



Pentavia, Mill Hill

London NW7 2ET

Framework Travel Plan

Date: 15/03/19

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1 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

- 1.1.1 Velocity Transport Planning was appointed by Meadow Residential in October 2017 to provide Framework Travel Plan (FTP) in relation to the redevelopment of Pentavia Retail Park, in the Mill Hill ward, to the north of the London Borough of Barnet (LBB). The location of the site is illustrated on **Figure 1-1** below.

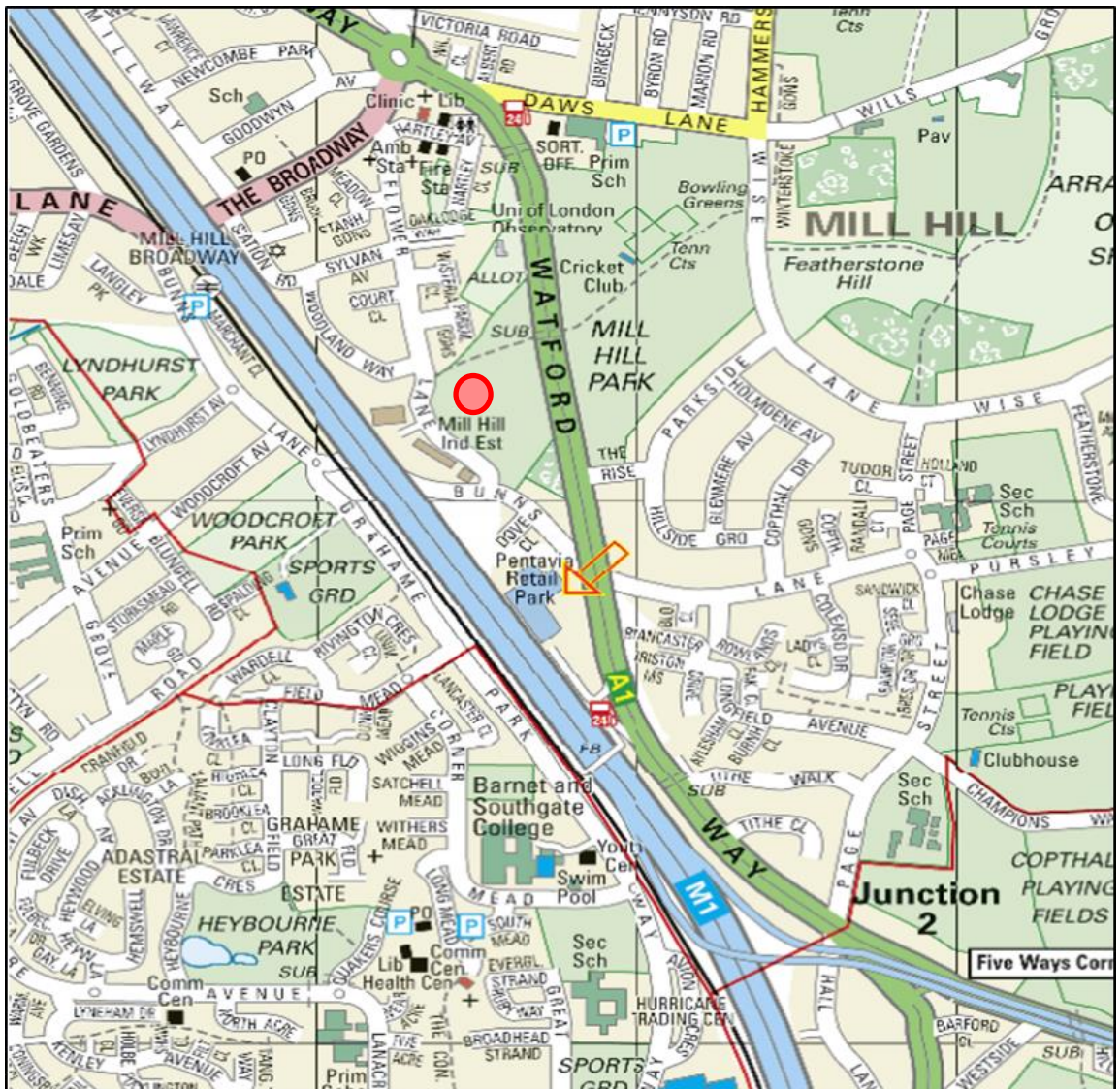


Figure 1-1: Site Location Plan

1.2 EXISTING SITE DESCRIPTION

- 1.2.1 The site consists of a former out-of-town retail park with associated parking. The retail development comprised 9,717sqm of A1 / A3 floor space (9,053sqm A1, 644sqm A3).

1.2.2 The Pentavia Retail Park was built in the early 1990s following planning consent in 1988 for a scheme comprising non-food retail warehouses, a garden centre and petrol station. Prior to 1988 the site had been used as allotments and a sports ground as well as a construction site for the M1.

1.2.3 Up until 2015 the site had been occupied by major national retailers including Homebase, Comet and Argos (Use Class A1). Since September 2015 the site has been temporarily occupied by Kosher Outlet Store. More recently a TGI Friday restaurant (Use Class A3) ceased trading from the site.

1.3 PROPOSED DEVELOPMENT

1.3.1 The proposed development comprises the demolition of all existing buildings and construction of 844 new Class C3 residential units and ancillary Class C3 Build to Rent facilities; 405sqm Gross Internal Area (GIA) Class A1 Retail; 326sqm (GIA) Class A3 and A4 food; and 297sqm (GIA) Class D1 Community; new pedestrian access to Bunns Lane; open space, landscaping; car parking; and highway/pedestrian improvements. It is anticipated that works could take place between 2019 and 2023.

1.3.2 The proposals will transform Pentavia Retail Park into a thriving and sustainable neighbourhood with green public parks and local amenities; a destination for people to live, work and enjoy. It will help to address Barnet's housing need by delivering high quality affordable homes.

1.3.3 The proposals will unlock this constrained site with new pedestrian routes and cycle links. This will create economic benefits to the local area as the development will help to increase footfall and spending on Mill Hill Broadway.

1.4 TRAVEL PLAN BACKGROUND

1.4.1 Travel Plans are strategies for managing multimodal access to a site or development that focus on maximising the potential for sustainable modes of transport. They set out the objectives of the plan, a range of measures to be implemented to achieve the objectives, and the means by which success of the plan will be monitored. Benefits from Travel Plans include:

- ⊙ Increase in walking and cycling, with associated health gains;
- ⊙ Reduced noise, congestion, pollution and improved conditions for freight distribution associated with reductions in car use;
- ⊙ Improved social inclusion;
- ⊙ Improved staff recruitment and retention (for commercial uses);
- ⊙ The opportunity to contribute to environmental management standards such as ISO14001;
- ⊙ Good public relations for businesses in their local community;
- ⊙ Financial savings;
- ⊙ Better estate management, and
- ⊙ Improved security and reduced fear of crime from better car parking management.

1.4.2 This report sets out a FTP for the proposed mixed use development and provides an over-arching framework which will drive the production of the future Full Travel Plan, once the site becomes occupied.

1.4.3 With regards to the flexible commercial land uses, it is recommended that the details contained within this TP are taken forward by the future occupant/operator of the commercial use to form a Travel Plan relevant to the specific organisation.

1.4.4 This FTP has been prepared in line with DfT's Travel Plan guidance *Good Practice Guidelines: Delivering Travel Plans through the Planning Process* document, and the Transport for London (TfL) document *Travel Planning for New Development in London*.

1.5 TRAVEL PLAN SCOPE

1.5.1 This FTP is a framework strategy providing sustainable travel options and measures for the proposed development at Pentavia Retail Park. Once the development proceeds through to occupation, this framework will be used to develop a full Travel Plan for the site.

1.5.2 This FTP has been written as a stand-alone document. Once further information on the site occupiers becomes available it will contain more detail information that will form a basis for preparation of the Full Travel Plan, with site-specific targets and monitoring strategy.

1.5.3 The remainder of this document is structured as follows;

- **Section 2** - Outlines relevant national, regional and local policies;
- **Section 3** - Outlines the site location and accessibility by non-car modes;
- **Section 4** - Outlines the development proposals and anticipated multi-modal trip generation of the site;
- **Section 5** - Outlines the development access strategy;
- **Section 6** - Outlines the development access parking strategy;
- **Section 7** - Outlines the anticipated multi-modal trip generation of the site;
- **Section 8** - Sets out the objectives and targets of the TP;
- **Section 9** - Outlines the TP strategy including how it will be managed;
- **Section 10** - Sets out the measures that will be implemented to help achieve the objectives and targets of the TP;
- **Section 11** - Outlines the monitoring and review programme which will ensure the TP continues to develop; and
- **Section 12** - Sets out an Action Plan for the site.

1.5.4 This FTP is supported by a Transport Assessment (TA), Delivery and Servicing Plan (DSP) and Car Park Management Plan (CPMP) prepared by Velocity Transport Planning, and is submitted as part of the full planning application (as Technical Appendix to the Environmental Statement).

2 POLICY CONTEXT

2.1.1 This section considers relevant transport and planning policy as follows;

- ⊙ National Planning Policy Framework (NPPF);
- ⊙ The London Plan (2016);
- ⊙ The Mayor's Transport Strategy, May 2010;
- ⊙ London Borough of Barnet's Local Development Framework Core Strategy; and
- ⊙ London Borough of Barnet Development Management Policies Local Plan.

2.2 NPPF (2018)

2.2.1 The National Planning Policy Framework (NPPF) was adopted in July 2018 and sets out the Government's planning policies for England and how these should be applied and provides a framework within which locally-prepared plans for housing and other development can be produced. At its heart the NPPF sets out a presumption in favour of sustainable development (Paragraph 11).

2.2.2 The NPPF promotes sustainable transport. It notes that transport issues should be considered at the earliest stages of development proposals.

2.2.3 Chapter 9 of the revised NPPF sets out the requirements for promoting sustainable transport advising that significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. The NPPF advises that planning policies should support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities.

2.2.4 Paragraph 109 of the NPPF states that "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe" and in this context that planning applications should:

- ⊙ give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second so far as possible to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- ⊙ address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- ⊙ create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- ⊙ allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- ⊙ be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

2.2.5 Paragraph 111 of the NPPF requires all developments that will generate significant amounts of movement to provide a travel plan and be supported by a transport assessment so that the likely impacts of the proposal can be assessed.

2.3 THE LONDON PLAN (2016)

2.3.1 The London Plan is the overall strategic plan for London, and it sets out a fully integrated economic, environmental, transport and social framework for the development of the capital to 2036. It forms part of the development plan for Greater London. London boroughs' local plans need to be in general conformity with the London Plan, and its policies guide decisions on planning applications by councils and the Mayor.

2.3.2 On 10th March 2015, the Mayor published (i.e. adopted) the Further Alterations to London Plan (FALP). From this date, the FALP are operative as formal alterations to the London Plan and form part of the development plan for Greater London. The London Plan has been updated to incorporate the Further Alterations. The revisions proposed have been considered in the review of the London Plan provided here.

2.3.3 In March 2016 the Mayor published Housing Standards and Parking Standards Minor Alterations to the London Plan. These have been considered in this report.

2.3.4 The Mayor's Vision and Objectives for London are set out in Chapter 1 and include the City being made up of diverse, strong, secure and accessible neighbourhoods where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities.

2.3.5 Chapter 6 of the London Plan provides transport policy. Policy 6.1 – Strategic Approach states “The Mayor will work with all relevant partners to encourage the closer integration of transport and development through the schemes and proposals shown in Table 6.1 and by:

- ⊙ Encouraging patterns and nodes of development that reduce the need to travel, especially by car – boroughs should use the standards set out in Table 6.2 in the Parking Addendum to this chapter to set maximum car parking standards in DPDs;
- ⊙ 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 6.3 in the Parking Addendum to set minimum cycle parking standards in DPDs;
- ⊙ supporting development that generates high levels of trips at locations with high public transport accessibility and/or capacity, either currently or via committed, funded improvements including, where appropriate, those provided by developers through the use of planning obligations (see Policy 8.2);
- ⊙ improving interchange between different forms of transport, particularly around major rail and Underground stations, especially where this will enhance connectivity in outer London (see Policy 2.3);
- ⊙ promoting walking by ensuring an improved urban realm, and
- ⊙ seeking to ensure that all parts of the public transport network can be used safely, easily and with dignity by all Londoners, including by securing step free access where this is appropriate and practicable”.

2.3.6 Policy 6.9 provides policy on cycling and it is recommended that planning decisions should ensure that new developments have secure, integrated, convenient and accessible cycle parking facilities in line with the minimum standards outlined in the plan and guidance set out in the London Cycle Design Standards. Development should positively contribute to an integrated cycling network by providing safe infrastructure that is also comfortable, adaptable and attractive.

2.3.7 Policy 6.10 provides policy on walking and recommends that planning decisions should ensure that developments have a high quality pedestrian environment and emphasise the quality of pedestrian and street space by referring to TfL's Pedestrian Design Guidance. Table 6.3 provides minimum standards for cycle parking provision. For residential units the minimum standards are:

- ⦿ 1 space per studio and 1 bedroom units and 2 spaces per all other dwellings for long stay; and
- ⦿ 1 space per 40 units for short-stay (visitors).

2.3.8 Parking Standards Minor Alterations to the London Plan were published in March 2016 providing updated parking standards for residential development. The parking standards set out that in an area of public transport accessibility level (PTAL) of 0-1 up to two spaces could be provided per unit. In an area of PTAL of 2-4 up to 1.5 spaces could be provided per unit. It is noted in Table 6.2 of the London Plan parking standards that in outer London areas with a low PTAL (0-1), boroughs should consider higher levels of provision to minimise impact due to overspill parking to on-street.

2.4 THE MAYOR'S TRANSPORT STRATEGY (2018)

2.4.1 The Mayor's Transport Strategy (MTS) was published in March 2018 and sets out the Mayor's policies and proposals to reshape transport in London over the next 25 years.

2.4.2 The central aim of the MTS is for 80% of all trips in London to be made on foot, by cycle or using public transport by 2041.

2.4.3 Three key themes are at the heart of the strategy:

1. Healthy Streets and healthy people

The MTS promotes a new Healthy Streets approach to reduce car dependency and increase active, efficient and sustainable travel. Streets environments should be designed to encourage walking and cycling to assist Londoners with staying healthy.

2. A good public transport experience

For longer trips public transport is the most efficient way for people to travel and should be attractive to facilitate a mode shift away from car use. Improvements to the public transport network are outlined including new infrastructure.

3. New homes and jobs

The MTS sets out Good Growth principles for the delivery of new homes and jobs that use transport to:

- Create high-density, mixed-use places; and
- Unlock growth potential in underdeveloped parts of the city

2.4.4 The MTS outlines transport principles of Good Growth as being:

- ⊙ Good access to public transport
- ⊙ High-density, mixed-use developments
- ⊙ People choose to walk and cycle
- ⊙ Car-free and car-lite places
- ⊙ Inclusive, accessible design
- ⊙ Carbon-free travel
- ⊙ Efficient freight

2.4.5 Delivery and actions plans are being developed which include more detail about how the Mayor and TfL will achieve the Mayor's Transport Strategy proposals. These will include new actions and initiatives that are in line with the policies of the strategy.

2.4.6 The first of these plans, the Walking action plan, is aimed at making London the world's most walkable city, with a target to increase the number of walking trips by more than one million a day by 2024.

2.4.7 To achieve the Walking Vision, there is a need to enable more people to walk part or all of their journey; improve the experience of walking in London; and reduce car dependency by encouraging mode shift from private car to walking.

2.4.8 The aim of Vision Zero is to eliminate all deaths and serious injuries on London's transport system. This plan focuses on the area where the greatest challenges lie - London's streets.

2.4.9 The Cycling Action Plan aims to make the Capital a place where cycling is an accessible and inclusive way of getting around, so everyone can share the benefits.

2.5 LOCAL PLANNING POLICY; CORE STRATEGY SEPTEMBER (2012)

2.5.1 The Core Strategy was adopted in September 2012 and sets out the vision for the LBB Local Plan, objectives and policies. LBB core objectives include; to manage housing growth to meet housing aspirations, to meet social infrastructure needs, to provide safe, effective and efficient travel and to ensure efficient use of land and natural resources.

- ⊙ Guiding developments to town centres are areas accessible by public transport and ensuring design encourage travel by walking, cycling and public transport;
- ⊙ Encouraging walking and cycling and providing an attractive public realm; and
- ⊙ Promoting car-free and car-capped developments.

2.5.2 Policy CS9 relates to providing safe, effective and efficient travel and state that the council will promote the delivery of transport infrastructure that will support growth and reduce the impact of travel. The council will prioritise the reduction of congestion and invest in improvements to the road and footway network.

2.6 LBB LOCAL PLAN - DMP

2.6.1 The DMP forms part of the LBB Local Plan and was adopted in September 2012. The DMP sets out the policy framework by which planning applications are decided on.

2.6.2 Policy DM 17 of the DMP document sets out the policies that are intended to facilitate the development of a safe, effective and efficient transport system. The following are set out in the policy:

- a. *Road safety*
The council will ensure that the safety of all road users is taken into account when considering development proposals, and will refuse proposals that unacceptably increase conflicting movements on the road network or increase the risk to vulnerable users.
- b. *Road hierarchy*
The council will seek to ensure that roads within the borough are used appropriately according to their status in the defined road hierarchy. In taking into account the function of adjacent roads the council may refuse development proposals which would result in inappropriate road use, or adversely affect the operation of roads in an area.
- c. *Development, location and accessibility*
The council will expect major development proposals with the potential for significant trip generation to be in locations which are, or will be made, highly accessible by a range of transport modes.
- d. *Transport assessment*
In considering planning applications for new development, the council will require developers to submit a full Transport Assessment (as defined by Department for Transport threshold) where the proposed development is anticipated to have significant transport implications in order to ensure that these impacts are considered. This assessment should include an analysis of accessibility by all modes of transport.
- e. *Travel planning*
For significant trip generating developments, (defined by Transport for London thresholds), the council will require the occupier to develop, implement and maintain a satisfactory Travel Plan (or plans) to minimise increases in road traffic and meet mode split targets. In order to ensure that they are delivering this the travel plan will need to contain measurable outputs so that they can be monitored.
- f. *Local infrastructure needs*
 - i. *Developments should be located and designed to make the use of public transport more attractive for all users by providing improved access to existing facilities, and if necessary the development of new routes and services, including improved and fully accessible interchange facilities.*
 - ii. *The council will expect development to provide safe and suitable access arrangements for all road users to new developments. Where improvements or changes to the road network are necessary by virtue of an approved development, the council will secure a Legal Agreement from the developer.*

- iii. *The council will require appropriate measures to control vehicle movements, servicing and delivery arrangements. Where appropriate the council will require Construction Management and/or Delivery and Servicing Plans.*
 - iv. *Where appropriate, development will be required to improve cycle and pedestrian facilities in the local catchment area by providing facilities on site and/or funding improvements off site.*
- g. *Parking management*
- i. *The council will expect development to provide parking in accordance with the London Plan standards, except in the case of residential development, where the maximum standards will be:*
 - 1. *2 to 1.5 spaces per unit for detached and semi-detached houses and flats (4 or more bedrooms);*
 - 2. *1.5 to 1 spaces per unit for terraced houses and flats (2 to 3 bedrooms); and*
 - 3. *1 to less than 1 space per unit for development consisting mainly of flats (1 bedroom).*
 - ii. *Residential development may be acceptable:*
 - 1. *With limited or no parking outside a Controlled Parking Zone (CPZ) but only where it can be demonstrated through a survey that there is sufficient on street parking capacity.*
 - 2. *With limited or no parking within a CPZ, where it can be demonstrated that there is insufficient capacity on street the applicant will be required to enter into a legal agreement to restrict future occupiers from obtaining on street parking permits. For proposals in close proximity to the edge of a CPZ a survey will also be required to demonstrate that there is sufficient on street parking capacity on streets outside the CPZ.*

3 SITE LOCATION AND ACCESSIBILITY

3.1.1 This section considers the baseline conditions at the site and in the area surrounding the site; including access by all modes of transport, and local highway network conditions.

3.2 EXISTING SITE

3.2.1 The application site is bounded by the A1 to the east and the M1 to the west, (see **Figure 1**). The Watford Way forms part of the Transport for London Road Network (TLRN). The site is closely located to Bunns Lane to the north, but is currently segregated from the site by an area of vegetation.

3.2.2 Vehicular access/egress to the site is only available from the northbound carriageway of the A1. Access and egress is via the A1 off and on-slip roads respectively, connected to a three arm roundabout from where access to the existing Pentavia Park is achieved. Access to the site for drivers travelling southbound on the A1 requires drivers to undertake a U-turn manoeuvre at Fiveways Corner; a signal controlled intersection located 1.8km further south of the site. Drivers wishing egress the site and travel south are required to undertake a U-turn at Mill Hill Circus, a 4-arm roundabout with partial signalisation located 2.5km north of the site.

3.2.3 A nursery is located immediately north of the site (about 650m walking distance); the nearest primary school is located north-west of the site (about 1km walking distance), with overall four primary schools located within a 1km radius from the site. An Infant School and Junior School are located east of the site on Pursley Road. There are three secondary schools at about 1km walking distance from the site.

3.2.4 The nearest grocery store is a Costcutter on Long Mead south west of the site, with a number of café/ small grocery stores/ restaurants located on The Broadway, about 1,5km walking distance north of the site.

3.2.5 The wider area has a number of larger supermarkets, parks and green areas and notably a rugby stadium, Allianz Park, is located south east of the site.

