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN
Land at Midland Crescent, London NW3

MAH PROJECT MANAGEMENT

1.0 INTRODUCTION

This document sets out the plan for the implementation of the project known as Midland Crescent, London NW3 6NA.

The plan seeks to address the site specific requirements in order to put in place a level of control that minimises, where practical, the impact of the works on the surrounding area, adjoining properties and Network Rail interface on the adjacent railway lines.

5.31 The document prepared by MAH Project Management deals with all the construction issues raised by LBC and TfL.

5.32 It is highly likely that the loading bay would be suspended during construction. However, the footway would be kept open at all times.

5.33 All deliveries would be pre-booked and any offending delivery vehicle would be sent away.

5.34 Pedestrians would be fully protected from any falling debris.

6. Impact on the Highway Network

6.1 The estimated number of vehicle trips has been calculated using trip rates from the TRAVL trip rate database and is shown in Tables 5.4 and 5.5 for a typical weekday peak hour. Daily service vehicle trips have been considered and are estimated to be 3 trips per day.

Service Traffic

6.2 Servicing requirements have been considered in Chapter 5. All servicing would be undertaken from the Red Route loading bay.

Construction Traffic

6.3 The contractor appointed to build the development will be required to enter into a Code of Construction Practice agreement with the aim of minimising the impacts of construction on the local area, all subject to agreements with TfL and LBC. This will specify the routes and times under which construction activities can occur, and consequently when vehicles can access the site area.

Student 'Move In' Process

6.4 The main move in period for new students at the beginning of every academic year would be spread over several weeks. This would be managed by the on-site management team, employed directly by the site managing agent. All students would be advised of the date and time for arrival to take up occupancy of their room. It would be made clear to students that the allocation of time slots is for their benefit to ensure a smooth and trouble free move in and minimise any localised disruption in terms of vehicular movements.

6.5 A common misconception regarding the operation of student housing projects is that all the students move in and out within tight timeframes. It is likely that the student accommodation will be mostly let by way of 51 week contracts which can start and finish at any time. Any seasonal peak will thus reduce with the passing of time. Leases can be as short as 4 weeks or might cover a semester (VAT is chargeable for leases under 13 weeks).

6.6 If the loading bay were to be occupied when a delivery vehicle arrives the designated short stay car parking immediately to the north would be the next best option (similarly available except between 4pm and 7pm).

Summary

6.7 The development would therefore have a minimal impact on the highway network.

6.8 Servicing would be undertaken efficiently at a location immediately adjacent to the site with an adequate loading capacity.

7. Impact on Pedestrians and Cyclists

Introduction

7.1 At the ground floor level, which ties in with the existing street level, the building will be set back to increase the space available to all pedestrians.

Pedestrian Impacts

7.2 Table 7.1 shows that the proposed student accommodation would generate an additional 6 pedestrian movements during the AM peak hour and an additional 23 pedestrian trips during the PM peak including those trips to and from public transport facilities.

TABLE 7.1: PROPOSED PEAK HOUR WALK TRIPS

Mode	AM Peak (0800-0900 hours)		PM Peak (1700-1800 hours)	
	Arrivals	Departures	Arrivals	Departures
Proposed Walk Only Trips	0	3	6	5
Proposed PT Trips	0	3	7	5
TOTAL	**0**	**6**	**13**	**10**

7.3 These peak hour walk trips would be spread both spatially and over time to the extent that the flows through the main entrance will be less than an arrival or departure every minute.

7.4 Walk trips would be distributed in different directions between a number of routes. Additionally, the increase in walk trips during the AM and PM peak hour would not be significant when considering the existing capacity of footways within the vicinity of the site, including pedestrian crossings in the area and existing footway widths along Finchley Road.

Cycle Impacts

7.5 The proposed number of cycle movements associated with the development during the peak hours is shown in Tables 5.4 and 5.5. In the morning peak there would be 1 cycle movement (departing) and in the PM peak there would be 2 movements (1 arrival, 1 departure). The number of cycle trips to and from the site during the peak hours would not significantly impact the existing cycle network infrastructure.

7.6 The student accommodation and residential development would provide 78 cycle storage bays allocated to the students, residents and their visitors.

Summary

7.7 The increase in walk and cycle trips would not create a significant impact in terms of the existing footway capacities and facilities.

8. Impact on the Public Transport Network

Introduction

8.1 This chapter discusses the impact of the proposed development at Finchley Road on the surrounding public transport infrastructure.

Bus Routes

8.2 The proposed number of bus users during the AM and PM peak hours is shown in Table 8.1, as set out in Chapter 5 (Table 5.6).

TABLE 8.1: PROPOSED PEAK HOUR BUS TRIPS

Mode	AM Peak (0800-0900 hours)		PM Peak (1700-1800 hours)	
	Arrivals	Departures	Arrivals	Departures
Proposed Bus Trips	0	1	2	2

8.3 There are some 140 bus services an hour in the immediate vicinity of Midland Crescent so the extra demand would be equivalent to 1 trip for every 35 bus services.

