

DRAFT TRAVEL PLAN

8-10 Southampton Row & 1 Fisher Street, Holborn

Client: Idé Real Estate

Reference: INFRA-PB6701-RP002-F0.1

Revision: 01/Final

Date: 05 May 2017

HASKONINGDHV UK LTD.

Manchester One
53 Portland Street
Manchester
M1 3LF
Transport & Planning
VAT registration number: 792428892

+44 161 2361018 **T**
email **E**
royalhaskoningdhv.com **W**

Document title: 8-10 Southampton Row & 1 Fisher Street, Holborn

Document short title: Draft Travel Plan
Reference: INFRA-PB6701-RP002-F0.1
Revision: 01/Final
Date: 05 May 2017
Project name: Southampton Row, Holborn
Project number: PB6701
Author(s): 304507

Drafted by: Kateryna Kryshkevych

Checked by: Patrick Hebbard

Date / initials: 05.05.2017 / PJH

Approved by: Brian Laird

Date / initials: 05.05.2017 / BL

Disclaimer

No part of these specifications/printed matter may be reproduced and/or published by print, photocopy, microfilm or by any other means, without the prior written permission of HaskoningDHV UK Ltd.; nor may they be used, without such permission, for any purposes other than that for which they were produced. HaskoningDHV UK Ltd. accepts no responsibility or liability for these specifications/printed matter to any party other than the persons by whom it was commissioned and as concluded under that Appointment. The integrated QHSE management system of HaskoningDHV UK Ltd. has been certified in accordance with ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007.

TABLE OF CONTENTS

1	INTRODUCTION AND CONTEXT	1
1.1	Background	1
1.2	Existing Conditions	1
1.3	Development Scheme Summary	2
1.4	Format of the Travel Plan	4
2	POLICY CONSIDERATIONS	6
2.1	Background	6
2.2	National Planning Policy Framework	6
2.3	The London Plan	7
2.4	London Borough of Camden Council’s Core Strategy 2010 to 2025	8
2.5	London Borough of Camden Council’s Development Policies 2010 to 2025	9
2.6	Guidance on the Requirements for Travel Plans	9
3	ACCESSIBILITY BY SUSTAINABLE TRAVEL MODES	11
3.1	Introduction	11
3.2	Accessibility on Foot	11
3.3	Accessibility by Cycle	12
3.4	PTAL Assessment	14
3.5	Accessibility by Bus	14
3.6	Accessibility by London Underground Tube	16
3.7	Accessibility by Rail	16
3.8	Summary	17
4	BASE MODE SPLIT AND TRAVEL PATTERNS	18
4.1	Background	18
4.2	Multi Modal Trip Generation	18
4.3	Development of a Definitive Occupational Base Position	19
4.4	Survey Groups and Response Rates	20
4.5	Survey Methodology	20
5	OBJECTIVES AND TARGETS	21
5.1	Background	21
5.2	Objectives	21
5.3	Targets	21
6	TRAVEL PLAN MEASURES	23
6.1	Background	23
6.2	Hard Measures	23

6.3	Soft Measures	23
6.4	Delivery and Servicing Plan	25
7	TRAVEL PLAN MANAGEMENT AND COMMUNICATION	26
7.1	Background	26
7.2	Travel Plan Coordinator	26
7.3	Communication	26
7.4	Staff Travel Pack	27
7.5	Noticeboard	27
7.6	Hotel Website	28
7.7	Summary	29
8	TRAVEL PLAN MONITORING	30
8.1	Background	30
8.2	Monitoring	30
8.3	Reporting	30
9	ACTION PLAN	31
9.1	Background	31
9.2	Action Plan	31

TABLES

Table 1: Service Deliveries and Frequencies	4
Table 2: Person Trip Rates and Proposed Person Trip Generation.....	18
Table 3: Proposed Modal Split	18
Table 4: Proposed Multi Modal Trip Generation	19
Table 5: Targeted Reduced Number of Pick-Up/Drop-Off by Car	22

EXTRACTS

Extract 1. Cycle Docking Stations Location	12
Extract 2. Location of the Nearest Bus Stops	15

PLANS

Plan 1	Site Location
Plan 2	Local Highway Network
Plan 3	Proposed Ground Floor Site Layout
Plan 4	Proposed Basement Site Layout
Plan 5	1km and 2km Walking Catchment Area
Plan 6	3km and 5km Cycling Catchment Area

APPENDICES

Appendix A	Pre-Application Response – Transport Section
Appendix B	PTAL Output
Appendix C	Bus Routes and Frequencies Summary Table
Appendix D	TRICS Output

1 INTRODUCTION AND CONTEXT

1.1 Background

1.1.1 Royal HaskoningDHV has been appointed by Idé Real Estate to prepare a Draft Travel Plan in support of a planning application for a proposed hotel development located at 8-10 Southampton Row and 1 Fisher Street in Holborn, Central London.