3.3 LOCAL HIGHWAY NETWORK

3.3.1 Based on site visit observations and discussions with Highway Officers in Barnet the roads likely to be impacted by the development are the following:

- ⊙ A1 Watford Way / Great North Way;
- ⊙ Bunns Lane;
- ⊙ Flower Lane;
- ⊙ Page Street; and
- ⊙ The Broadway.

A1 Watford Way / Great North Way

- 3.3.2 The A1 is located adjacent to the site. The road is a trunk road with a dual carriageway. Each carriageway has three lanes and the speed limit is 50mph. The traffic flows are separated by an approximately 2.5m wide built up median with guard railing and fencing.
- 3.3.3 The A1 forms part of the strategic network and connects to the M1 to the north and A41 to the south. It is served by the 113 and N113 bus services.
- 3.3.4 It forms part of the strategic network and connects to the M1, Fiveway Corner and Page Street. It is served by the 113 and N113 bus services. The road is extensive and connects to a number of side roads such as The Rise, Tithe Walk and Tithe Close.
- 3.3.5 The A1 has a number of junctions in proximity to the site. Fiveways Corner is a signalised network of junctions connecting A1 Watford Way, A1 Great North Way, A41 Watford Way, Hall Lane and Page Street. Signalised pedestrian crossing facilities are located on Page Street, A41 Watford Way and Great North Way.
- 3.3.6 Page Street forms a signalised priority junction with A1 Watford Way and represents the minor arm of the junction. Traffic coming from Page Street is allowed left turn only southbound on A1 Watford Way. Those seeking to head north on A1 Watford Way would head south and undertake a U-turn at the junction of Five Ways Corner. Traffic from northbound carriageway of the A1 Watford Way can undertake a right turn into Page Street. The junction has a yellow box to ensure that traffic is not stopped.
- 3.3.7 Mill Hill Circus is a part signalised roundabout. The signal controls traffic driving past the entry to the roundabout from A1 Watford Way in both northbound and southbound direction. Additionally, there are signalised pedestrian crossings on A1 Watford Way on the entry and exit arms of the roundabout.
- 3.3.8 The Broadway and Lawrence Street arms are give way arms. All entry arms of the roundabout have three lanes albeit the arms entry arms on The Broadway and Lawrence Street have short flare entry as the third lane. The roundabout has three circulatory lanes.
- 3.3.9 The junction of A1 Watford Way and Halls Lane is a priority junction with Halls Lane being the minor arm. Halls Lane can be entered by northbound traffic only on the A1 and egress is in the northbound direction only as well. This results in left turns to access the road and left turns to egress the road.

Bunns Lane

- 3.3.10 Bunns Lane has a single carriageway and extends from the mini roundabout with Hale Lane and The Broadway to the mini roundabout with Page Street. The road is a principal road, located in a predominantly residential area and features a 30mph speed limit.
- 3.3.11 There are single yellow lines in place on both sides of the road for the full length of the road. The single yellow lines located north west of the M1 are in force Monday to Saturday 8am to 6.30pm. East of the M1 the single yellow lines are in force 1pm to 6pm on event days.
- 3.3.12 Parking is provided on footways east of the M1. The parking bays are for resident permit holders only during event days between 13:00-18:00. A number of unrestricted parking bays are provided on-street west of the M1.
- 3.3.13 The north west section of the road has a painted median which is approximately 3m wide. Along the road are ghost right turn lanes for those accessing residential roads to the west or office or Mill Hill Broadway rail station car park located on the east side.

- 3.3.14 The residential roads that connect to Bunns Lane to the north and south all form part of a permit parking area which is in force on event days between 13:00-18:00.
- 3.3.15 Bunns Lane and Lyndhurst Avenue are connected via a mini-roundabout. The roundabout also provides access to a car park for 120 Bunns Lane. An uncontrolled pedestrian crossing is located on the southern section of Bunns Lane with a central reserve island.
- 3.3.16 Bunns Lane and Woodcroft Avenue are connected via a priority junction with Woodcroft Avenue being the minor arm. A ghost right turn lane is provided for southbound traffic making a right turn into Woodcroft Avenue.
- 3.3.17 An uncontrolled pedestrian crossing is provided south of the junction with dropped kerbs and tactile paving.
- 3.3.18 The junction of Bunns Lane and Flower lane is a priority junction with Flower Lane being the minor arm. A ghost right turn is provided for traffic coming from the east turning into Flower Lane.
- 3.3.19 A zebra crossing is located east of the junction with a central reserve island, tactile paving and dropped kerbs.
- 3.3.20 An uncontrolled crossing is located on Flower Lane with a central reserve island. Tactile paving and dropped kerbs are provided on the footway on either side.

Flower Lane

- 3.3.21 Flower Lane is approximately 6-7m wide and is bound by The Broadway to the north and Bunns Lane to the south and forms priority junctions with both roads. The road is located in a residential area and provides access to numerous private properties as testified by the many dropped kerbs that lead into private driveways.
- 3.3.22 The road is marked with single yellow line restrictions on both sides and is located within a Controlled Parking Zone (CPZ) with a restriction from Monday to Friday between 11:00-12:00 and between 13:00-18:00 on event days. The road is marked with double-yellow lines on both sides in the vicinity of the junction with The Broadway. The road includes sporadic Permit Holders Only car parking bays.
- 3.3.23 The road features spacious pedestrian footways, with a minimum width of 3m, on both sides and regular lighting columns. The footways often feature grass verges, particularly along the western footway. Informal pedestrian crossing facilities are located at the junctions with The Broadway and Bunns Lane.

Page Street

- 3.3.24 Page Street is located in a residential area and forms the minor arm of the priority junction with Wise Lane. The road extends towards the south, forming a priority junction with Tudor Close and mini roundabouts with Bunns Lane and Pursley Road.
- 3.3.25 The road is approximately 6m wide with a 30mph speed limit. The road provides access to Copthall School and Chase Lodge Hospital, located on the eastern side of the link.
- 3.3.26 The section of the road located north of the mini roundabouts does not feature a pedestrian footway on the eastern side of the road. Footways on both sides of the road are present in the vicinity of the mini roundabouts and along the southern section of Page Street. The footways are relatively spacious, particularly the western footway which is approximately 4-5m wide. The footways often include grass verges that provide separation from the road. The road is generally well lit with light columns provided at regular intervals.

3.3.27 The road features a number of Permit Holders Only car parking bays and is marked with a single-yellow line stopping restriction from Monday to Saturday between 08:30-18:30 and between 13:00-18:00 on Sundays during event days.

3.3.28 Zebra crossing facilities featuring a pedestrian island are located approximately 20m north of the mini roundabout with Bunns Lane and on Pursley Road at the second mini roundabout.

The Broadway

3.3.29 The Broadway is a two lane road that forms a mini roundabout with Hale Lane and Bunns Lane and extends to the north-east before forming a large signalised roundabout with Watford Way, Goodwyn Avenue and Lawrence Street. The road features an overhead bypass, the M1, in the vicinity of the mini roundabout and provides access to numerous commercial facilities.

3.3.30 The road is approximately 8-9m wide, although the presence of car parking spaces (primarily Pay and Display) and bus stop lanes ensures that the overall width of the link is not consistent. The footways on both sides of the road are spacious and reach up to 7m in width.

3.3.31 The road features a number of pelican crossing facilities. Crossing points are located in the vicinity of the junction with Flower Lane, Brockenhurst Gardens and Station Road.

3.4 WALKING

3.4.1 Pedestrian access to the site is possible from the western side of the A1 (Watford Way) via an existing footway. Connectivity to the west of the site is achieved via a pedestrian bridge over the M1 approximately 200m south of the site and via a subway under the railway line at the southern end of the site. This route connects to Grahame Park Way.

3.4.2 It is noted that there is no direct access to the site from Bunns Lane. Pedestrians that intend to approach the site from Bunns Lane are required to walk up a staircase that connects to the western footway of the A1 and then access the site. The staircase is located approximately 230m north of the main access to the site, where Bunns Lane is located beneath the A1. Additionally, the western footway of the A1 can be accessed from Bunns Lane from a pedestrian ramp located approximately 90m north-west from the underpass. The ramp features a guardrail and leads to a bus stop on the A1.

3.4.3 A pedestrian underpass which links the western footway of the A1 to Tithe Walk is located approximately 350m south-east from the site and enables pedestrians to access bus stops for buses that travel southbound.

3.4.4 A pedestrian link to the site is also available from Grahame Park Way, where an underpass allows pedestrians to walk underneath the railway line and access a footway bridge that enables them to cross the M1 and access the site.

3.4.5 A number of uncontrolled pedestrian crossing facilities are located along Bunns Lane, with a zebra crossing with flashing beacons and a central pedestrian island located near the junction with Flower Lane. An additional zebra crossing facility is located near the mini roundabout between Bunns Lane and Page Street and features flashing beacons and tactile paving on both sides of the road.

Pedestrian Crossing

3.4.6 Zebra crossing facilities with flashing beacons are located on Watling Avenue, near Goldbeaters Grove, and on Bunns Lane, near Flower Lane. Uncontrolled crossing facilities are located on Watling Avenue, Bunns Lane and Woodland Way.



Figure 3-1: Zebra crossing on Watling Avenue



Figure 3-2: Zebra crossing on Bunns Lane

- 3.4.7 The zebra crossing facility located on Watling Avenue features pedestrian guardrails on both sides, enhancing the safety of users. The crossing capacity of both facilities is good and allows multiple pedestrians to cross per time.
- 3.4.8 The flashing beacons of both facilities ensure that drivers are warned that pedestrians have preference in crossing the road. The dropped kerbs of both facilities are in line and at an acceptable gradient. The approaches to the crossings are not obstructed by signage or lampposts.



Figure 3-3: Uncontrolled crossing on Bunns Lane

- 3.4.9 There is a total of eight uncontrolled crossing facilities on Bunns Lane, two on Watling Avenue, one on Flower Lane and one on Woodland Way. Two uncontrolled crossings, located at the lower end of Bunns Lane on Links 6 and 7, include dropped kerbs and a pedestrian island but no tactile paving. All other crossing on Flower Lane and Bunns Lane include dropped kerbs with tactile paving and a pedestrian island. The crossing on Woodland Way has dropped kerbs with tactile paving as shown in **Figure 3-4**.



Figure 3-4: Uncontrolled Crossing on Woodland Way

- 3.4.10 A Pedestrian Environment Review System (PERS) audit was undertaken on Wednesday 17th August 2016 to understand pedestrian environmental conditions in the area full detail on the outputs are provided within the TA.
- 3.4.11 A footway capacity assessment was carried out to assess a Pedestrian Comfort Level (PCL) along the key routes that are expected to be most utilised by pedestrians to access the proposed development. The capacity assessment of the existing pedestrian crossings on Flower Lane and Bunns Lane identified that the existing facilities provide high levels of comfort for pedestrians, with PCL A+, which provides plenty of space for people to walk at the speed that they choose and results in less than 3% of restricted movements. Full details are provided within the TA.

3.5 CYCLING

- 3.5.1 **Figure 3-5** below indicates that there is an off-road cycle route which extends south to Hendon and on to Brent Cross. Grahame Park Way that runs parallel to the M1 is also signed for cyclists. This route can be accessed by cyclists via the provision of the subway and footbridge, but cyclists are required to dismount as cycling is not permitted.

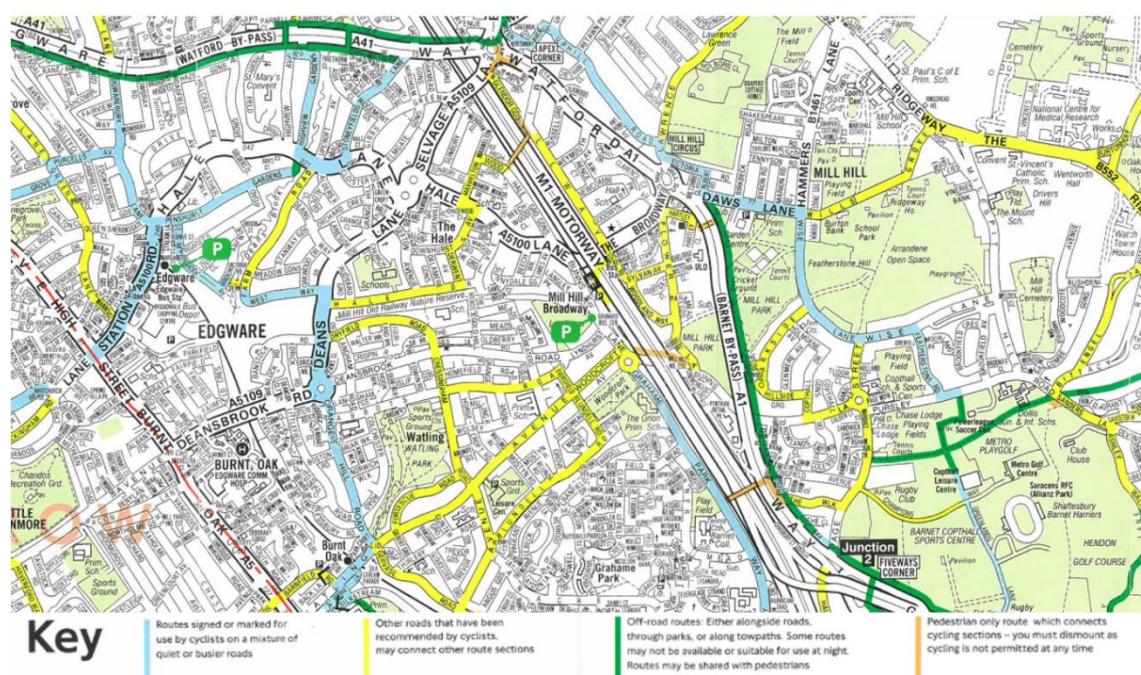


Figure 3-5: Local Cycle Map (obtained from TfL Cycle Maps)

3.6 PUBLIC TRANSPORT ACCESSIBILITY LEVEL

- 3.6.1 PTAL for the Site has been reviewed using WEBCAT that showed that the site has PTAL between 1a and 2 depending on the location within the site. The variation of PTAL across the site can be seen from the WEBCAT extract in **Figure 3-6**.

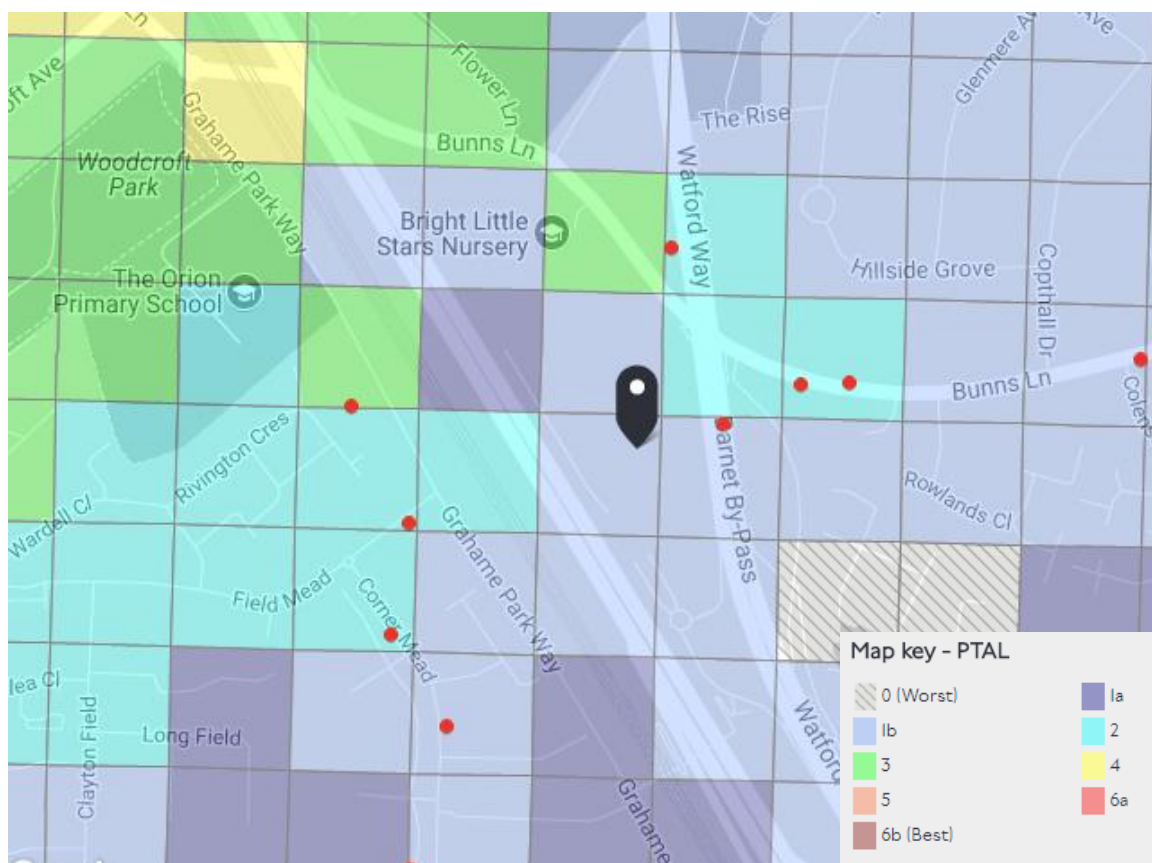


Figure 3-6: WEBCAT PTAL Output

- 3.6.2 Given that the WEBCAT Output does not provide significant detail in terms of PTAL and is based on a grid system, a site specific PTAL assessment has been carried out in accordance with the TfL Methodology.
- 3.6.3 The TA further considered that an 8 minute walk to a bus stop, and 12 minute walk to a rail station is well within what is considered reasonable by the average person, and that in reality commuters regularly walk greater distances / for longer. Given that the PTAL methodology does account for variation in distance / access time by a weighting within the calculation, it has been deemed reasonable to consider what the PTAL score would be by extending the parameters of the calculation to include for a 15 minute walk to both bus stops and rail stations.
- 3.6.4 The full assessment of the site by application of the above extended PTAL assessment is contained within the TA and demonstrates that the site scores a PTAL 3 across its full extent when a walking distance to access public transport services of 15 minutes is considered.
- 3.6.5 It is concluded that the site has much better access to public transport services than the TfL WebCAT PTAL would suggest.

3.7 ACCESSIBILITY BY BUS

- 3.7.1 The closest bus stop to the site is on the northbound carriageway of the A1 adjacent the existing petrol station at the southern end of the site and serves the northbound bus route. The bus stop is located within a five-minute walking distance from Pentavia Retail Park.

- 3.7.2 Access to southbound bus stops can be accessed via two routes. Pedestrians can head north on the western footway of the A1 and take steps down onto Bunns Lane, walk under the A1 and up steps on the eastern side to gain access to the footpath adjacent southbound traffic. Alternatively, pedestrians can walk south on the western side of the A1 to access an underpass which links to Tithe Walk to the east, and bus stop just south of this point.
- 3.7.3 These two bus stops are served by bus route 113/N113 which provides services between Edgware and Marble Arch (5 – 8 buses per hour).
- 3.7.4 A bus route 221 operates frequent service (10-15 buses per hour) between Edgware and Turnpike Lane and provide direct service from the Site to Mill Hill Station. Close bus stops to the site are located on Bunns Lane and are accessed via the steps on the A1.
- 3.7.5 More bus services are available within the residential streets to the west of the M1 (303,302, 251, 114, and 186) and are accessible via the existing subway / footbridge.
- 3.7.6 **Figure 3-8** shows the bus stops in the area surrounding the site.

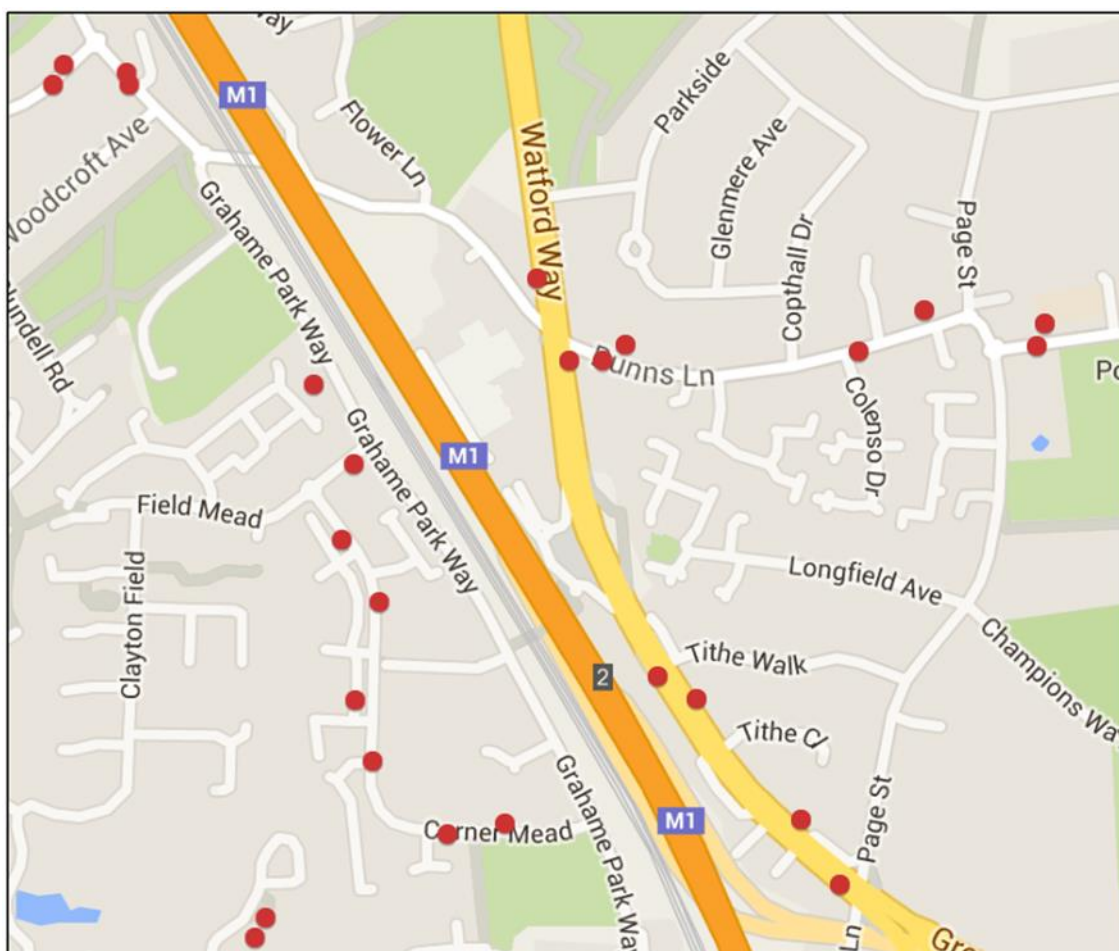


Figure 3-7: Bus Stops Surrounding the Site

- 3.7.7 **Table 3-1** presents the routes, directions and frequencies of the main bus services located within the immediate vicinity of the site. These include bus stops within a 20-minute walking distance from the retail park. The details of the bus routes are available in **Appendix A**.