London Underground

8.4 Table 8.2 shows the anticipated number of London Underground trips during the AM and PM peak hours. The development would generate an additional 2 trips on the London Underground during the AM peak and 7 during the PM peak hour. This level of demand is equivalent to 1 trip per 10 trains.

TABLE 8.2: PROPOSED PEAK HOUR UNDERGROUND TRIPS

Mode	AM Peak (0800-0900 hours)		PM Peak (1700-1800 hours)	
	Arrivals	Departures	Arrivals	Departures
Proposed Underground Trips	0	2	4	3

8.5 The number of new rail trips, mostly by way of London Overground services, would be 1 trip in the AM peak hour and 2 trips in the PM peak hour. In both instances the extra demand would be spread over 16 train services – that is equivalent to 1 trip per 5 trains.

8.6 In summary, development impacts on local bus, London Overground and London Underground services have been considered and have been shown to be minimal. It is concluded that the development is likely to have no significant impact on the capacity of the surrounding public transport network, particularly during peak periods.

9. Mitigation and Planning Obligations and Travel Planning

Introduction

9.1 This chapter describes aspects included in the proposed development, which would mitigate the local transport related impacts.

Mitigation Measures

9.2 The development would substantially improve the streetscape of the local area with funding provided by the Section 106 planning obligations (previously assessed at £15,100). This would particularly improve conditions for pedestrians and cyclists with a much improved footway surfacing. The removal of the vehicle kerb-cut would be a significant benefit to all users of the Finchley Road.

9.3 Servicing would take place from the public highway from a designated loading bay.

9.4 The development would include secure and sheltered cycle parking for students, residents and their visitors in order to encourage cycling to and from the site. No car parking is proposed as part of the development in order to discourage car use. In order to further deter any increased parking in surrounding streets, it is proposed that future occupants' rights to apply for local parking permits would be removed (to be secured by way of a Section 106 Agreement).

9.5 The trip generation analysis has indicated that small numbers of additional passenger trips are likely to result on nearby bus routes, Overground and Underground services in the context of capacity and frequencies and these newly generated trips would not cause any adverse capacity issues in peak periods. It is likely that a large majority of the additional public transport trips would be undertaken during off-peak periods.

9.6 The TA demonstrates that future walk trips to and from the proposed development would be satisfactorily accommodated within the footway network. The applicant agrees a contribution should be considered, secured by way of a Section 106 Agreement, to ensure walk routes to and from the development are of consistently good quality, thus encouraging walk travel.

9.7 Corporate Residential Management Limited (CRM) would be responsible for the full-time management of the Midland Crescent student accommodation on behalf of the owner. As an element of CRM's role in travel management, and the continued contribution to reducing the environmental impact of new buildings, they actively encourage the use of alternative travel methods other than the private car. By way of example:

- They have worked with a number of local authorities throughout the UK on developing Green Travel plans;
- In welcome pack information, the students are provided with details of local public transport services, timetables how to purchase tickets, oyster cards etc.;

- A robust plan is followed as part of the student move in process to mitigate travel problems.
- In all cases CRM liaise with local police and obtain traffic management advice ahead of the weekend and agree a strategy for the management of vehicle movements including, for example, any temporary suspension of on street parking restrictions. CRM have found this process to work effectively in major conurbations where there are similar situations;
- On-site staff would be employed directly by the managing agent, whose human resources recruitment philosophy is to always seek to employ the site staff from the local community or within reasonable travel distance.

9.8 The development would be supported by a Construction (Environmental) Management Plan (CMP), secured through a Section 106 Agreement with LBC - the aim being to minimise the impact of construction traffic on the local area. This would include, amongst other requirements, the likely construction trips generated and mitigation proposed. Details of the CMP would include site access arrangements, booking systems, construction phasing and vehicle routes to and from the site, ensuring routes taken and any road and footway closures do not adversely impact on the bus network.

9.9 Similarly, a (Delivery and) Service Management Plan (SMP) would be agreed with LBC which would identify efficient and sustainability measures to be undertaken once the development became operational. This would help identify the optimum use of loading facilities to reduce the impact of goods vehicle trips to the site. Additionally, the SMP could establish appropriate servicing time restrictions in order to encourage off peak servicing. There would also be reference to measures that will reduce conflict with pedestrians and cyclists during the delivery periods at the access points and within the site.

9.10 A draft, site specific, full Travel Plan has been developed for the development with the aim of promoting sustainable modes of travel and reducing reliance on the private car. This draft full Travel Plan is being submitted as a separate appended document alongside this Transport Assessment. Assuming planning permission is granted, the Section 106 agreement will require that a formal version of this document is submitted for approval.

10. Summary and Conclusions

10.1 This Transport Assessment has been prepared in support of a planning submission which proposes to redevelop the Midland Crescent, Finchley Road site in order to provide a development comprising a new student accommodation, residential development and small scale commercial development. The TA has been prepared in accordance with TfL's *Transport Assessment Best Practice Guidance* document (May 2006).

10.2 The location of the proposed development is shown in Figure 1.1. In quantum terms (PTAL) the site has excellent accessibility to a range of public transport services. In quality terms, given the diversity and complementarity of the public transport services (being both radial and orbital with quick connections to the heart of the West End and the King's Cross area), the location can only be viewed as outstanding and entirely appropriate for a high intensity land use (in terms of daily trip generation).