Service Number	Locations	Direction / Route (Towards)	First / Last Bus	AM Peak Headway (Frequency)	PM Peak Headway (Frequency)
113	A1 / Watford Way / Barnet By-Pass	Marble Arch Station	First 04:40 Last 00:09	5-9 mins (7-12 / hr)	8-11 mins (5-8 / hr)
		Edgware Station	First 06:08 Last 01:38	7-11 mins (5-9 / hr)	7-11 mins (5-9 / hr)
221	Bunns Lane	Turnpike Lane Station	First 05:35 Last 00:30	9-12 mins (5-7 / hr)	10-13 mins (5-6 / hr)
		Edgware Station	First 05:49 Last 00:49	10-12 mins (5-6 / hr)	10-12 mins (5-6 / hr)
302	Lyndhurst Avenue	Kensal Rise Station	First 05:30 Last 00:10	6-10 mins (6-10 / hr)	6-10 mins (6-10 / hr)
		Mill Hill Broadway Station	First 06:19 Last 00:37	6-9 mins (7-10 / hr)	6-9 mins (7-10 / hr)
303	Lyndhurst Avenue	Colindale Superstores	First 05:27 Last 00:07	13-14 mins (4-5 / hr)	15 mins (4 / hr)
		Edgware Station	First 05:37 Last 00:15	15 mins (4 / hr)	14-15 mins (4 / hr)
114	Lyndhurst Avenue / Woodcroft Avenue / Watling Avenue	Ruislip Station	First 04:55 Last 01:15	8-12 mins (5-8 / hr)	8-12 mins (5-8 / hr)
		Mill Hill Broadway Station	First 05:22 Last 01:17	7-11 mins (5-9 / hr)	7-11 mins (5-9 / hr)
186	Lyndhurst Avenue / Woodcroft Avenue	Brent Cross	First 06:08 Last 00:48	9-13 mins (5-7 / hr)	8-12 mins (5-8 / hr)
		St Mark's Hospital	First 05:26 Last 00:01	11-13 mins (5 / hr)	11-13 mins (5 / hr)
251	Lyndhurst Avenue / Woodcroft Avenue / Watling Avenue	Edgware Station	First 05:30 Last 00:20	9-12 mins (5-7 / hr)	9-12 mins (5-7 / hr)
		Arnos Grove Station	First 05:19 Last 00:29	7-12 mins (5-9 / hr)	10-14 mins (4-6 / hr)
240	The Broadway	Edgware Station	First 06:27 Last 01:30	10-14 mins (4-6 / hr)	10-14 mins (4-6 / hr)
		Golders Green Station	First 05:47 Last 00:27	11-14 mins (4-5 / hr)	11-14 mins (4-5 / hr)

Table 3-1: Local Bus Routes

3.7.8 **Table 3-1** indicates that the area is well serviced by buses, with approximately 81-119 and 78-111 buses servicing the wider area during the morning and afternoon peak times respectively.

3.8 RAIL/UNDERGROUND

3.8.1 The nearest railway station is Mill Hill Broadway, located approximately 1.0km from the site and within a 13-minute walking distance. It is served by First Capital Connect running Thameslink services. The typical daytime service from the station is four trains per hour to central London, Wimbledon and Sutton, of which two terminate at St Albans and two at Luton.

3.8.2 Summaries of the service frequencies at Mill Hill Broadway station are presented in **Table 3-2**.

Service	Direction / Destination	First / Last Train	AM Peak Frequency	PM Peak Frequency
Railway (Mill Hill Broadway)	Towards Three Bridges	First 00:03 Last 23:35	None during peak	None during peak
	Towards Bedford	First 00:05 Last 23:37	Service at 09:42	Service at 18:05
	Towards Brighton	First 03:33 Last 03:33	None during peak. Only one service at 03:33	None during peak. Only one service at 03:33
	Towards Sutton	First 05:14 Last 23:18	3-4 services per hour	3-4 services per hour
	Towards St Albans	First 06:06 Last 22:14	2-3 services per hour	2-3 services per hour
	Towards Luton	First 06:32 Last 22:00	1-2 per hour	2 per hour
	Towards Sevenoaks	First 06:32 Last 20:12	1-2 per hour	1-2 per hour
	Towards Bromley South	First 07:10 Last 07:48	2 services between 07:00-08:00	None

Table 3-2: Rail Services

3.8.3 The nearest underground stations are Burnt Oak and Colindale, located 2.0km from the site respectively (25 minutes walking distance), both served by the Northern Line. Mill Hill East station is located 2.8km east of the site and is also served by the Northern Line.

3.8.4 Summaries of the service frequencies at London Underground station is presented in **Table 3-3**.

Service	Accessed via Bus Route	Direction / Destination	First / Last Train	AM Peak Frequency	PM Peak Frequency
Northern Line (Burnt Oak)	302 114	Towards Edgware	First 05:42 Last 01:10	21	20
		Towards Morden / Golders Green	First 05:25 Last 00:47	21	20
Northern Line (Mill Hill East)	221	Towards Finchley Central / Kennington	First 05:25 Last 00:54	5	4
Northern Line (Colindale)	N/A	Towards Edgware	First 05:40 Last 01:08	19	21
		Towards Morden / Golders Green	First 05:27 Last 00:49	21	20
Northern Line (Hendon Central)	113	Towards Edgware	First 05:38 Last 01:05	19	21
		Towards Morden / Golders Green	First 05:30 Last 00:52	21	20

Table 3-3: London Underground Services

3.8.5 **Table 3-3** indicates that the area is well served by London Underground services.

3.9 SUMMARY

3.9.1 The site can be accessed by vehicles (moving northbound) and pedestrians from the A1, where the pedestrian footway is segregated from the road.

3.9.2 The information presented in this chapter indicates that the site has a good level of accessibility by public transport with numerous well serviced bus stops located in the wider area. The presence of a local London Underground and Railway Stations indicates there are plenty of opportunities to travel by non-car modes.

4 DEVELOPMENT PROPOSALS

4.1.1 This section provides a description of the proposed development with reference to schedule of accommodation, access, parking and on-site management.

4.2 SCHEDULE OF ACCOMMODATION

4.2.1 The proposed development comprises the demolition of all existing buildings and construction of 844 new Class C3 residential units and ancillary Class C3 Build to Rent facilities; 405sqm Gross Internal Area (GIA) Class A1 Retail; 326sqm (GIA) Class A3 and A4 food; and 297sqm (GIA) Class D1 Community; new pedestrian access to Bunns Lane; open space, landscaping; car parking; and highway/pedestrian improvements. It is anticipated that works could take place between 2019 and 2023.

4.2.2 **Table 4-1** below sets out the proposed development schedule in more detail.

Proposed Use	Quantum
C3 - Residential	844 Units
C3 - Ancillary	894 sqm GIA
A1 – Convenience Store	251 sqm GIA
A1 – Dry Cleaners/Hairdressers	154 sqm GIA
A3 / A4 – Restaurant / Pub	154 sqm GIA
A3 – Coffee Shop / Café	171 sqm GIA
D1 – Healthcare / Nursery	297 sqm GIA

Table 4-1: Proposed Development Schedule

4.2.3 Proposed ground floor and lower ground floor plans of the development are contained within **Appendix B**.

4.3 PROPOSED RESIDENTIAL ACCOMMODATION

4.3.1 The development will provide 844 residential units in a mix of one, two, and three bedroom units. 458 units are proposed to be Build to Rent (54% of all units), of which 188 units will be offered as affordable housing, comprising 30% London Living Rent (LLR) and 70% Discounted Market Rent (DMR). 386 units will be conventional residential (46% of all units), of which 157 will be offered as affordable housing, comprising 60% London Affordable Rent and 40% shared ownership.

4.3.2 **Table 4-2** provides a breakdown of the number of unit types proposed.

No. of Bedrooms	No. of Units
Studio (1 Person)	4
1 bedroom (2 Person)	281
2 bedroom (3 Person)	96
2 bedroom (4 Person)	340
3 bedroom (5 Person)	24
3 bedroom (6 Person)	99
Total	844

Table 4-2: Proposed Residential Unit Mix

Residential Ancillary Uses

- 4.3.3 The nature of the proposed Build to Rent units means that dedicated space is provided for the ongoing management facility, inclusive of a concierge service that will have a 24-hour presence within the site.
- 4.3.4 Other ancillary uses will also be provided inclusive of a residents post office, meeting space, and a fitness centre for build to rent residents to use exclusively. It is recognised that this also acts to mitigate against vehicle trips that might otherwise be generated for the purposes of accessing these uses, and supports choice against, and those who are unable to afford car ownership.
- 4.3.5 Ancillary uses to the residential development are proposed to be located at ground floor level within the 'inner circus'; a central connective hub at the heart of the development, for socialising, recreation and biodiversity.

4.4 OTHER SITE USES

- 4.4.1 The other non-residential uses proposed on the site are described in the development schedule **Table 4-1**. These uses are located in two distinct areas of the proposed development.
- 4.4.2 Retail uses (A1 uses) including the dry cleaners and hair dressers, the proposed coffee shop (A3 use), Nursery / Healthcare Centre (D1 use), and restaurant / bar (A3/A use) are proposed to be located within the 'inner circus' of the development.
- 4.4.3 The small convenience store (A1 use) is proposed to be located at the southern-most end of the site.
- 4.4.4 Although these facilities will be accessible to the wider public, it is anticipated they will be heavily supported by the residential development proposed and as such will operate more like an ancillary use.

4.5 RELOCATION OF ROUTE 221 BUS STOPS

- 4.5.1 To further enhance the accessibility of public transport services to the site, and rationalise existing spacing of bus stops on Bunns Lane, it is proposed to relocate existing east and westbound bus stops currently located to the west of the A1's bridge over Bunns Lane.
- 4.5.2 Bus Stops are currently located to the eastern extents of Bunns Lane, near its junction with Page Street. These are approximately 320m east of the bus stops located to the east of the A1 bridge over Bunns lane. The next pair of bus stops on route 221 are located approximately 600m further north-west on Flower Lane. As a result there is scope to rationalise the spacing of these stops such that the space between all stops is more consistent; approximately 450m.
- 4.5.3 The proposed relocation would reduce the connection to the bus stops by approximately 165m (2 minute walking time), and offers the opportunity to integrate the bus stop infrastructure directly with the developments connection to Bunns Lane. It is anticipated that the design and treatment of this area will promote the use of the bus service due to both its actual and perceived ease of access.
- 4.5.4 **Figure 4-1** shows a high level plan associated with the relocation which demonstrates the rationalisation of bus stop spacing and opportunity to create a closer connection to the site.

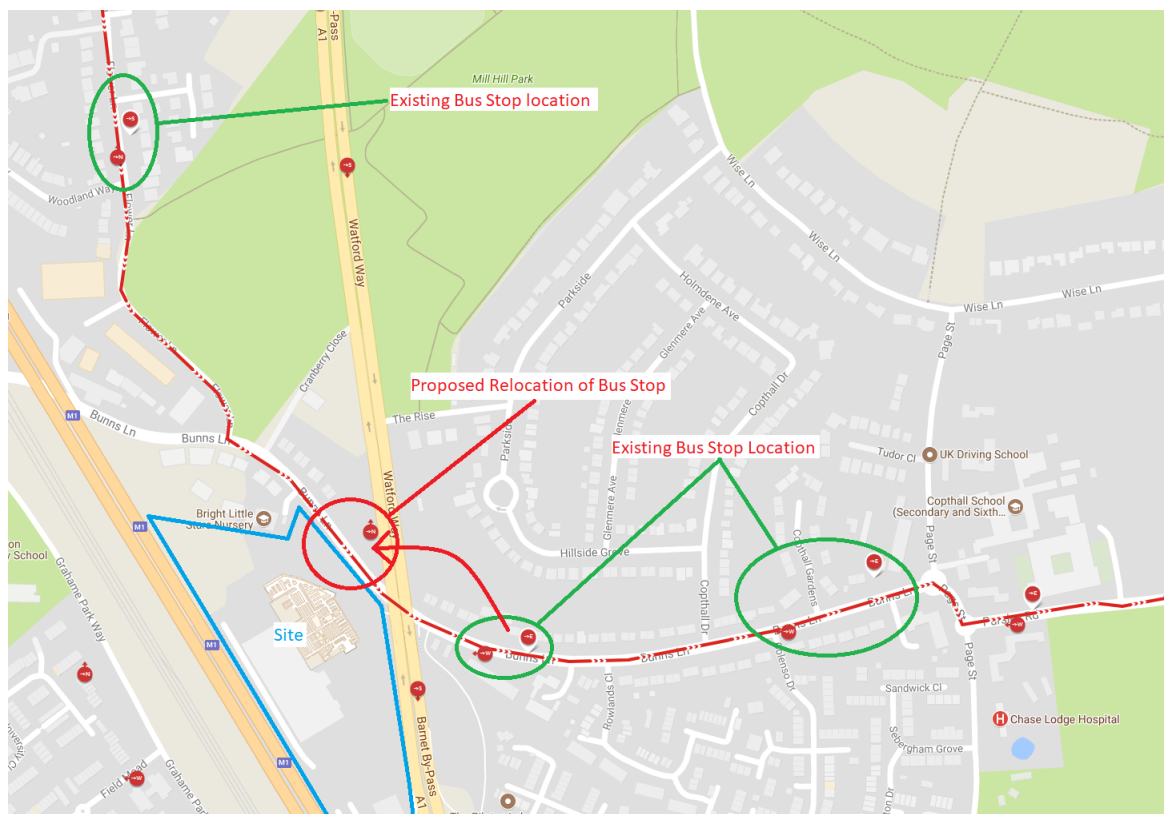


Figure 4-1: Proposed relocation of Bus Stops on Bunns Lane

4.6 INCREASE IN SERVICE FREQUENCY OF ROUTE 221

- 4.6.1 In response to a request from TfL, the development will commit funding of £95k per year for a period of 5 years (a total of £475k) to add a return journey to bus route 221. It is recognised that the increased frequency in conjunction with the relocation and direct connection to Bunns Lane offers an excellent and convenient connection to the public transport network.

4.7 RELOCATION OF ROUTE 113 BUS STOP

4.7.1 As a further enhancement to public transport infrastructure and connectivity it is proposed to relocate the existing bus stop of route 113, currently located just north of the A1's bridge over Bunns Lane, to a position immediately adjacent the site.

4.7.2 **Figure 4-3** shows a high level plan associated with the proposed relocation identified.

4.7.3 The relocation of the bus stop is considered appropriate for the following reasons:

- ⦿ The current bus stop location does not serve any immediate properties / origin / destination in its immediate vicinity (refer to **Figure 4-4** which indicates the bus stops existing position);
- ⦿ The existing bus stop is located to connect to a public footpath which leads to Bunns Lane. However the footpath is narrow, constrained by vegetation, and is also an uncomfortable gradient whether traveling down or uphill (refer to **Figure 4-5**). The proposed relocation will tie-in to the proposed access of the site to Bunns Lane which provides both a more direct stepped route as well as a more comfortable ramped route at 1:21;
- ⦿ In conjunction with the relocation linking to an improved route to Bunns Lane, the proposed relocation of route 221 bus stops to this location improves the interconnectivity of the routes. This is a considerable benefit given that the 113 and 221 serve north-south and east west connections respectively;
- ⦿ In conjunction with the proposed core accesses and relocation / concierge / reception and route through to access the A1, the relocation of the 113 bus stop can be accessed from the development in approximately 110m less distance (1.5 minute walk time);
- ⦿ The proposed relocation of the bus stop in conjunction with and proposed developments frontage to the A1 and Concierge / reception will offer natural surveillance of the bus stop and improve the boarding and alighting experience (particularly alighting of an evening where the current bus stop location would not be as attractive); and
- ⦿ The proposed relocation of the 113 bus stop offers the opportunity to integrate the bus stop infrastructure directly into the landscape strategy of the sites boundary with the A1. It is anticipated that the design and treatment of this area will promote the use of the bus service due to both its actual and perceived ease of access.



Figure 4-2: Proposed relocation of 113 Bus Stop on A1



Figure 4-3: Existing 113 Bus Stop



Figure 4-4: Existing connection to Bunns Lane from 113 Bus Stop

4.8 BUNNS LANE / PAGE STREET JUNCTION IMPROVEMENT

- 4.8.1 Through discussion with LBB it is understood that there is a desire to improve the existing junction on Bunns Lane and Page Street, which is understood to be at capacity during peak periods.
- 4.8.2 Although it has been demonstrated that the development has a negligible traffic impact on the junction, it is recognised that in the context of overall accessibility, its improved operation would improve reliability of bus routes on Bunns Lane.
- 4.8.3 As such, the development will contribute a fair and meaningful sum towards an improvement scheme that will be designed and approved by LBB.
- 4.8.4 At the time of writing it is understood that LBB have previously commissioned a study to determine an appropriate improvement scheme, and that a preferred option has been identified. However, the study relied on baseline traffic data which is now considered invalid due to time lapsed.
- 4.8.5 It is proposed that LBB will issue information on the preferred improvement option to enable an updated traffic model inclusive of new baseline traffic flows and proposed development traffic to confirm its suitability and to determine an appropriate contribution associated with the development.
- 4.8.6 As the information is not currently available it is proposed that this modelling information be recommended as a planning condition.

5

PROPOSED DEVELOPMENT ACCESS STRATEGY

5.1.1 This section of the TP describes both changes to, and how, access to the site will occur as a result of the proposed development.

5.2 OVERVIEW

5.2.1 Proposed site layout plans are contained within **Appendix B**. The proposed development is formed by a number of building blocks.

- Blocks A, C, E, G, I, J, L, N, O, Q, and R run along the full extents of the western extents of the site forming a screen to the adjacent M1 motorway;
- Blocks B, D, F, H, K, M, and P are located along the eastern extents of the site forming a screen to the A1; and
- Blocks K and L oppose each other on the east and west sides of the development at its widest point to create a large central amenity space for activity to occur, known as the inner circus;

5.2.2 The form and landscaping of the development are proposed to maximise the amount of outdoor amenity space on the development, and as such the severance of intrusive vehicular traffic is proposed to be pushed to the periphery of the site by means of a two-way peripheral road located on the western boundary of the site.

5.2.3 It is from the internal peripheral road that access can be gained to the lower ground floor parking areas for residents.

5.2.4 In order to ensure that some activity is maintained within the inner circus, a minimal amount of vehicular traffic will be able to access this area by means of control and for short stay durations (i.e. taxis, small deliveries, refuse collection).

5.2.5 Vehicular access and egress to the site is maintained in accordance with the existing arrangements. Vehicles enter and exit the site from the northbound carriageway of the A1. Vehicles access and egress is via the on and off-slip roads linked to the A1 which are proposed to be maintained in their current form.

5.3 PEDESTRIAN AND CYCLE ACCESS

Primary Bunns Lane Access

5.3.1 A new pedestrian link is proposed between the site and Bunns Lane that unlocks what was a barrier to the site. In pre-application feedback TfL stated that they consider “that a direct pedestrian and cycle access onto Bunn’s Lane is necessary for a residential use of the site and should be provided”.

5.3.2 The link is proposed to have a positive impact on both the sites accessibility, permeability, and resident’s ability to access key services located north of the development. It is intended that the link will open up access to bus routes 221 on Bunns Lane, and 113 on the A1, as well as significantly improve connections to Mill Hill Broadway station.

- 5.3.3 The proposed access and egress will provide a direct and coherent link from Bunns Lane with both the A1, and the site. An access to the proposed link will be formed in the northern corner of the central area of the site between block M and K which is located directly on the desire line. The continuation of the link from Bunns Lane permeates through the site, allowing for a coherent and pleasant route.
- 5.3.4 An accessible route linking Bunns Lane with the development is also proposed. This includes a 1:21 gradient ramp that zig-zags up the embankment with more direct stepped access either side. The route will be landscaped with trees and groundcovers to balance surveillance with a buffering from surrounding traffic.
- 5.3.5 **Figure 5-1** indicates the proposed primary access / egress to Bunns Lane, with visual representations of the how this route would appear shown in **Figures 5-2 & 5-3**.

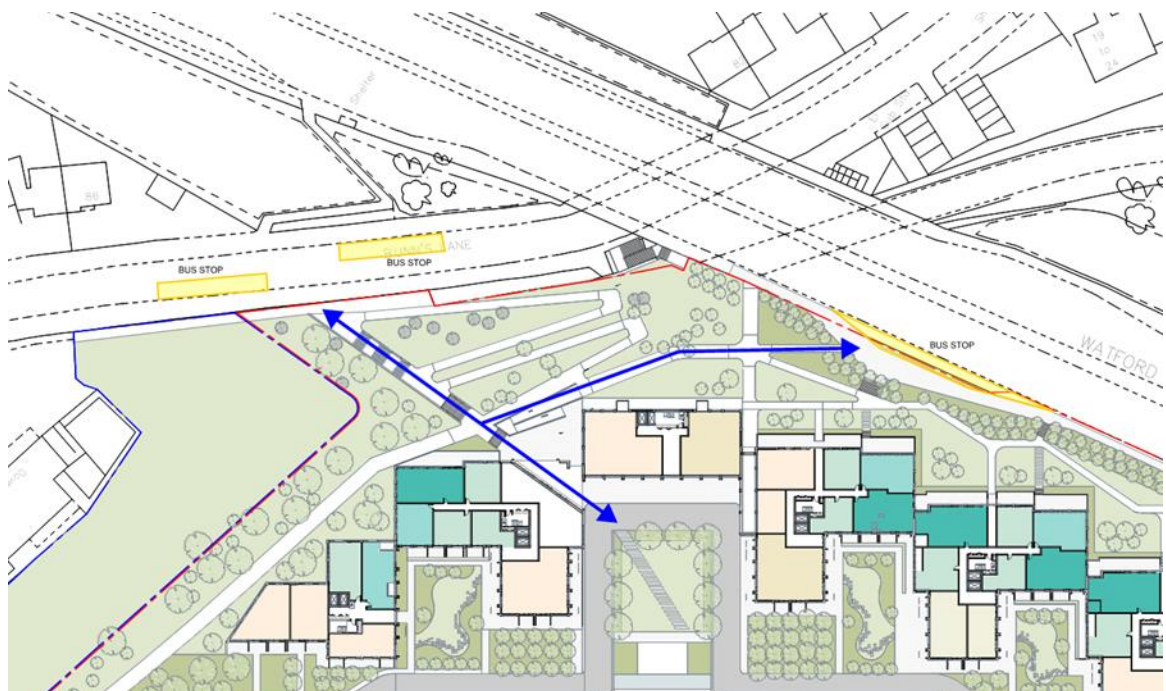


Figure 5-1: Proposed Primary Bunns Lane Link



Figure 5-2: View from Bunns Lane



Figure 5-3: View into (the central area of the development

Secondary Bunns Lane Access

- 5.3.6 It is proposed to provide a secondary route to Bunns Lane, which both connects to the site and the A1. The route is proposed as a shared cycle footpath (3.0m wide), to extend the existing shared cycle footpath on the A1 and provide a connection not currently available.
- 5.3.7 The secondary access route is shown below in **Figure 5-4**.

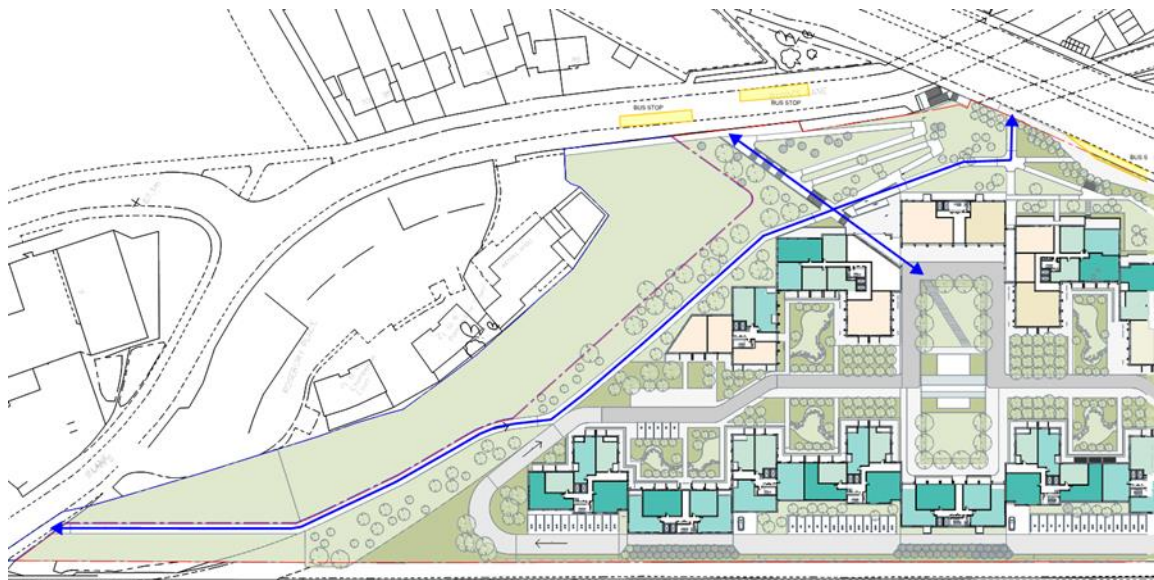


Figure 5-4: Proposed Secondary Bunns Lane Link

Access to the A1

- 5.3.8 Dual core access is proposed to the blocks located on the east side of the site, adjacent the A1. This facilitates direct access / egress to the A1, and is provided in conjunction with some defensible space to the ground floor units by way of terraces.
- 5.3.9 The provision of access to the cores will activate this edge of the site and will assist in providing a further level of natural surveillance to the landscape buffer between the site and the A1. It is also proposed to allow access through the blocks on the east side of the site for those residents in blocks to the east. Thus removing the eastern buildings as a barrier to A1, and increasing permeability whilst reducing walking distance to the wider highway network.
- 5.3.10 Access, activation and surveillance of the A1 edge has been further enhanced by relocation of a site concierge / reception to face the A1 within Block H. Access between the A1 and the central area of the site will also be facilitated through a tunnel adjacent the concierge for both residents and visitors.
- 5.3.11 A linear park is proposed to provide a buffer between the site and the A1 which can also be used as a secondary route to connect to Bunns Lane rather than the footpath on the A1.



Figure 5-6: Proposed Layout (Southern Entry Square)



Figure 5-7: Visualisation of Southern Entry Square

Connection to M1 Footbridge

- 5.3.15 Access to the site for pedestrians and cyclists is proposed to be further improved by the provision of a footpath that connects directly to the bottom of the existing ramp to bridge over the M1 and access Grahame Park Way.
- 5.3.16 The proposed route connecting the development to the M1 footbridge will involve substantial landscape improvements, including the creation of the new footpath together with attractive and robust planting adjacent to this path and up to the connection to the bridge ramp.
- 5.3.17 These combined enhancements will ensure that these present key routes across the major infrastructures will become more popular and attract regular usage. This in turn will provide a feeling of greater safety and security through surveillance.

Grahame Park Way Underpass Improvement

- 5.3.18 The development will fund an improvement scheme to the railway underpass to Grahame Park Way inclusive of the M1 footbridge. It is understood that both of these assets are owned by third parties (e.g Highways England), and therefore it has been discussed and agreed with LBB that the exact nature and details of the improvements will be determined post determination and secured by planning condition.
- 5.3.19 Although the details of the improvements are not defined, it is proposed that they will broadly consist of stone and masonry refurbishment, improved landscaping, and additional lighting and surveillance.
- 5.3.20 **Figure 5-8** is an illustrative example of how the underpass could be improved.

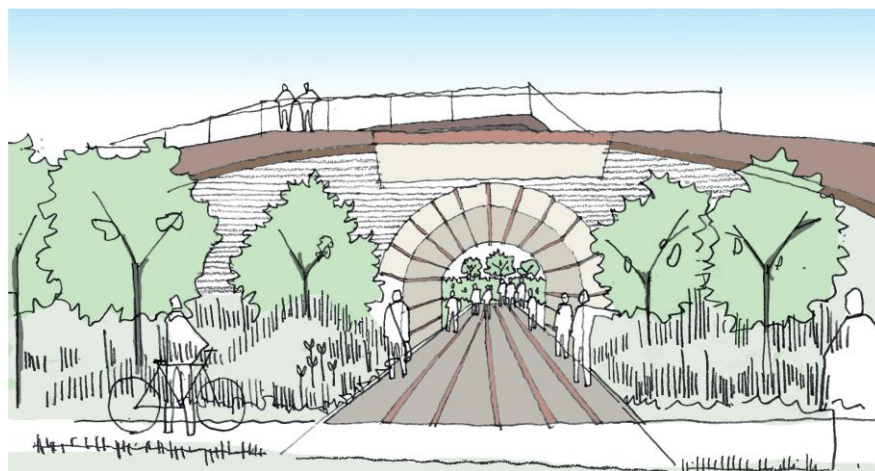


Figure 5-8: Potential Grahame Park Way Underpass Improvement (for illustrative purposes)

Central Site Areas

- 5.3.21 Interaction with vehicular traffic is minimised within the site for north-south movements due to the provision of the peripheral road located on the western side of the site which will cater for the majority of vehicle movements.
- 5.3.22 The surface treatment to the shared, trafficable surfaces within the inner circus are less intrusive than the peripheral road and highlight that the space is for shared use by pedestrian and cyclists also. The route connects to both the north and the south and facilitates permeability across the site for both pedestrians and cyclists.

- 5.3.23 To further assist the connections across the site, a pedestrian / cycle route extends from 'Mill Hill Walk' (refer to plans in **Appendix B**) across the southern entry square. This allows connection to the crossing point on the egress slip road to the A1, which gives access to the A1's footpath and bus stops for route 113.

Connecting Cycling Routes

- 5.3.24 A combination of all the proposed accessibility improvements assist in making the site highly permeable for both pedestrians and cyclists. **Figure 5-9** demonstrates how the proposal helps unlock a new connection between cycle routes to the north and south of the site.

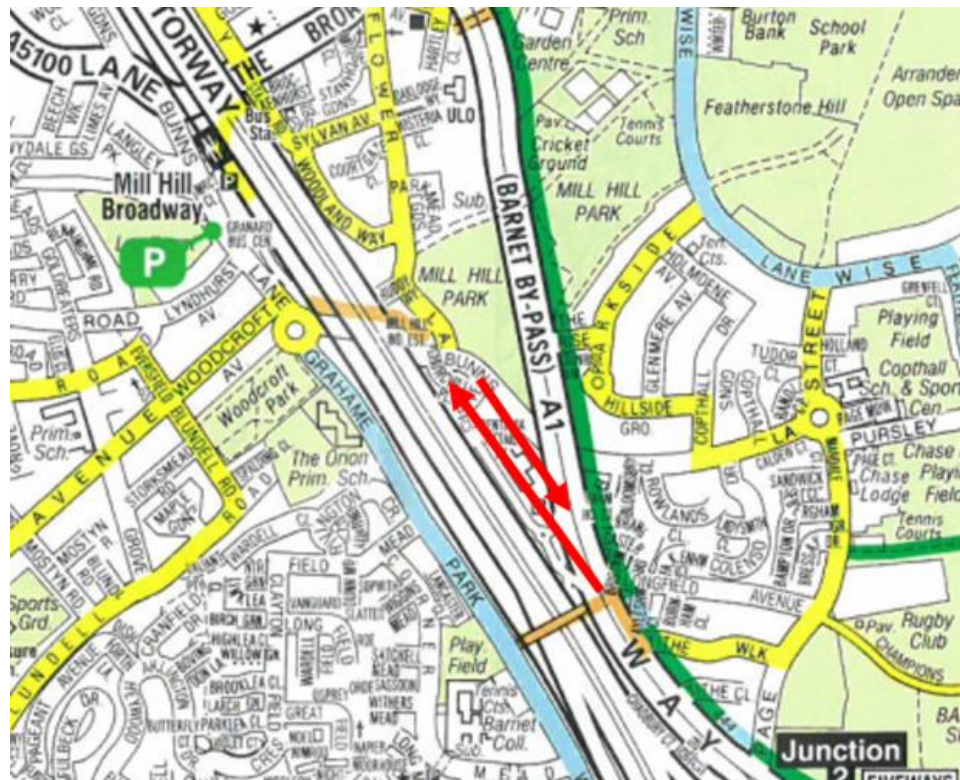


Figure 5-9: Connecting Cycle Routes

- 5.3.25 Extensive cycle parking is provided throughout the site such that access to the site for those wishing to do so by cycle have convenient and safe places to park. The provision of cycle parking is discussed in more detail in **Section 6**.

5.4 DELIVERY AND SERVICING ACCESS

- 5.4.1 A DSP has been prepared in support of the planning application, and provides a detailed description of the way in which these operations will occur. A copy of the DSP is has been submitted as a stand-alone document of the planning application.
- 5.4.2 Entry control measures will be in place to prevent unauthorised access, but a trade button will allow contact to a site management representative to facilitate access to the site.
- 5.4.3 Delivery and servicing activities of non-residential uses will take place outside of peak times, and will take place from a dedicated servicing area located at the south-east corner of the site adjacent the A1.

- 5.4.4 Delivery and servicing activities of non-residential uses will take place outside of peak times, and will take place from a dedicated servicing area located at the southern end of the site, or at designated loading areas within the sites internal route.
- 5.4.5 Refuse collection will take place from various designated collection points within the inner circus where the on-site management team will consolidate refuse from the development for collection.
- 5.4.6 Vehicle tracking which demonstrates the movements associated with site wide delivery and servicing is contained within the DSP.

5.5 EMERGENCY ACCESS

- 5.5.1 Emergency access is will be achieved throughout the development, via the A1, the internal periphery road, and also internally within the inner circus of the site. Vehicle tracking has been carried out to demonstrate the emergency access routes of the site by LfB Fire Tender and is contained within the TA.

5.6 CONSTRUCTION ACCESS

- 5.6.1 A separate Construction Traffic Management Plan (CTMP) has been prepared in support of the planning application which fully describes the proposed operation of traffic during the demolition and construction phases of the development.
- 5.6.2 It is also assumed that a full Construction Logistics Plan (CLP) will be secured by planning condition prior to the commencement of any works.

6 PROPOSED DEVELOPMENT PARKING STRATEGY

6.1.1 This section of the FTP provides a summary of the parking that is proposed as part of the development and subsequent arrangement of its use.

6.2 PROPOSED SITE PARKING

6.2.1 **Table 6-1** provides a summary of proposed site wide car parking provision.

	Residential	Resident Visitor	Car Club	Retail / Commercial / Community	Total
Standard Parking Bays					
with electrical charging point	74	10	5	7	96
with passive electrical provision	207	0	0	0	207
Sub-Total	281	10	5	7	303
Disabled Parking Bays					
with electrical charging point	85	0	0	2	87
Total	85	0	0	2	87
All Car Parking					
Total	366	10	5	9	390

Table 6-1: Site Wide Car Parking Provision

6.2.2 In addition to the parking spaces proposed from the outset, further provision has been made to allow for a further 31 residential car parking spaces within landscaped areas adjacent the peripheral road to the west of the site. These could be converted should demand require, and be secured via a planning condition.

6.2.3 More specific description of proposed car parking provision is provided in the relevant sub-sections that follow.

6.2.4 **Table 6-2** provides a summary of proposed site wide cycle parking provision.

	Residential	Retail / Commercial / Community	Total Development
Cycle Parking			
Long Stay	1,544	8	1,552
Short Stay	30	21	51
Total	1,574	29	1,603

Table 6-2: Site Wide Car Parking Provision

6.2.5 A more specific description of proposed cycle parking provision is provided in the relevant sub-sections that follow.

6.3 RESIDENTIAL CAR PARKING

6.3.1 It is proposed to provide a total of 366 car parking spaces for the use of residents within the proposed development site. All 366 residential car parking spaces are proposed to be provided within a lower ground level car park.

6.3.2 It is proposed that 10% of all accessible units could be provided with a disabled parking space if required. Therefore, it is proposed that 85 parking spaces will be sized and marked for the use of disabled motorists. All disabled spaces will have full electric charging capability. Of the remaining 281 residential car parking spaces 20% will have active electric charging facilities, with the remaining all having passive provision.

6.3.3 In addition to the parking spaces proposed from the outset, further provision has been made to allow for a further 31 residential car parking spaces within landscaped areas adjacent the peripheral road to the west of the site. These could be converted should demand require, and be secured via a planning condition. This would result in a total of 397 car parking spaces for residents.

Car Park Management

6.3.4 Specific details relating to the management of residential car parking can be found within the Car Park Management Plan (CPMP) submitted as a stand-alone document of the application. However, it is noted that allocation of parking to residents will be on a rented basis.

6.3.5 Parking spaces will be rented to residents rather than allocated by specific unit. This enables parking capacity within the car park to be maximised much more efficiently by comparison to more typical residential parking allocation. Where in other developments, a car parking space is sold or rented in conjunction with an allocated spot, this can result in it being empty if the occupier does not own a car. If an occupier in the proposed development does not own a car they will not rent a space, and thus it will be available to rent to occupiers who do.

6.3.6 It is considered that other developments with more typical parking allocation would suffer overspill more quickly due to the fact that they do not optimise parking capacity in this way. For example, an instance can arise where overspill occurs even though 30 parking spaces are free, but allocated to non-car owners. The proposed residential car parking therefore operates equivalent to an unallocated car park.

Access to Car Club

- 6.3.7 For those unable to afford a private vehicle or requiring occasional access to a vehicle rather than ownership, the development proposes to provide car club access on-site. It has not been determined whether this would be operated by the developer, or whether an external car club provider might be utilised, however, ZipCar have been approached and provided a viability assessment which indicates they would be able to place up to five cars on the site.
- 6.3.8 Convenient access to a car club facility will encourage lower levels of car ownership. Evidence which summarised below:
- ⦿ Carplus (2014) Annual Survey: London (p. 25):

the percentage of new joiners reporting owning no car before joining a car club was 58 per cent and after joining the car club was 73 per cent. Indicating the potential for a 15% reduction in car ownership relative to conditions that might otherwise prevail;
 - ⦿ TfL (2014) Parking and Car Club Potential Users and Use, Systra (p. 2):

Research of London license holders identified that household car ownership is not reviewed regularly. When it is, reasons include life events, such as moving house or having a baby and external impacts such as changing parking policy or age / functionality of the car owned. This highlights that the proposed development is well best placed to maximise the benefits of a car club as all occupiers will initially be moving home;
 - ⦿ Zip Car, A Transport Solution (2017 Viability Assessment):

Zipcar provided car club car takes an average of 10-15 privately owned vehicles off the roads of the UK, because members often sell (or don't replace) a car when they join.

6.4 VISITOR PARKING

- 6.4.1 It is proposed to provide visitors of the residential development with access to 10 car parking spaces. The car parking spaces are located at the ground floor level adjacent the access road.
- 6.4.2 Further details in relation to the operation and management of the parking in this area of the development is contained within the CPMP.

6.5 RETAIL / COMMERCIAL / COMMUNITY USE CAR PARKING

- 6.5.1 It is proposed to provide 9 car parking spaces for activity associated with the retail and commercial uses. The parking will be located at the southern end of the site, immediately accessible from the A1. This enables control of the site to prevent vehicle movements occurring internally within the site to facilitate a more permeable environment for pedestrian and cyclists.
- 6.5.2 In response to specific requests made by the GLA during consultation it is intended to limit surface car parking at the southern end of the site.
- 6.5.3 LBB adopt the parking standards of the London Plan in consideration of both retail and leisure uses. It is recognised that the London Plan provides maximum parking standards for these uses.
- 6.5.4 Given the number of residential units proposed as part of the development, it is recognised that a high proportion of trips that will support these uses will be made on foot, by residents who already have access to a car parking space within the residential parking area.

- 6.5.5 The restriction on access and egress to the site via the A1 northbound carriageway only, further deters significant new or diverted trips being drawn to these uses by private car, as they will not be convenient for non-residential users by comparison to other retail offerings in the wider area.
- 6.5.6 It is therefore considered that an appropriate level of car parking would be to provide for a small level of pass-by trade associated with vehicles already on the northbound carriageway of the A1 who might seek to stop and access the A1 food convenience store proposed. However, it should be noted that given the presence of the adjacent BP Petrol Filling Station and associated 'Wild Bean Café' and M&S food convenience, it is likely that pass-by trade for food retail will be absorbed in this location.
- 6.5.7 In conjunction with reviewing the parking requirements at the southern end of the site, the size of the A1 food convenience store has been reduced from 656sqm to 254sqm. As a result, its ability to attract trips external to the sites residents through pass-by, diversion or new has been further mitigated.
- 6.5.8 It is therefore proposed to provide 9 parking spaces, inclusive of two disabled spaces, to the west of the site, adjacent the access road which runs parallel to the M1 motorway. This locates the parking immediately adjacent the proposed A1 food convenience store, and allows for the formation of an 'entry square' at the southern end of the site.
- 6.5.9 Members of staff will be encouraged to travel to the site by sustainable modes of transport by following the procedures highlighted in the TP.
- 6.5.10 The 9 parking spaces provided at the south end of the site will be Pay & Display to ensure that long stay parking is discouraged and that there is a turn-over of parking spaces.