10.3 PPG 13 on Transport which was re-issued by the Government in 2001 was replaced by the NPPF in March 2012 - which re-established the policy background for this subject area, stating that Transport Assessments and Travel Plans should be submitted with all planning applications for developments likely to have significant transport implications. The Transport Assessment (TA) has been prepared by Tim Spencer & Co. The report examines the transport aspects of the development and has been prepared in accordance with Transport for London's (TfL) Transport Assessment Best Practice Guidance document (May 2006).

10.4 In quantum terms (PTAL) the site has excellent accessibility to a range of public transport services. In quality terms, given the diversity and the complementary nature of the public transport services (being both radial and orbital with quick connections to the heart of the West End and the King's Cross area), the location can only be viewed as outstanding and entirely appropriate for a high intensity land use (in terms of daily trip generation). Public Transport Accessibility Levels (PTALs) are a detailed and accurate measure of the accessibility of a point to the public transport network, accounting for walk access time and service availability. The PTAL is categorised in levels from 0 to 6, where 0 represents poor access to public transport and 6, excellent accessibility. Level 6 has been further sub-divided into 2 sub-levels (6a and 6b) to provide greater clarity. The 6a PTAL figure has been confirmed by the on-line TfL PTAL calculator. This is based on a service database from 2008 to it is quite likely that the recent frequency improvement will have elevated the Midland Crescent 'Accessibility Index' into the 6b category – the highest possible.

10.5 A key feature of the travel demand associated with student accommodation is that the arrival and departure time profiles are quite different from any other form of development. The majority of journeys, at 66%, will happen outside of the Transport for London peak periods. The busiest period for travel is 13.30 to 14.00 o'clock. The hourly travel demand in the 3-hour AM peak period (7 to 10 hours) is half that of the inter-peak and evening periods. Only 25% of the travel demand will occur in the PM peak period (16 to 19 hours) at an hourly rate only slightly higher than the average off-peak hour. These facts have significant implications for the capacity assessment of the forecast travel demand.

10.6 The proposed development is located within a 3 minute walk of Finchley Road Station. The Jubilee Line and Metropolitan Line are very complementary in that the Jubilee Line dissects the West End, by way of Bond Street and Green Park, and the Metropolitan Line skirts around the central area and connects to the City of London by way of King's Cross St Pancras. Both services have seen important capacity improvements in recent times. The Metropolitan Line has new high capacity trains and the Jubilee Line has seen the train lengths increased from 6 to 7 carriages per train. There are numerous important interchanges in central London that add to the quality of the services.

10.7 The proposed site at Midland Crescent is well served by bus routes with high frequency bus services along Finchley Road. The six services are all high frequency routes with scheduled waiting times of between 4.4 and 6.2 minutes – in which translates into a scheduled frequency of 10 to 14 services per hour in each direction. The aggregated services frequency is some 70 services an hour in each direction.

10.8 Finchley Road and Frognal London Overground station is also located within a 3 minute walk of the Midland Crescent development. As has been the case within the tube services there have been significant improvements to the quality and capacity of the train service in recent years, which run at 8 services an hour in each direction. There have also been significant improvements to the station facilities.

10.9 A draft, site specific, full Travel Plan has been developed for the development with the aim of promoting sustainable modes of travel and reducing reliance on the private car. This draft full Travel Plan will be submitted as a separate document alongside the application as required by TfL. Assuming planning permission is granted, the Section 106 agreement will require that a formal version of this document is submitted for approval.

10.10 The main 'move in' period for new students at the beginning of every academic year would be spread over three or four days. This would be managed by the on-site management team, employed directly by the managing agent, CRM. All students would be advised of the date and time for arrival to take up occupancy of their room. It would be made clear to students that the allocation of time slots is for their benefit to ensure a smooth and trouble free move in and minimise any localised disruption in terms of vehicular movements.

10.11 Servicing for the student accommodation and residential units would take place from the 'Red Route' loading bay within the Finchley Road. The time limitation to fit with the bus lane, with no loading between 16:00 and 19:00 hours is unlikely to cause any difficulties because most of the servicing activity would be expected to occur before that time.

10.12 There is currently a vehicular access at the south east end of the development site from Finchley Road. This access would be permanently removed and the footways shall be improved to serve the new development and local pedestrian activity. No new vehicular access is proposed to the site.

10.13 The main transport planning conclusions drawn from the Transport Assessment are as follows;

- The project is compliant with transport policies at all levels;
- The site has excellent accessibility to all modes of travel;
- The impact on all transport networks will be minimal;
- The planning application is also supported by a well-developed draft Travel Plan that can be secured through the planning obligations;
- The development will not result in any form of congestion;
- The project will maximise facilities for cyclists;
- The project will deliver improvements to local pedestrian facilities;
- The site is within a strategically important development area and will contribute to achieving the overall objectives in making best used of valuable land resources in an area of excellent transport accessibility;
- The transport connections into central London from the Finchley Road area will allow residents to access a large number of higher education institutions within a short travel time.