6.6 CYCLE PARKING

- 6.6.1 It is proposed to provide all cycle parking across the site in accordance with the draft New London Plan. There will be an allocation of 1,574 cycle spaces provided in relation to the residential use, 30 of which will enable parking for visitors. A further 29 cycle parking spaces will be provided in relation to the retail and commercial uses.
- 6.6.2 Cycle parking is located on the lower ground floor in secure stores and also within external areas. Residential cycle storage areas have been designed with additional capacity to enable further parking to be installed and to enable oversized cycle storage
- 6.6.3 Cycle parking has been distributed throughout the development in accordance with the relevant minimum standards for the mix of units within each core.

7 TRAVEL SURVEY

- 7.1.1 This section summarises the predicted initial travel behaviour of future occupants. As the site is not yet occupied, and no existing data are available, the multimodal trip generation, and modal split was undertaken within the TA, and is summarised below.
- 7.1.2 Following the occupation of the site, a baseline survey will be undertaken. This is proposed to be undertaken within six months of first occupation or at 75% occupancy, whichever is first.
- 7.1.3 **Table 7-1** summarises the combined multimodal trips for all of the proposed development uses.

Mode	AM Peak Hour			PM Peak Hour			Daily			
	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	
Car	23	48	71	46	27	73	402	413	815	22%
Underground	0	14	14	19	1	22	114	154	269	7%
Train	7	38	45	26	8	36	178	179	356	9%
Bus	21	73	92	42	26	64	261	329	591	16%
Walk	37	102	139	87	47	134	610	648	1257	33%
Cycle	5	12	17	5	6	8	67	64	131	3%
Taxi	3	3	6	6	4	10	28	28	56	1%
Motorcycle	2	6	8	5	2	7	19	16	35	1%
LGV/OGV	3	1	4	18	18	36	135	130	265	7%

Table 7-1: Multimodal Development Trip Generation

8

OBJECTIVES AND TARGETS

8.1.1 This chapter sets out the overarching objectives for the FTP, as well as targets for the short and medium term. It includes indicators through which progress towards meeting the targets will be measured. Further information on monitoring and review of the FTP can be found in **Section 11**.

- ⦿ Objectives are the high-level aims of the FTP. They help to give the Travel Plan direction and provide a clear focus.
- ⦿ Targets are the measurable goals by which progress will be assessed. The FTP sets out targets which the development will seek to reach within the period covered by this FTP. In addition, interim targets have been set.

8.2 OBJECTIVES

8.2.1 The objectives of the FTP are two-fold. Firstly, to increase awareness of sustainable travel modes available and secondly to reduce the dependence on travel by car to and from the development. Therefore, more specifically, the objectives of the FTP for the development are to:

- ⦿ Increase awareness of the advantages and availability of sustainable modes of transport over the car;
- ⦿ Introduce a package of physical and management measures that will facilitate travel by sustainable modes, and therefore, and
- ⦿ Limit unnecessary or unsustainable use of the car for journeys to and from the site.

8.2.2 As set out in **Section 6**, a Car Park Management Plan (CPMP) will be implemented in order to allocate disabled parking spaces and manage the uptake and future demand for on-site disabled parking.

8.3 TARGETS

8.3.1 FTP targets are measurable goals by which progress can be assessed. These targets should be reviewed through a programme of monitoring (outlined in **Section 11**) to ensure they remain SMART (Specific, Measurable, Achievable Realistic and Timed).

8.3.2 Targets come in two forms - action targets and aim targets:

- ⦿ **Action Targets** are non-quantifiable actions that need to be achieved by a certain time.
- ⦿ **Aim Targets** are quantifiable, and in the case of this FTP, relate to the degree of modal shift the plan is seeking to achieve.

8.4 ACTION TARGETS

8.4.1 The action targets for this FTP are:

- ⦿ To appoint a Travel Plan Coordinator (*see Travel Plan Strategy section*)
- ⦿ To coordinate baseline travel surveys (*see Monitoring and Review section*)

8.5 AIM TARGETS

- 8.5.1 This FTP sets up an initial target for Year Five of the site occupation and a five-year framework with interim targets that will be expected to be included in the Full Travel Plan following the occupation of the site and baseline survey.
- 8.5.2 It should be noted that the targets presented in **Table 8-1** were set up in relation to the multimodal trip generation produced within the TA. This mode share data will be verified and updated with baseline data collected after six months of first occupation or at 75% occupancy, whichever is first. The collected data will be used to produce Full Travel Plan, where interim targets for Year One and Three and an updated target for Year Five.
- 8.5.3 **Table 8-1** outlines the preliminary Aim Targets set out for the site based on the 9% mode reduction of car, 6% mode increase of cycling and 3% mode increase for bus. This is in addition to limiting any unnecessary or unsustainable car journeys (particularly those with single occupants) to and from the site. The targets are set to measure progress towards the main objectives over a five-year period.

Travel Mode	Predicted Mode Share	Five Year Target Mode Share	Change
Car	22%	11%	-9%
Underground	7%	7%	0%
Train	9%	9%	0%
Bus	16%	19%	+3%
Walk	33%	33%	0%
Cycle	3%	9%	+6%
Taxi	1%	1%	0%
Motorcycle	1%	1%	0%
LGV/OGV	7%	7%	0%

Table 8-1: Preliminary Mode Share Targets

- 8.5.4 If the subsequent baseline travel survey shows that the assumed modal split identified in **Table 8-1** is different, the targets will be amended to take into account the surveyed modal split. Targets will be finalised and written into the FTP once annual travel surveys have been completed, the results analysed and discussions subsequently held with the LBB/TfL Travel Planning Officers.
- 8.5.5 Once the first travel survey has been undertaken the Full Travel Plan will be produced and updated with more accurate baseline mode share proportions. A review of the target mode shift will also be undertaken to ensure they are realistic and achievable.
- 8.5.6 It should be noted that the Travel Plan will be a live document, continuously updated over time and as such targets may change over time as a result of an on-going monitoring process.

9 TRAVEL PLAN STRATEGY

9.1 MANAGEMENT

- 9.1.1 The site will be managed by an appointed management company who will have a presence on-site. The management company will appoint a Travel Plan Coordinator (TPC) who will manage the day to day running of the Travel Plan.

9.2 TPC RESPONSIBILITIES

- 9.2.1 The TPC will be responsible for administration of the Travel Plan, the implementation of measures, and for the on-going monitoring and review of the Travel Plan. The TPC will report to the management company and other involved stakeholders such as residents' associations (if applicable), regarding the implementation and progression of the Travel Plan.
- 9.2.2 Administration of the Travel Plan will involve the maintenance of the necessary systems, data and paperwork, consultation and promotion associated with the implementation of the Travel Plan. Regular updating of the Travel Plan document is part of the responsibility of the nominated TPC.
- 9.2.3 A filing system will be established and maintained, for recording all correspondence relating to the Travel Plan, the results of periodic monitoring and the results of each review. The content of the document will be shared with LBB to ensure it has the maximum potential to encourage use of non-car modes of transport.
- 9.2.4 The TPC will ensure that physical measures such as cycle racks are maintained and useable. They will be the central point of contact between the site occupants, will promote and market the Travel Plan, organise and undertake travel surveys, be responsible for on-going monitoring will liaise with LBB/TfL in relation to any transport concerns related to the development.
- 9.2.5 It is proposed that the TPC role and responsibilities will be assigned 3 months before initial occupation of the residential units.

9.3 MARKETING STRATEGY

- 9.3.1 Future occupiers will receive information regarding the Travel Plan at the earliest possible stage. Ideally future occupiers will be informed of the Travel Plan at the point of sale or when rental agreements are signed.
- 9.3.2 Occupiers will also receive this information and travel information within the Welcome Packs that they will receive at the start of their occupation of their unit. The TPC will use mail drops to individual units (residential & commercial) to help inform occupiers of the Travel Plan measures. The TPC will also seek to attend resident meetings to gain information and promote Travel Plan measures with the occupiers of both the residential and commercial units.
- 9.3.3 Within the welcome packs for each household will be details of the Zipcar car share scheme including the first year membership and associated preliminary driving credit.
- 9.3.4 Travel information points will be installed at key access points within the site which will detail bus, cycling and walking routes, and bus/rail timetables. Travel information board will also be provided for all non-residential units, located within staff rooms/areas.

10 MEASURE AND INITIATIVES

10.1 INTRODUCTION

- 10.1.1 This section of the TP outlines the specific physical and management measures to be implemented as part of the Travel Plan. The implementation of the listed measures, which include awareness initiatives and infrastructure provision, forms the core of the Travel Plan.
- 10.1.2 **Table 10-1** on the following page, provides the proposed measures and initiatives which will aim to promote active and sustainable travel modes. It should be noted that the list of measures is not exhaustive and the TPC will be encouraged to investigate other potential initiatives. This list will be reviewed following the completion of the initial travel surveys the Travel Plan targets updated accordingly.

Transport Mode	Proposal	Specific Tasks	Responsibility	Timeframe
N/A	Put in place a mechanism for implementing and monitoring the Travel Plan	Appointment of Travel Plan Co-ordinator	Applicant	Three months prior to first occupation
	Surveys reporting and marketing	Baseline Travel Survey	Travel Plan Co-ordinator	Within 6 months from first occupation or at 75% occupancy
		Baseline Travel Survey results reported to LBB and TfL, along with full Travel Plan where necessary	Travel Plan Co-ordinator	1 month after completion of baseline travel survey
		Subsequent surveys undertaken and reported to LBB	Travel Plan Co-ordinator	12 months after baseline survey results reported
		Welcome Pack for new residents /Electronic Travel Information App	Applicant / Travel Plan Co-ordinator	Available at first occupation
Walking	Pedestrian Route Information	Routes detailed within Welcome Pack, including maps and walking distances	Applicant / Travel Plan Co-ordinator	Available at first occupation
	Walking route planner	To promote use of www.walkit.com which advises on walking route planners		

	Potentials Improvements to pedestrian environment	To encourage walking amongst residents	Applicant	To be considered
Cycling	Adequate provision for cycle parking	Provision of residential and commercial short and long stay cycle parking in line required standards as set out in TA.	Applicant. To closely monitor demand for cycle storage over time	Available at first occupation
	Safe cycle route information	Routes detailed within residents Welcome Pack, and commercial unit staff room, including maps and cycle distances	Travel Plan Co-ordinator	Available at first occupation
	On site cycle repair kit	On-site management/concierge and commercial unit to have cycle repair kits	Travel Plan Co-ordinator	Available at first occupation
	Dr Bike	TPC to consider arrangements for 'Dr. Bike' (or similar) visits to the site to give tips and make basic repairs to Bicycles	Travel Plan Co-ordinator. These can be arranged for free with local cycle stores	To consider implementation within first 12 months of occupation
	Cycle route planner	To promote use of cycle route planners such as; www.cyclestreets.net www.ctc.org.uk/journey-planner http://www.sustrans.org.uk/change-your-travel/get-cycling/planning-your-cycle-routes	Travel Plan Co-ordinator	Advertised at first occupation

Public Transport	Encourage use of public transport	Ensure timetable and interchange information is within residential Welcome Pack and commercial unit staff room	Travel Plan Co-ordinator	Available at first occupation
Car	Car Club Membership	Implementation of a 1 year developer funded Zipcar membership package and £20 driving credit	Travel Plan Co-ordinator	Available at first occupation
	Car Parking Management Strategy	To ensure that the car parking provided on site is efficiently used and car ownership and car diving discouraged	Applicant/Travel Plan Co-ordinator	Available at first occupation

Table 10-1: Measures and Incentives

11 MONITORING AND REVIEW

11.1 MONITORING

11.1.1 The Travel Plan will be initially monitored on a five year cycle. The first and second monitoring surveys will be undertaken at Years 1 and 3 (on the first and third anniversary of the initial baseline travel survey). The final monitoring survey will be carried out on the fifth anniversary of the initial baseline survey. Monitoring surveys will follow the established TRAVL survey methodology to ensure they are compatible with iTRACE (the Travel Plan project management tool used by London Borough's).

11.1.2 As noted in **Section 5**, the baseline travel survey will be undertaken within 6 months of the occupation or at 75% occupancy of the residential and commercial units are occupied. This baseline survey represents the start of the Travel Plan for monitoring purposes and is known as Year 0. The exact requirements for the monitoring and baseline surveys will be discussed with LBB/TfL.

11.1.3 Monitoring surveys will ultimately allow collection of data related to:

- ⦿ Conduct multi-modal traffic surveys to establish residential and commercial mode share;
- ⦿ Monitor the level of disabled car parking within the site and on nearby streets;
- ⦿ Monitor the take-up by residents / others of the car club scheme;
- ⦿ Monitor the demand for cycle parking, and
- ⦿ Collect and record any comments from local residents and staff of the commercial unit in terms of on-site sustainability and success of the Travel Plan in helping to encourage sustainable travel.

11.1.4 Information gathered through the monitoring process will be recorded for input to the annual review (outlined below). The information will be made available to the LBB/TfL.

11.2 REPORTING

11.2.1 The TPC will compile a Review Report at Years 1, 3 and 5 outlining the results of the annual review. The report will also incorporate the results of on-going monitoring throughout the preceding period. The report will be issued to LBB/TfL.

12 ACTION PLAN

- 12.1.1 The draft Action Plan outlined below in **Table 12-1** sets out the measures included within the Travel Plan that are directed at influencing occupiers/staff associated with both the residential and commercial land uses.

Table 12-1: Action Plan				
Action Type	Action	Responsibility	Timeframe	Notes
Management	Appointment of Travel Plan Coordinator (TPC)	Site Management/Concierge	Three months prior to occupation	This is preferable to be completed as soon as possible, as when the site is occupied, the TPC will need to undertake baseline travel surveys within 6 months of the occupation of the site - defined as 75%.
Baseline Travel Patterns	Baseline travel survey	TPC	Within 6 months of the occupation of the site - defined as 75%	Survey results will need to be reported back to LBB so targets can be set. The baseline survey represents the Full Travel Plans Year 0 start point, i.e. the point that implementation occurs.
Travel Plan Document Progression	Finalisation of measures to be implemented	TPC and Planning Authority officers	Within 3 months of the baseline survey	The measures should be agreed with LBB during the application process; however the baseline survey might reveal other possible measures to implement.
	Target setting	TPC and LBB/TfL officers	Within 3 months of the completion the baseline survey	Targets will need to be agreed with LBB/TfL.
	Full Travel Plan document completion	TPC	Within 3 months of the completion of the baseline survey Revised at Year 3 after full review	This should be completed well before Travel Plan launch.

Monitoring, Review & Reporting	Monitoring of measures and initiative take-up	TPC	On-going	This will involve regular monitoring of cycle and motorcycle parking use, and uptake of other measures implemented.
	First snapshot/monitoring survey	TPC	At Year 1	On the first anniversary of the completion of the baseline survey. This will be completed in-house
	Partial review and reporting 1	TPC and LBB/TfL officers	Following Year 1 snapshot survey result analysis	This will be a partial review focusing on revision of targets and measures where necessary.
	Second snapshot/monitoring survey	TPC	At Year 3	On the third anniversary of the completion of the baseline survey.
	Full review and reporting	TPC and TfL/LBB	Following Year 5 monitoring survey results analysis	This will be a full review at the end of the 5 year monitoring and review period. The Travel Plan document will be completely revised. At this time the role of the TPC will transfer from the management company to a local interest group or representative.
Implementation	Implementation of measures	TPC with liaison with Management Company	From the start of construction and on-going	Dependent on the nature of the measure. Physical measures such as changing facilities will be implemented during construction. Policy measures will be implemented on an on-going basis. The TPC will need to create a detailed implementation timetable.

Appendix A

BUS ROUTES AND TIMETABLES

Appendix B

PROPOSED LOWER AND GROUND FLOOR SITE LAYOUTS

Appendix A

BUS ROUTES AND TIMETABLES

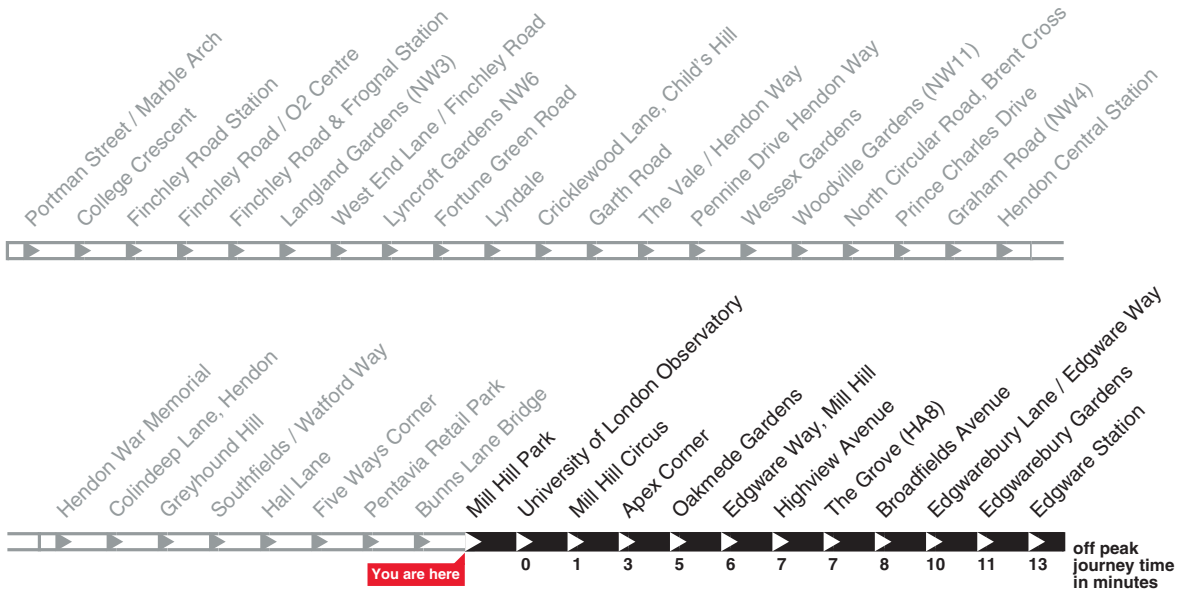
London Buses

113

Daily



Buses towards Edgware Station



Monday to Friday

First buses	7 to 8am	8am to 9pm	9 to 10pm	10 to 11pm	11pm to 1am	Last buses
06 08	07 08	<i>about every</i>	21 07	22 12	At these 08	01 08
06 28	07 23	7-11	21 22	22 28	minutes 28	01 38
06 48	07 41	<i>minutes</i>	21 37	22 48	past the 48	
	07 56		21 52		hour	

Saturday

First buses	7 to 8am	8 to 9am	9 to 10am	10am to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to 1am	Last buses
06 08	07 08	08 09	09 09	<i>about every</i>	20 02	21 01	22 11	At these 08	01 08
06 28	07 28	08 29	09 24	10-13	20 16	21 21	22 28	minutes 28	01 38
06 48	07 49	08 49	09 39	<i>minutes</i>	20 31	21 36	22 48	past the 48	
			09 49		20 46	21 51		hour	
			09 59						

Sunday

First buses	7 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 1pm	1 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to 1am	Last buses
06 08	At these 08	09 03	10 06	11 06	12 11	At these 14	18 14	19 12	20 11	21 01	22 09	At these 08	01 08
06 38	minutes 38	09 23	10 26	11 26	12 34	minutes 34	18 34	19 31	20 26	21 21	22 28	minutes 28	01 38
	past the	09 44	10 46	11 47	12 54	past the 54	18 52	19 51	20 41	21 36	22 48	past the 48	
	hour					hour				21 51		hour	

Operated by Metroline for London Buses



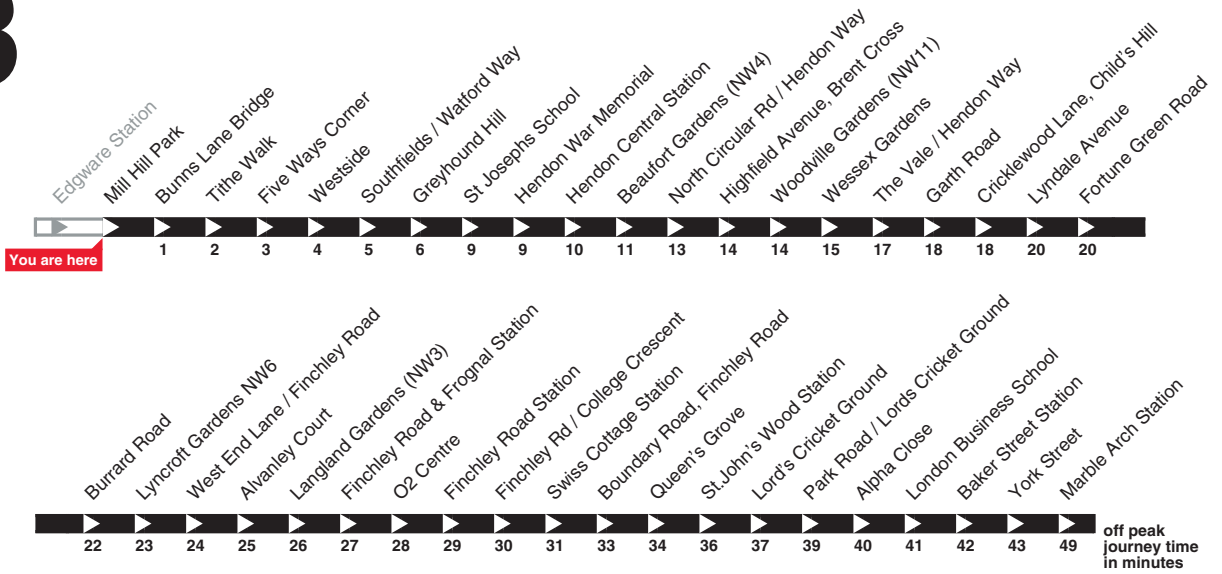
London Buses

113

Daily



Buses towards Marble Arch Station



Monday to Friday

First bus	5 to 6am	6 to 7am	7 to 8am	8am to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 11pm	11pm to Midnight	Last bus
04 40	05 00	06 05	<i>about every</i>	<i>about every</i>	18 04	19 12	20 01	At these 19	23 19	00 09
	05 20	06 15	5-9	8-11	18 14	19 27	20 19	minutes 39	23 39	
	05 40	06 25	<i>minutes</i>	<i>minutes</i>	18 24	19 42	20 39	past the 59		
	05 55	06 35			18 34		20 59	hour		
		06 43			18 44					
		06 51			18 59					
		06 56								

Saturday

First bus	5 to 7am	7 to 8am	8am to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 11pm	11pm to Midnight	Last bus
04 40	At these 00	07 00	<i>about every</i>	17 01	18 11	19 01	20 01	At these 19	23 19	00 09
	minutes 20	07 15	9-10	17 11	18 26	19 21	20 19	minutes 39	23 39	
	past the 40	07 30	<i>minutes</i>	17 21	18 41	19 41	20 39	past the 59		
	hour	07 45		17 31			20 59	hour		
		07 55		17 41						
				17 56						

Sunday

First bus	5 to 7am	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 11pm	11pm to Midnight	Last bus
04 40	At these 10	07 10	08 10	09 06	10 03	11 03	At these 16	17 16	18 19	19 19	20 00	At these 19	23 19	00 09
	minutes 40	07 30	08 30	09 23	10 23	11 22	minutes 36	17 37	18 39	19 39	20 19	minutes 39	23 39	
	past the	07 50	08 49	09 43	10 43	11 39	past the 56	17 57	18 59		20 39	past the 59		
	hour					11 58	hour				20 59	hour		

Operated by Metroline for London Buses



London Buses

114

Daily



Buses towards Mill Hill Broadway Station



Monday to Friday

First buses	6 to 7am	7 to 8am	8am to 7pm	7pm to Midnight	Midnight to 1am	Last buses
0522	0602	0716	<i>about every</i>	<i>about every</i>	0005	0102
0542	0622	0731	7-11	10-12	0017	0117
	0640	0741	<i>minutes</i>	<i>minutes</i>	0032	
	0659	0751			0047	

Saturday

First buses	6 to 8am	8 to 9am	9am to Midnight	Midnight to 1am	Last buses
0521	At these 01	0801	<i>about every</i>	0005	0102
0541	minutes 21	0820	8-12	0017	0117
	past the 41	0835	<i>minutes</i>	0032	
	hour	0850		0047	

Sunday

First buses	6 to 7am	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to Midnight	Midnight to 1am	Last buses
0516	0616	0716	0820	0913	1005	<i>about every</i>	0005	0102
0546	0646	0748	0851	0935	1020	10-13	0017	0117
				0950	1033	<i>minutes</i>	0032	
					1046		0047	
					1058			

Operated by Metroline for London Buses

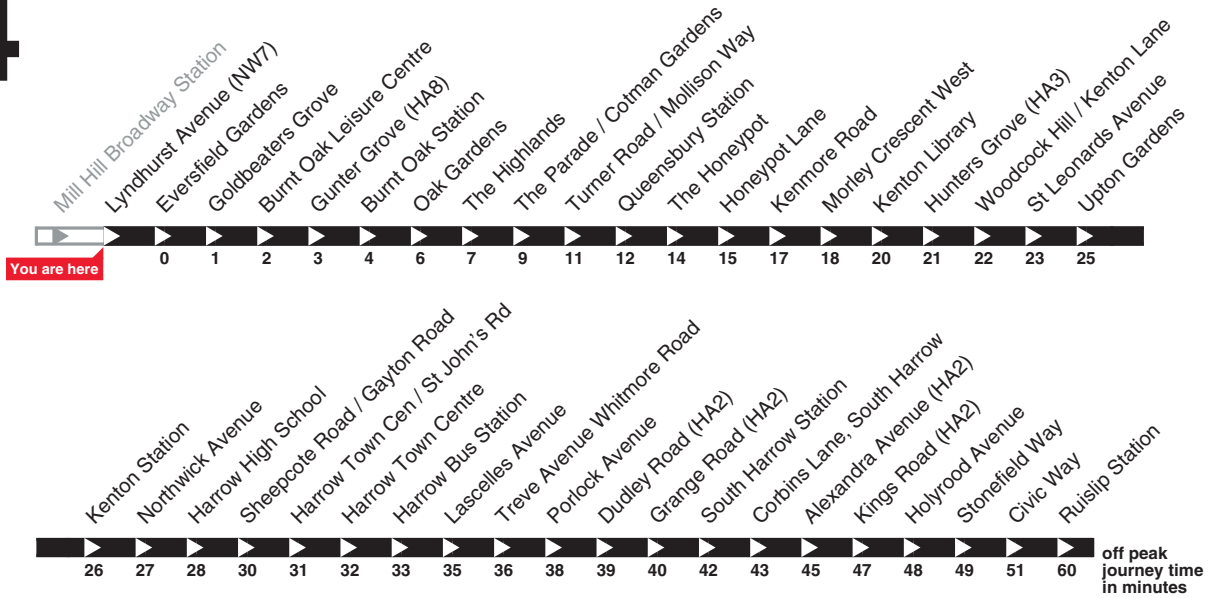
London Buses

114

Daily



Buses towards Ruislip Station



Monday to Friday

First bus	5 to 6am	6am to 10pm	10 to 11pm	11pm to 1am	Last buses
0455	0515 0530 0545	<i>about every</i> 8-12 <i>minutes</i>	2209 2221 2233 2245	At these 00 minutes 15 past the 30 hour 45	0100 0115

Saturday

First bus	5 to 6am	6 to 7am	7 to 8am	8am to 11pm	11pm to 1am	Last buses
0455	0515 0535 0555	0615 0630 0645	0700 0715 0730 0745	<i>about every</i> 9-12 <i>minutes</i>	At these 00 minutes 15 past the 30 hour 45	0100 0115

Sunday

First bus	6 to 8am	8 to 9am	9 to 10am	10am to 11pm	11pm to 1am	Last buses
0545	At these 15 minutes 45 past the hour	0815 0835 0855	0910 0925 0937 0949	<i>about every</i> 11-12 <i>minutes</i>	At these 00 minutes 15 past the 30 hour 45	0100 0115

Operated by Metroline for London Buses

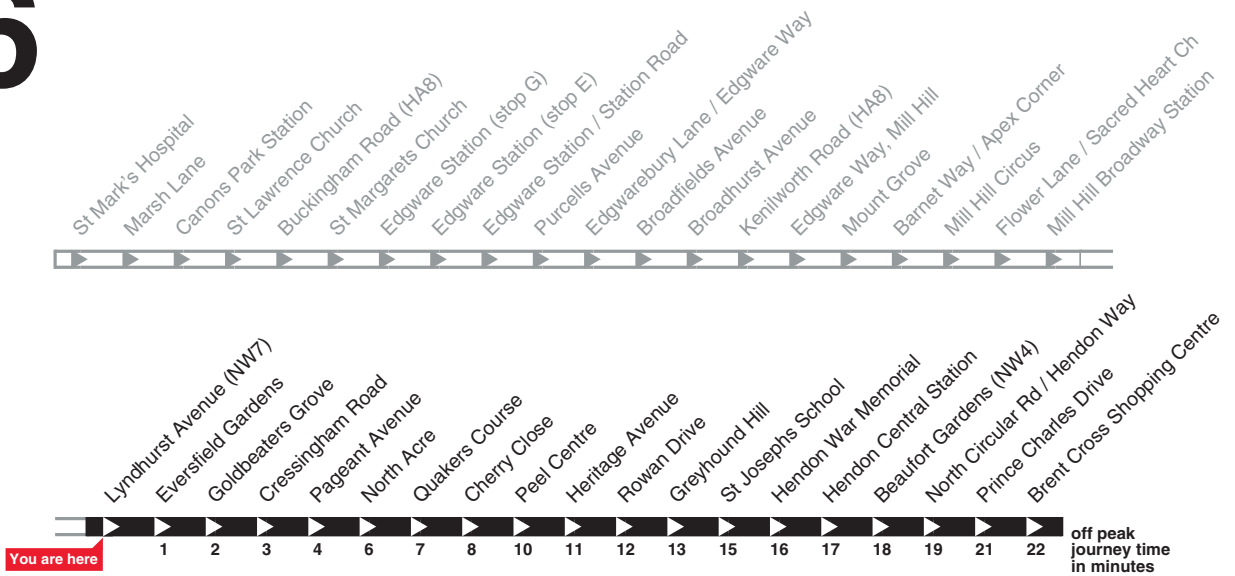
London Buses

186

Daily



Buses towards Brent Cross Shopping Centre



Monday to Friday

First buses	7am to 2pm	2 to 3pm	3 to 8pm	8 to 9pm	9 to 11pm	11pm to Midnight	Last buses
06 08	<i>about every</i>	14 01	<i>about every</i>	20 01	At these 11	23 11	00 08
06 29	9-13	14 13	8-12	20 19	minutes 31	23 31	00 28
06 40		14 25		minutes	23 49	00 48	
06 50		14 32		minutes	hour		
		14 39					
		14 52					

Saturday

First buses	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to 7pm	7 to 8pm	8 to 9pm	9 to 11pm	11pm to Midnight	Last buses	
06 08	07 08	08 18	09 00	10 01	<i>about every</i>	19 00	20 16	At these 11	23 11	00 08	
06 38	07 38	08 30	09 11	10 13	9-13	19 18	20 36	minutes 31	23 31	00 28	
			09 29	10 25				minutes			23 49
			09 49	10 32				minutes			
				10 42		19 36	20 53	hour			
				10 54		19 56					

Sunday

First buses	8 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 3pm	3 to 4pm	4 to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to Midnight	Last buses									
07 08	08 08	09 09	10 21	11 01	At these 02	15 02	16 01	17 01	18 17	19 16	20 15	21 13	22 11	23 11	00 08									
07 38	08 38	09 39	10 41	11 21	minutes 22	15 22	16 21	17 21	18 36	19 36	20 35	21 31	22 31	23 31	00 28									
					past the 42											15 41	16 41	17 38	18 56	19 56	20 55	21 51	22 51	23 49
					hour																			

Operated by Metroline for London Buses



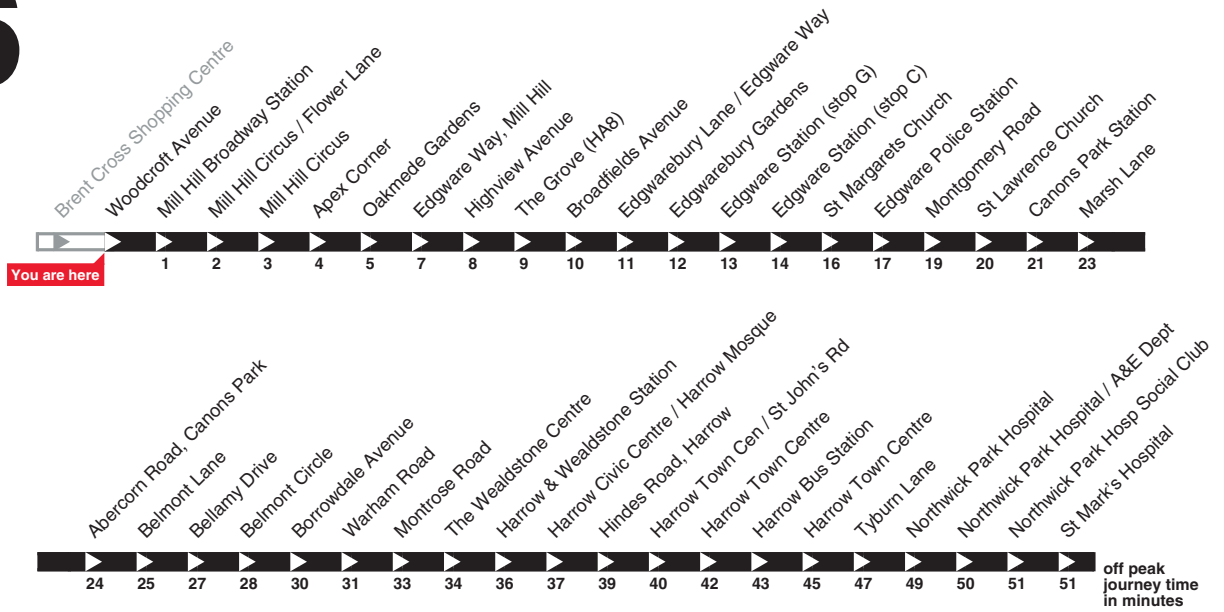
London Buses

186

Daily



Buses towards St Mark's Hospital



Monday to Friday						
First buses	6 to 7am	7am to 9pm		9 to 11pm	11pm to Midnight	Last bus
0526	0626	<i>about every</i>		At these 00	2300	0001
0556	0646	11-13 <i>minutes</i>		minutes 20	2320	
				past the 40	2341	
				hour		

Saturday							
First buses	6 to 7am	7 to 9am	9am to 7pm	7 to 8pm	8 to 11pm	11pm to Midnight	Last bus
0526	0626	At these 06	<i>about every</i>	1900	At these 00	2300	0001
0556	0646	minutes 26	11-13 <i>minutes</i>	1920	minutes 20	2320	
		past the 46		1940	past the 40	2341	
		hour			hour		

Sunday													
First buses	8 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 3pm	3 to 4pm	4 to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 11pm	11pm to Midnight	Last bus
0701	0801	0901	1001	1120	At these 00	1500	1601	1701	1801	1901	At these 00	2300	0001
0731	0831	0921	1021	1140	minutes 20	1521	1621	1721	1821	1921	minutes 20	2320	
		0941	1041		past the 40	1541	1641	1740	1841	1940	past the 40	2341	
			1058		hour						hour		

Operated by Metroline for London Buses



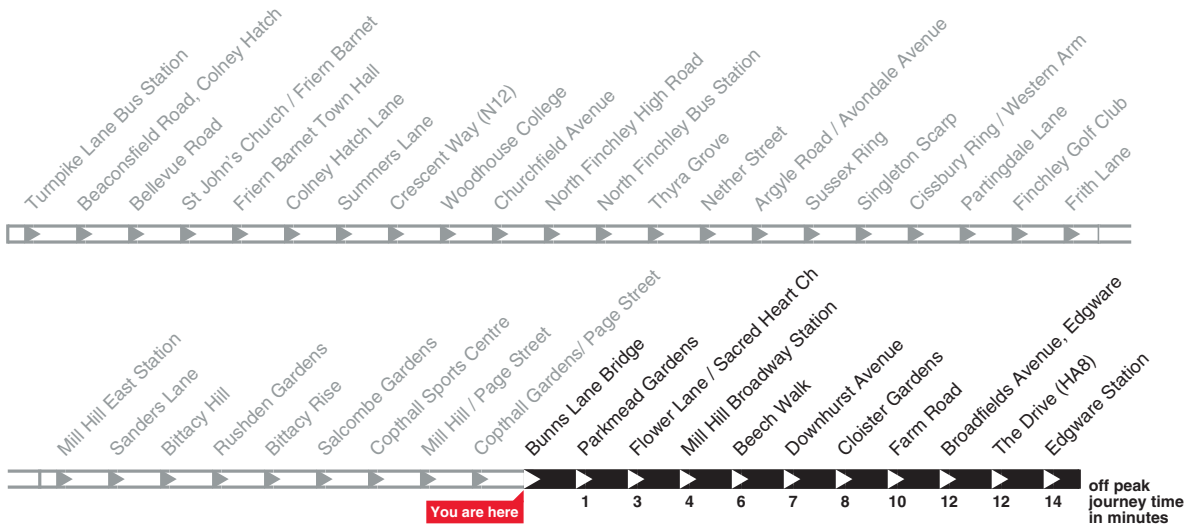
London Buses

221

Daily



Buses towards Edgware Station



Monday to Thursday

First bus	6 to 7am	7am to 3pm	3 to 4pm	4pm to Midnight	Last buses
05 49	06 04 06 19 06 33 06 48	<i>about every</i> 10-12 <i>minutes</i>	15 04 15 05 15 10 15 19 15 30 15 42 15 54	<i>about every</i> 10-12 <i>minutes</i>	00 01 00 13 00 25 00 37 00 49

Journeys at 15:04 run as far as Mill Hill Broadway Station.

Friday

First bus	6 to 7am	7am to 3pm	3 to 4pm	4pm to Midnight	Last buses
05 49	06 04 06 19 06 33 06 48	<i>about every</i> 10-12 <i>minutes</i>	15 04 15 05 15 10 15 19 15 30 15 42 15 54	<i>about every</i> 10-12 <i>minutes</i>	00 01 00 13 00 25 00 37 00 49

Journeys at 15:04 run as far as Mill Hill Broadway Station.

Saturday

First bus	6 to 7am	7 to 8am	8am to Midnight	Last buses
05 49	06 04 06 19 06 34 06 49	07 04 07 19 07 32 07 47	<i>about every</i> 10-13 <i>minutes</i>	00 01 00 13 00 25 00 37 00 49

Sunday

First bus	6 to 7am	7am to Midnight	Last buses
05 49	06 04 06 19 06 34 06 49	<i>about every</i> 10-13 <i>minutes</i>	00 01 00 13 00 25 00 37 00 49

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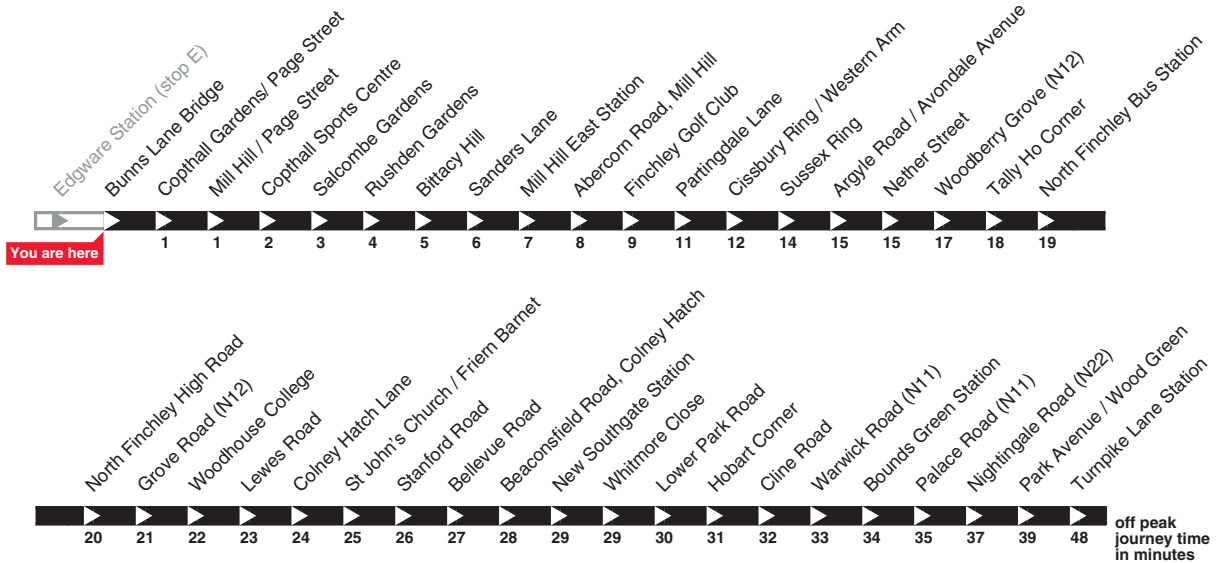
London Buses

221

Daily



Buses towards Turnpike Lane Station



Monday to Thursday

First buses	6 to 8am	8 to 9am	9am to 3pm	3 to 4pm	4pm to Midnight	Last buses
05 35	<i>about every</i>	08 04	<i>about every</i>	15 09	<i>about every</i>	00 06
05 50	9-12 <i>minutes</i>	08 13	11-14 <i>minutes</i>	15 21	10-13 <i>minutes</i>	00 18
		08 22		15 25		00 30
		08 26		15 33		
		08 34		15 45		
		08 46		15 57		

Friday

First buses	6 to 8am	8 to 9am	9am to 3pm	3 to 4pm	4pm to Midnight	Last buses
05 35	<i>about every</i>	08 04	<i>about every</i>	15 09	<i>about every</i>	00 06
05 50	9-12 <i>minutes</i>	08 13	11-14 <i>minutes</i>	15 21	10-13 <i>minutes</i>	00 18
		08 22		15 25		00 30
		08 26		15 33		
		08 34		15 45		
		08 46		15 57		

Saturday

First buses	6 to 7am	7am to Midnight	Last buses
05 35	06 05	<i>about every</i>	00 06
05 50	06 20	10-12 <i>minutes</i>	00 18
	06 35		00 30
	06 47		
	06 58		

Sunday

First buses	6 to 7am	7am to Midnight	Last buses
05 35	06 05	<i>about every</i>	00 06
05 50	06 20	10-13 <i>minutes</i>	00 18
	06 35		00 30
	06 50		

Operated by Arriva London for London Buses

240

Daily



Buses towards Edgware Station



Monday to Friday

First buses	7 to 8am	8am to 7pm	7 to 8pm	8 to 9pm	9pm to Midnight	Midnight to 1am	Last buses
06 27	07 07	<i>about every</i>	<i>about every</i>	20 07	At these 08	00 08	01 00
06 47	07 27	10-14	8-12	20 18	minutes 28	00 30	01 30
	07 42	<i>minutes</i>	<i>minutes</i>	20 33	past the 48		
	07 54			20 48	hour		

Saturday

First buses	7 to 8am	8 to 9am	9 to 10am	10am to 6pm	6 to 7pm	7 to 8pm	8pm to Midnight	Midnight to 1am	Last buses
06 27	07 27	08 07	09 09	<i>about every</i>	18 08	19 00	At these 08	00 08	01 00
06 57	07 47	08 27	09 34	12-13	18 18	19 15	minutes 28	00 30	01 30
		08 47	09 46	<i>minutes</i>	18 30	19 30	past the 48		
		09 58			18 45	19 48	hour		

Sunday

First buses	8 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 1pm	1 to 3pm	3 to 4pm	4 to 6pm	6 to 7pm	7 to 8pm	8pm to Midnight	Midnight to 1am	Last buses
07 27	08 27	09 28	10 30	11 00	12 02	At these 08	15 08	At these 07	18 07	19 03	At these 08	00 08	01 00
07 57	08 57	09 59		11 20	12 25	minutes 28	15 28	minutes 27	18 27	19 21	minutes 28	00 30	01 30
				11 40	12 48	past the 48	15 47	past the 47	18 46	19 38	past the 48		
						hour		hour		19 53	hour		

Operated by Metroline for London Buses

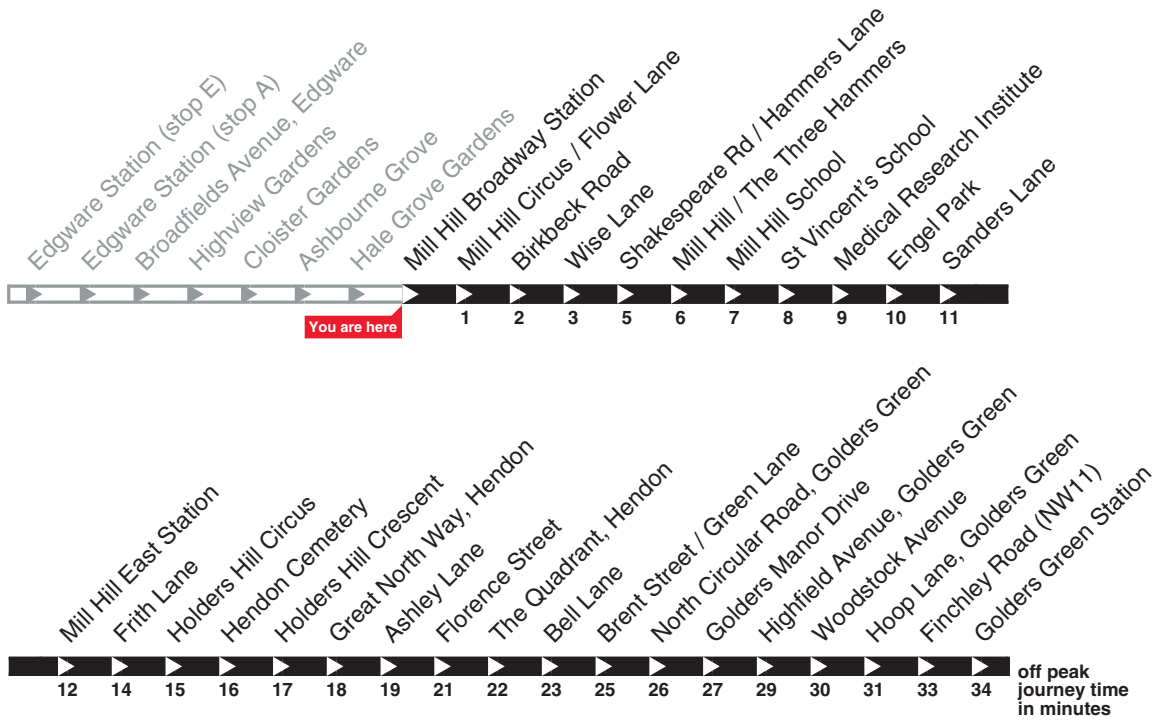
London Buses

240

Daily



Buses towards Golders Green Station



Monday to Friday								
First bus	6 to 7am	7 to 8am	8am to 7pm		7 to 8pm	8 to 11pm	11pm to Midnight	Last bus
05 47	06 07	07 03	<i>about every</i>		19 09	At these 07	23 07	00 27
	06 27	07 10	11-14		19 24	minutes 27	23 27	
	06 46	07 17	<i>minutes</i>		19 39	past the 47	23 57	
	06 55	07 28			19 54	hour		
		07 38						
		07 51						

Saturday										
First bus	6 to 7am	7 to 9am	9am to 6pm			6 to 7pm	7 to 8pm	8 to 11pm	11pm to Midnight	Last bus
05 47	06 17	At these 07	<i>about every</i>			18 09	19 09	At these 07	23 07	00 27
	06 47	minutes 27	12			18 24	19 27	minutes 27	23 27	
		past the 47	<i>minutes</i>			18 39	19 47	past the 47	23 57	
		hour				18 54		hour		

Sunday										
First bus	7 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 6pm	6 to 7pm	7 to 8pm	8 to 11pm	11pm to Midnight	Last bus
06 57	At these 27	09 27	10 07	11 07	At these 09	18 09	19 08	At these 07	23 07	00 27
	minutes 57	09 47	10 27	11 27	minutes 29	18 29	19 27	minutes 27	23 27	
	past the		10 47	11 48	past the 49	18 48	19 47	past the 47	23 57	
	hour				hour			hour		

Operated by Metroline for London Buses

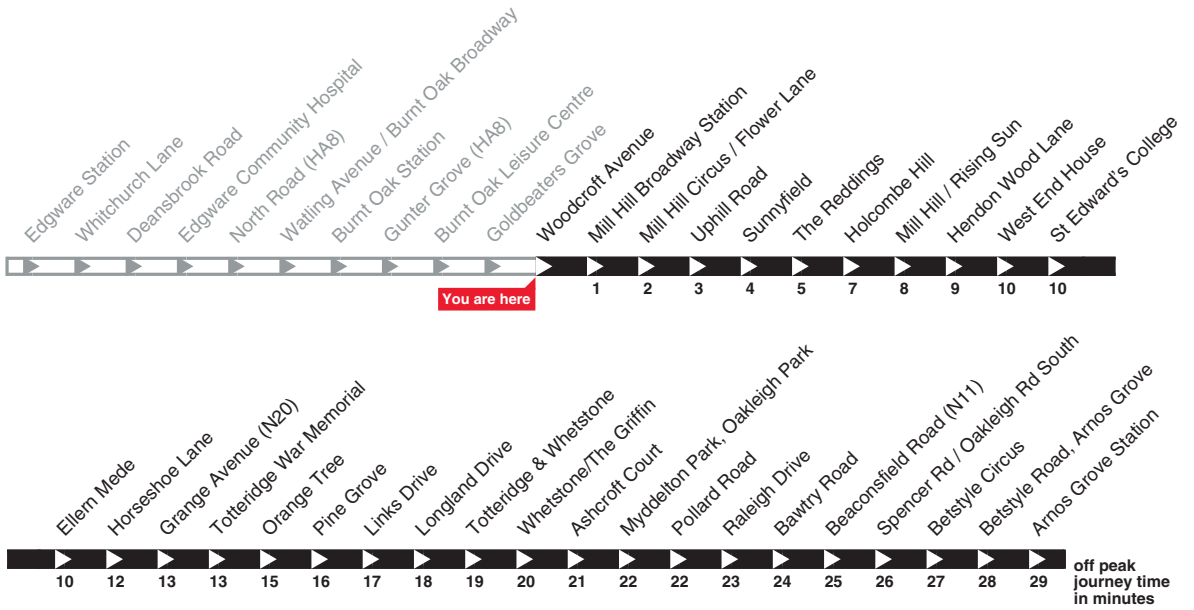
London Buses

251

Daily



Buses towards Arnos Grove Station



Monday to Friday

First buses	6 to 7am	7 to 8am	8 to 9am	9am to 8pm	8 to 9pm	9 to 10pm	10pm to Midnight	Last buses
05 19	06 00	<i>about every</i>	<i>about every</i>	<i>about every</i>	20 08	21 09	At these 09	00 09
05 39	06 21	10-12	7-10	10-14	20 28	21 29	minutes 29	00 29
	06 37	<i>minutes</i>	<i>minutes</i>	<i>minutes</i>	20 49	21 49	past the 49	
	06 53						hour	

Saturday

First buses	6 to 7am	7 to 8am	8 to 9am	9 to 10am	10am to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 10pm	10pm to Midnight	Last buses
05 19	06 19	07 18	08 18	09 08	<i>about every</i>	18 00	19 13	20 08	21 09	At these 09	00 09
05 39	06 39	07 38	08 38	09 24	11-13	18 12	19 33	20 28	21 29	minutes 29	00 29
05 59	06 59	07 58	08 53	09 36	<i>minutes</i>	18 24	19 48	20 49	21 49	past the 49	
				09 48		18 39				hour	
						18 54					

Sunday

First buses	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 1pm	1 to 3pm	3 to 4pm	4 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to Midnight	Last buses
06 23	07 23	08 24	09 23	10 03	11 01	12 01	At these 19	15 19	At these 19	20 18	21 17	22 10	23 09	00 09
06 53	07 53	08 54	09 43	10 22	11 21	12 19	minutes 39	15 39	minutes 39	20 38	21 34	22 29	23 29	00 29
				10 41	11 41	12 39	past the 59	15 59	past the 59	20 57	21 51	22 49	23 49	
						12 59	hour		hour					

Operated by London Sovereign for London Buses



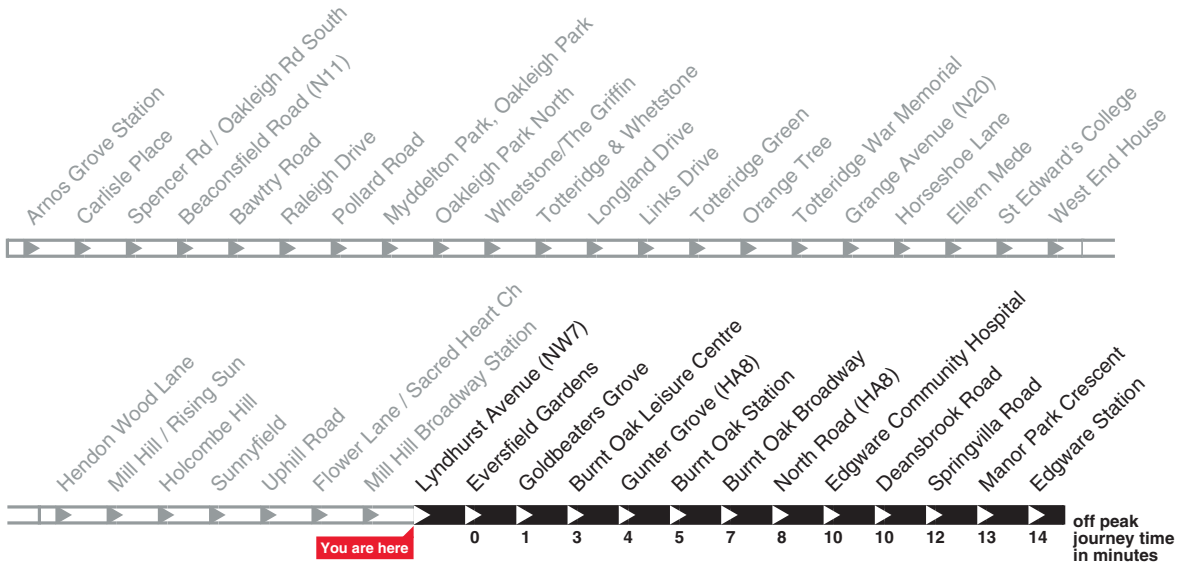
London Buses

251

Daily



Buses towards Edgware Station



Monday to Friday

First buses	6 to 7am	7am to 7pm	7 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to Midnight	Last buses
05 30	06 11	about every	about every	20 07	21 05	22 03	23 03	00 00
05 50	06 33	9-12	10-14	20 26	21 24	22 23	23 22	00 20
	06 49	minutes	minutes	20 45	21 44	22 43	23 41	

Saturday

First buses	6 to 7am	7 to 8am	8 to 9am	9 to 10am	10am to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to Midnight	Last buses
05 30	06 10	07 11	08 14	09 11	about every	18 07	19 06	20 06	21 05	22 03	23 03	00 00
05 50	06 30	07 32	08 35	09 27	11-13	18 21	19 26	20 25	21 24	22 23	23 22	00 20
	06 51	07 53	08 55	09 42	minutes	18 36	19 46	20 45	21 44	22 43	23 41	
				09 54		18 51						

Sunday

First bus	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to Midday	Midday to 1pm	1 to 2pm	2 to 3pm	3 to 4pm	4 to 7pm	7 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to Midnight	Last buses
06 50	07 20	08 22	09 23	10 05	11 05	12 05	13 07	14 07	15 07	At these 05	19 05	20 04	21 03	22 01	23 00	00 00
	07 51	08 53	09 45	10 25	11 25	12 26	13 27	14 27	15 26	minutes 25	19 25	20 24	21 22	22 20	23 20	00 20
			10 45	11 45	12 47	13 47	14 47	15 45		past the 45	19 44	20 44	21 41	22 40	23 40	
										hour						

Operated by London Sovereign for London Buses



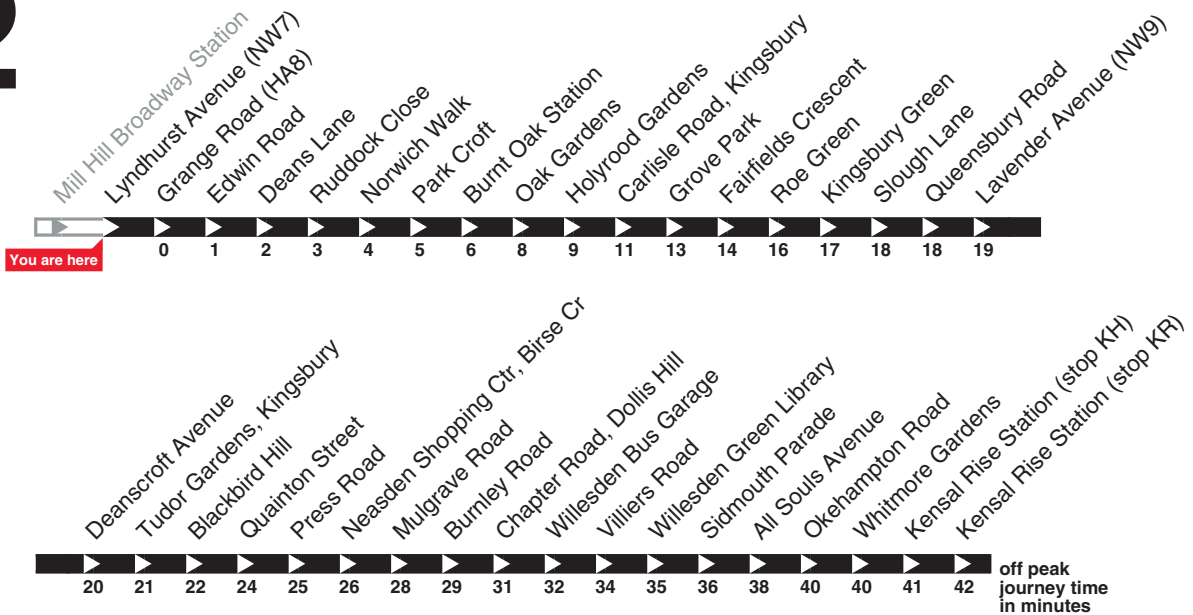
London Buses

302

Daily



Buses towards Kensal Rise Station



Monday to Friday

First buses	6 to 7am	7am to 8pm	8pm to Midnight	Last bus
0530 0545	0600 0615 0630 0640 0649 0655	<i>about every</i> 6-10 <i>minutes</i>	<i>about every</i> 12 <i>minutes</i>	0010

Saturday

First buses	6 to 7am	7 to 8am	8 to 9am	9am to Midnight	Last bus
0530 0550	0610 0630 0645	0700 0715 0730 0740 0750	<i>about every</i> 6-10 <i>minutes</i>	<i>about every</i> 8-12 <i>minutes</i>	0010

Sunday

First buses	7 to 8am	8 to 9am	9 to 10am	10am to Midnight	Last bus
0625 0655	0725 0745	0805 0825 0845	0906 0921 0936 0951	<i>about every</i> 12-13 <i>minutes</i>	0010

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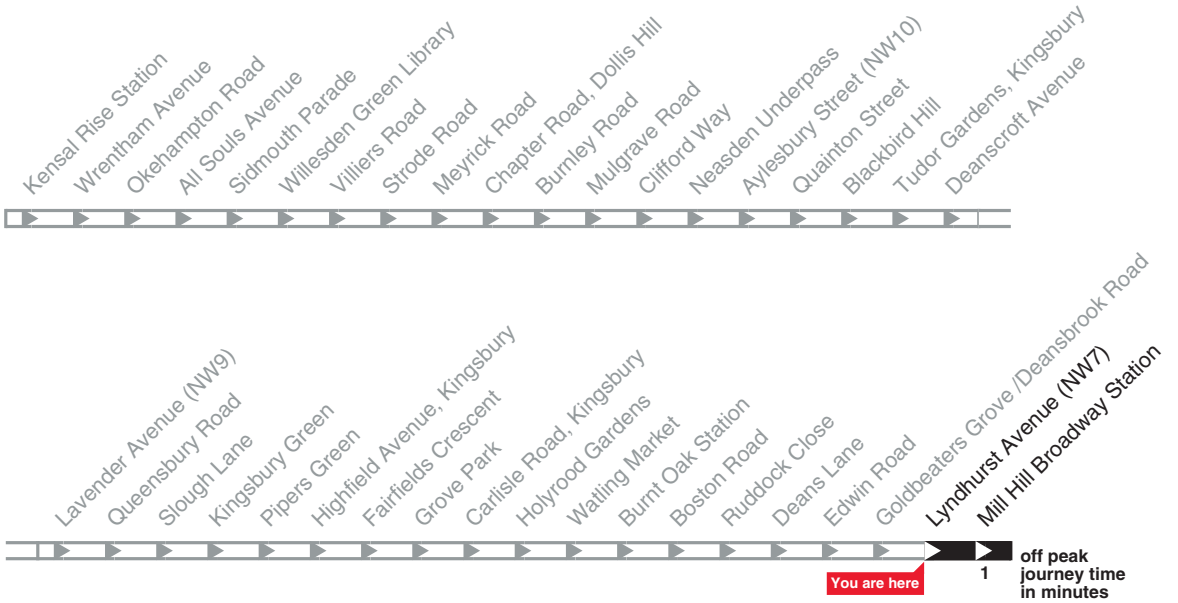
London Buses

302

Daily



Buses towards Mill Hill Broadway Station



Monday to Friday

First buses	7 to 8am	8am to 8pm	8pm to Midnight	Last buses
06 19	07 04	<i>about every</i>	<i>about every</i>	00 01
06 34	07 19	6-9	10-12	00 13
06 49	07 34	<i>minutes</i>	<i>minutes</i>	00 25
	07 43			00 37
	07 51			
	07 59			

Saturday

First buses	7 to 8am	8 to 9am	9am to 7pm	7pm to Midnight	Last buses
06 19	07 14	<i>about every</i>	<i>about every</i>	<i>about every</i>	00 01
06 39	07 29	10-14	7-10	10-12	00 13
06 59	07 44	<i>minutes</i>	<i>minutes</i>	<i>minutes</i>	00 25
	07 59				00 37

Sunday

First buses	8 to 9am	9 to 10am	10 to 11am	11am to Midnight	Last buses
07 09	08 09	09 09	10 16	<i>about every</i>	00 01
07 39	08 29	09 32	10 31	10-12	00 13
	08 49	09 55	10 43	<i>minutes</i>	00 25
			10 55		00 37

Operated by Metroline for London Buses

London Buses

303

Daily



Buses towards Colindale Superstores



Monday to Friday

First buses	6 to 7am	7 to 8am	8 to 9am	9 to 10am	10am to 3pm	3 to 4pm	4 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9pm to Midnight	Last bus
05 27	06 27	07 07	08 04	<i>about every</i>	At these 00	15 00	At these 03	18 03	19 01	20 18	At these 07	00 07
05 57	06 47	07 25	08 19	13-14	minutes 15	15 17	minutes 18	18 17	19 16	20 38	minutes 37	
		07 37	08 35	<i>minutes</i>	past the 30	15 33	past the 33	18 32	19 30		past the	
		07 50	08 50		hour 45	15 48	hour 48	18 47	19 44	19 59	hour	

Saturday

First buses	6 to 8am	8 to 9am	9 to 10am	10am to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8pm to Midnight	Last bus
05 26	At these 26	08 17	09 14	At these 13	17 12	18 12	19 09	At these 07	00 07
05 56	minutes 56	08 37	09 29	minutes 28	17 27	18 29	19 38	minutes 37	
	past the	08 59	09 43	past the 43	17 42	18 49		past the	
	hour		09 58	hour 58	17 57			hour	

Sunday

First bus	7 to 9am	9 to 10am	10am to Midday	Midday to 1pm	1 to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9pm to Midnight	Last bus
06 52	At these 22	09 12	At these 09	12 10	At these 11	17 11	18 09	19 08	20 08	At these 07	00 07
	minutes 52	09 32	minutes 29	12 30	minutes 31	17 30	18 39	19 38	20 37	minutes 37	
	past the	09 51	past the 49	12 51	past the 51	17 50				past the	
	hour		hour		hour					hour	

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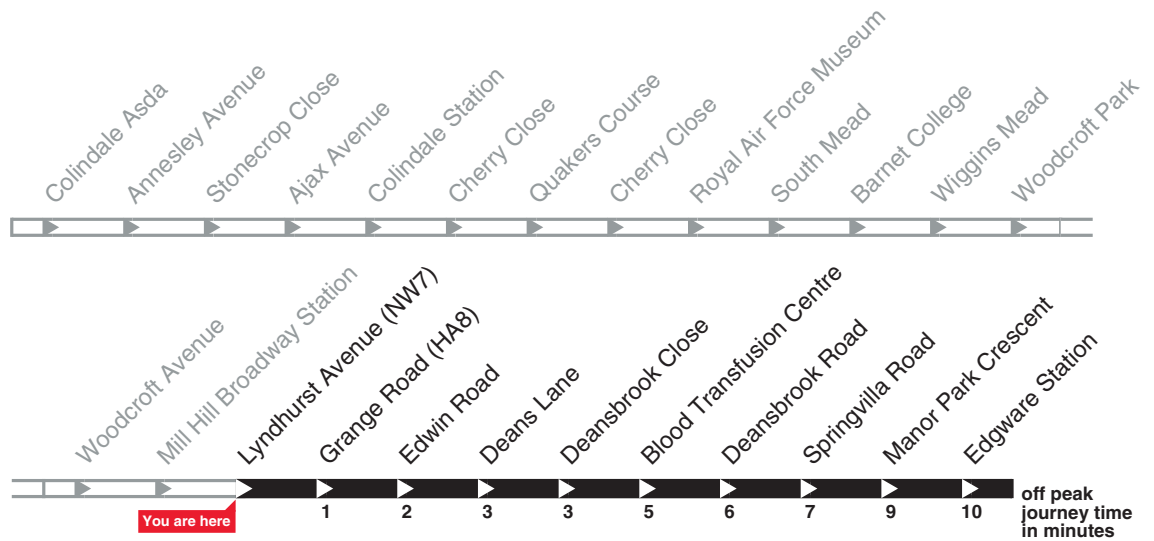
London Buses

303

Daily



Buses towards Edgware Station



Monday to Friday

First bus	6 to 7am	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to 3pm	3 to 4pm	4 to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9pm to Midnight	Last bus
05 37	06 07	07 12	08 03	09 02	10 15	At these 01	15 00	16 14	17 14	18 13	19 06	20 06	At these 15	00 15
	06 37	07 33	08 18	09 17	10 31	minutes 16	15 15	16 29	17 28	18 28	19 21	20 26	minutes 45	
	06 57	07 48	08 33	09 29	10 46	past the 31	15 30	16 44	17 43	18 40	19 36	20 45	past the	
			08 48	09 44	09 59	hour 46	15 45	16 59	17 58	18 51	19 51		hour	

Saturday

First bus	6 to 8am	8 to 9am	9 to 10am	10am to 4pm	4 to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8pm to Midnight	Last bus
05 34	At these 04	08 05	09 03	At these 00	16 00	17 14	18 13	19 17	At these 15	00 15
	minutes 34	08 26	09 18	minutes 15	16 15	17 28	18 27	19 45	minutes 45	
	past the	08 45	09 31	past the 30	16 30	17 43	18 42		past the	
	hour		09 45	hour 45	16 45	17 58	18 57		hour	

Sunday

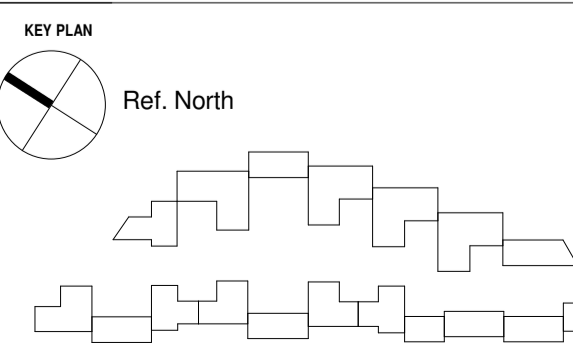
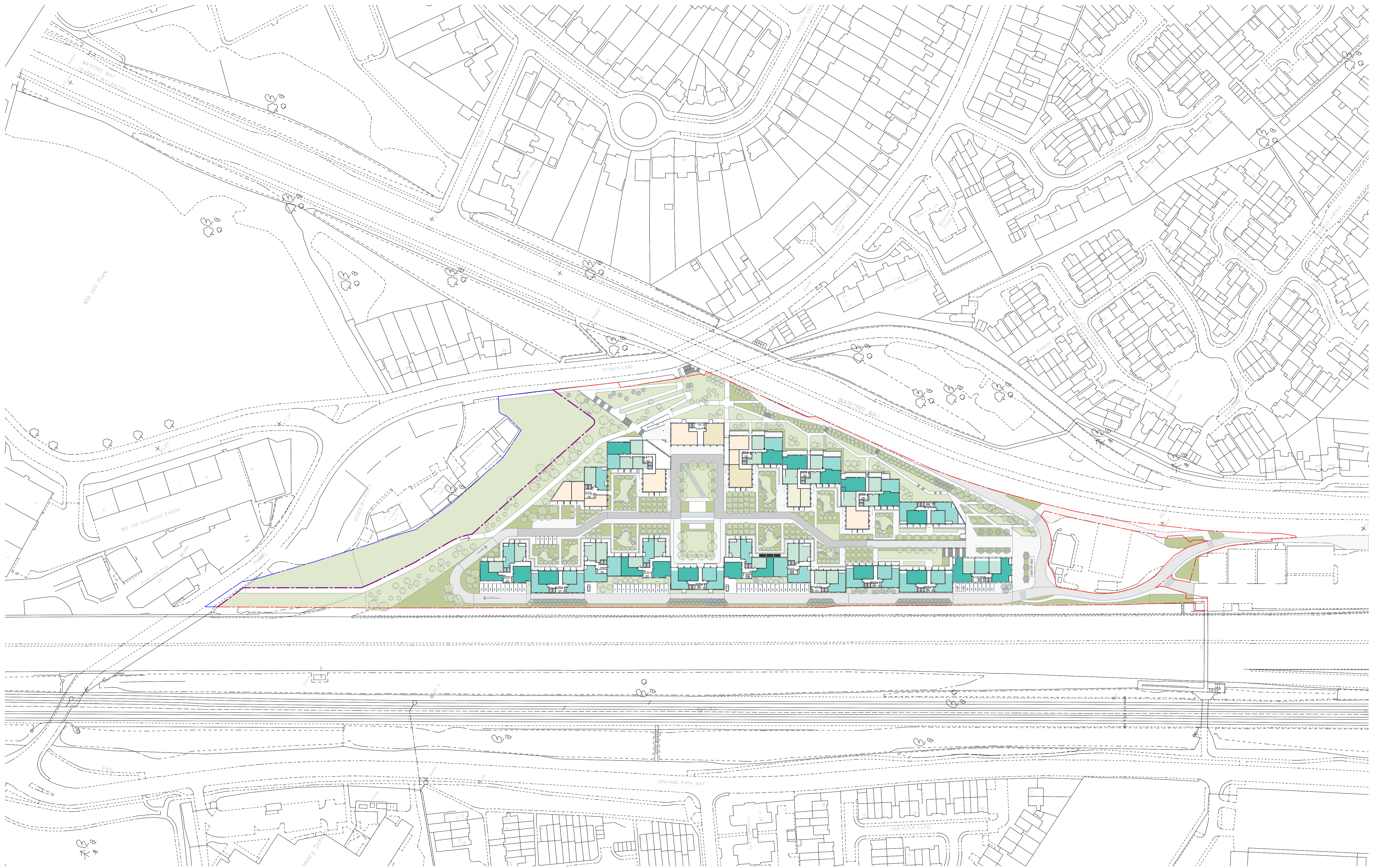
First bus	7 to 9am	9 to 10am	10am to 3pm	3 to 4pm	4 to 5pm	5 to 6pm	6 to 7pm	7pm to Midnight	Last bus
06 59	At these 29	09 19	At these 19	15 19	16 00	17 00	18 17	At these 15	00 15
	minutes 59	09 41	minutes 39	15 40	16 20	17 20	18 47	minutes 45	
	past the	09 59	past the 59		16 40	17 39		past the	
	hour		hour			17 59		hour	

Operated by Arriva London for London Buses



Appendix B

PROPOSED LOWER AND GROUND FLOOR SITE LAYOUTS



REV	DATE	DESCRIPTION
P1	01.02.19	For information

SITE BOUNDARY —
 APPLICATION BOUNDARY —

NOTES
 Check and verify all dimensions prior to commencement of work.
 This drawing shall be read in conjunction with all other contract documents including those by other consultants, and including specifications.
 Seek clarification of inconsistencies/ conflicts.
 Figured dimensions shall take precedence to scaled dimensions.

DRAWN	CHECKED	JOB NO.
Author	Checker	44032

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CLIENT
 Meadow Residential

PROJECT
 Mill Hill - London

ARCHITECTS:
 AS2 ARCHITECTURE + INTERIORS
 44-46 SCRUTTON STREET, LEVEL 1
 LONDON, EC2A 4HR, UNITED KINGDOM.
CLIENT:
 MEADOW RESIDENTIAL
 FIRST FLOOR, 50 GREAT
 MARLBOROUGH STREET, LONDON,
 W1F 7JG.

DRAWING TITLE
 SITE PLAN

STRUCTURAL ENGINEER:
 RISE
 4 PEAR TREE COURT, LONDON,
 EC1P 3DS.
MECHANICAL / ELECTRICAL ENGINEER:
 CHEPMAN BROS
 54 FRYTON HOUSE, 8-10 KIRBY STREET,
 LONDON, EC1N 8TS.

LANDSCAPE ARCHITECT:
 OUBERSIQUE
 THE BOATHOUSE, 27 FERRY
 ROAD, TEDDINGTON, TW11 9RN.

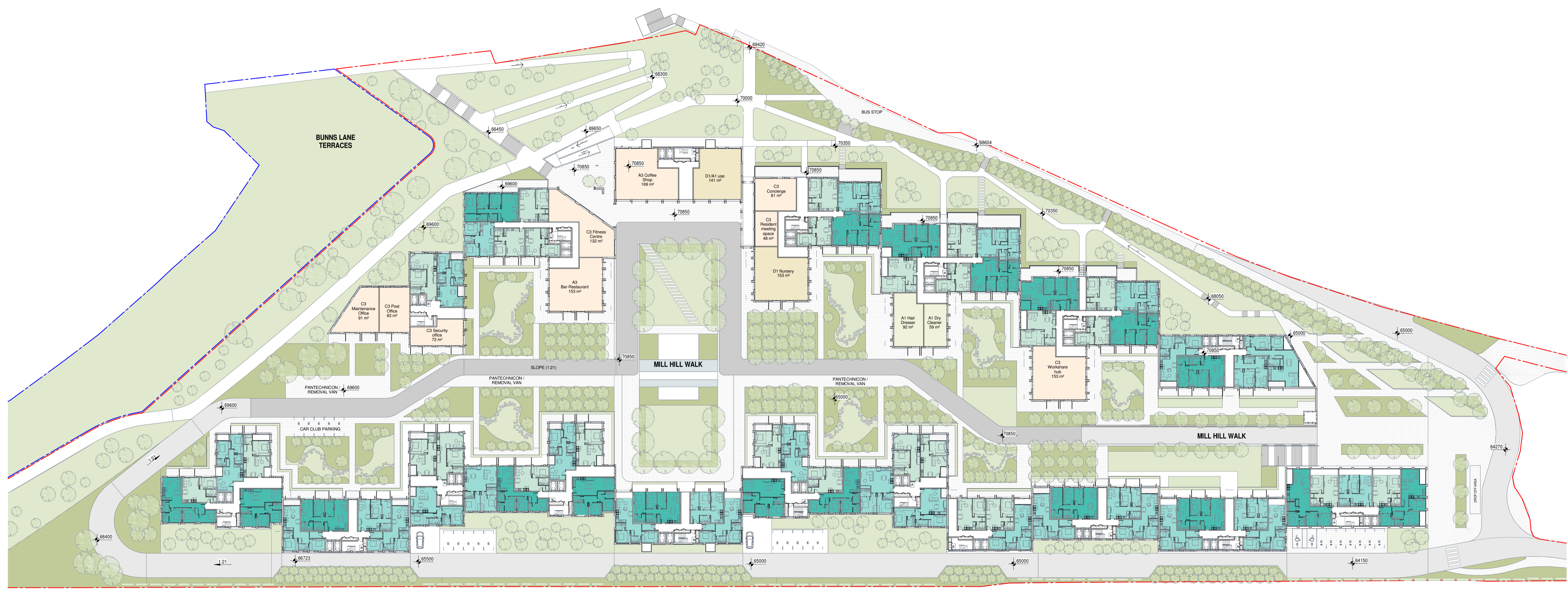
Arney Fender Katsalidis

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REVISION / DRAWING No.
 P1 | PLANNING

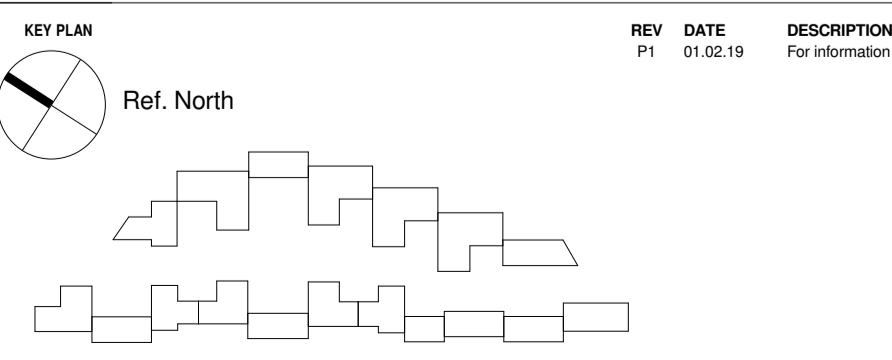
A01-00-03

- Legend**
- 1 Bed
 - 2 Bed
 - 3 Bed
 - C3 Ancillary
 - A1 Class Order
 - A3-A4 Class Order
 - D1 Class Order

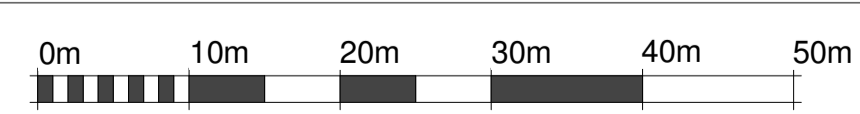


M1 MOTORWAY

LEVELS ARE SUBJECT TO CHANGE



REV	DATE	DESCRIPTION
P1	01.02.19	For information



SITE BOUNDARY ———
APPLICATION BOUNDARY ———

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MMR	JC	44032

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CLIENT
Meadow Residential

PROJECT
Mill Hill - London

ARCHITECTS:
ARNEY FENDER KATSAIDIS
44-46 SCRUTTON STREET, LEVEL 1
LONDON, EC2A 4HS, UNITED KINGDOM.
CLIENT:
MEADOW RESIDENTIAL
FIRST FLOOR, 50 GREAT MARLBOROUGH STREET, LONDON, W1F 7JZ.

STRUCTURAL ENGINEER:
RIS
4 PEAR TREE COURT, LONDON, EC1P 3DS.
MECHANICAL / ELECTRICAL ENGINEER:
CHEPMAN EDGE
SAYFON HOUSE, 6-10 KIRBY STREET, LONDON, EC1N 8TS.

LANDSCAPE ARCHITECT:
OUTERBOURNE
THE BOATHOUSE, 27 FERRY ROAD, YESSINGTON, TW11 9NN.

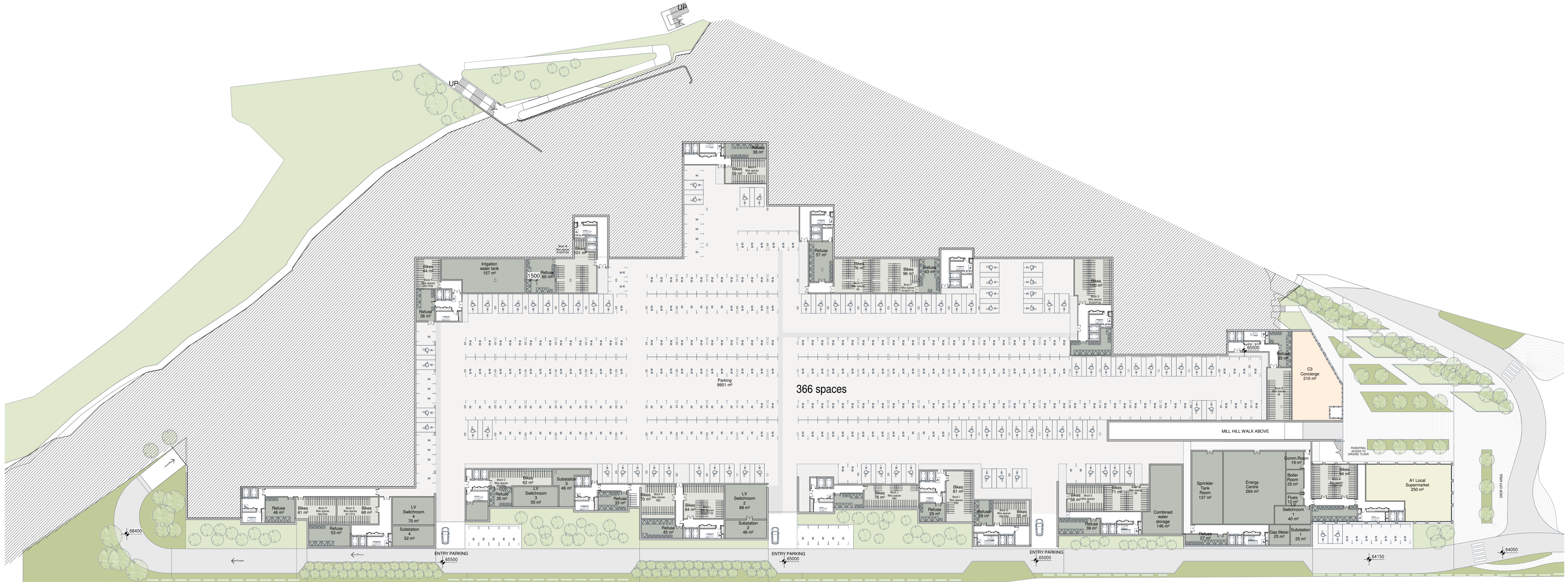
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DRAWING TITLE
GA_LEVEL 00_OVERALL PLAN

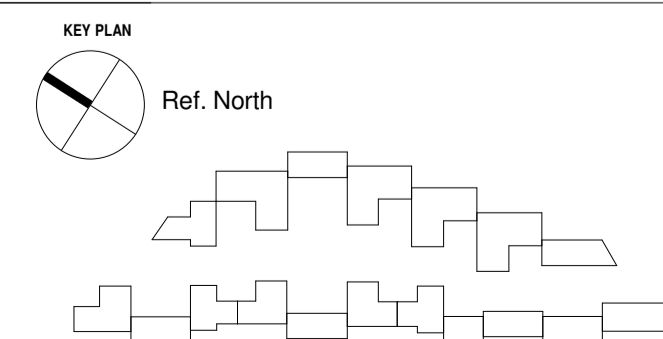
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REVISION / DRAWING No.
P1 | PLANNING

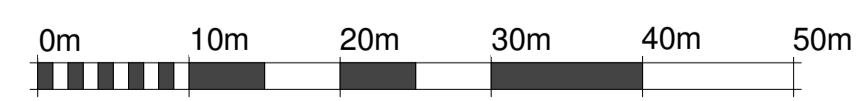
A10-00-01



STRUCTURE TO BE COORDINATED



REV	DATE	DESCRIPTION
P1	01.02.19	For information



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MMR	JC	44032

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CLIENT
 Meadow Residential

PROJECT
 Mill Hill - London

ARCHITECTS:
 822 ARCHITECTURE + INTERIORS
 44 46 SCRUTTON STREET, LEVEL,
 LONDON, EC2A 4HS, UNITED KINGDOM.

CLIENT:
 MEADOW RESIDENTIAL
 FIRST FLOOR, 50 GREAT
 MARLBOROUGH STREET, LONDON,
 W1F 7J2.

ARCHITECTS:
 822 ARCHITECTURE + INTERIORS
 44 46 SCRUTTON STREET, LEVEL,
 LONDON, EC2A 4HS, UNITED KINGDOM.

STRUCTURAL ENGINEER:
 HES
 4 PEAR TREE COURT, LONDON,
 EC1P 3DS.

MECHANICAL / ELECTRICAL ENGINEER:
 CHAPMAN BOSS
 SAFYRON HOUSE, 6-10 KIRBY STREET,
 LONDON, EC1N 8TS.

LANDSCAPE ARCHITECT:
 OUBERSHAW
 THE BOATHOUSE, 27 FERRY
 ROAD, TEDDINGTON, TW11 9NN.

Arney Fender Katsalidis

SCALE
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REVISION / DRAWING No.
 P1 | PLANNING

A10-LG-01