1.1.2 The proposed development would comprise an eight storey building, accommodating a hotel reception on ground floor and 120 rooms on floors one to eight, with a public bar on ground floor and a public restaurant on the first floor.

1.1.3 In total the proposed development would comprise an area of 5,102sqm over eight floors, a basement and sub-basement. The floor area includes 148sqm of public restaurant floorspace and 42sqm of bar floorspace.

1.1.4 This Draft Travel Plan considers travel relating to staff and the proposed hotel development visitors, and has been produced in reference to National, Regional and Local planning guidance including:

- National Planning Policy Framework;
- The London Plan;
- London Borough of Camden Council's Core Strategy 2010 to 2025;
- London Borough of Camden Council's Development Policies 2010 to 2025; and
- TfL Guidance on the Requirements for Travel Plans.

1.1.5 A Transport Statement has also been prepared for the proposed development, which should be read in conjunction with this Draft Travel Plan.

1.2 Existing Conditions

1.2.1 The proposed development is to be located on land to the east of Southampton Row (A4200), approximately 100m north of Holborn Underground Tube Station in the London Borough of Camden. **Plan 1** shows the location of the site in a general context and **Plan 2** shows the location of the site relative to the local highway network.

1.2.2 As can be seen from **Plan 2**, the site is bound by Southampton Row (A4200) to the west, Fisher Street to the north, Catton Street to the south. Lion Court Conference Centre fronting Procter Street (A40) bounds the site to the east.

1.2.3 The site is currently occupied by a seven storey building, occupied by Crossrail offices, on the west side and a Crossrail shaft on the east side. The shaft is currently being constructed and will be used for future maintenance for Crossrail's tunnelled railway line, which when completed will link Reading to Abbey Wood and Shenfield, through central London.

1.2.4 It can also be seen from **Plan 2** that the site is located in a densely built up area, with St Martins College of Art and Design to the north, offices (Lion Court Conference Centre) to the east, a hotel development currently under construction (planning application ref: 2007/5204/P) to the south and offices to the west.

- 1.2.5 The site is located within a 10 minute walk from the British Museum, Sir John Soane's Museum, University of Arts London, The Shaftsbury Theatre and Great Ormond Street Hospital.

1.3 Development Scheme Summary

- 1.3.1 Idé Real Estate is seeking full planning permission for construction of an eight storey building, accommodating a hotel reception on ground floor and 120 rooms on floors one to eight, with a public bar on ground floor and a public restaurant on the first floor.
- 1.3.2 In total the proposed development would comprise an area of 5,102sqm over eight floors, a basement and sub-basement. The floor area includes 148sqm of public restaurant floorspace and 42sqm of bar floorspace.
- 1.3.3 The proposed development ground floor layout is shown on **Plan 3**.

Proposed Pedestrian Entrances

- 1.3.4 As it can be seen from **Plan 3**, the pedestrian entrance to the hotel would be taken from the northwest corner of the building fronting Southampton Row and Fisher Street. The pedestrian entrance to the public bar and restaurant would be taken from the southwest corner of the building fronting Southampton Row and Catton Street.

Proposed Site Access

- 1.3.5 At present there is a vehicular entrance into the site from Fisher Street and Catton Street, located between the existing building and the Crossrail shaft. As it can be seen on **Plan 3**, it is proposed that these existing accesses would be closed and reinstated as footway.
- 1.3.6 The proposed development does not involve the creation of a new vehicular access as no car parking on site is proposed to cater for the development. **Section 3** of this Draft Travel Plan demonstrates that the site is highly accessible by sustainable modes of transport and providing no car parking on site is in line with London Borough of Camden Council's policy to deter unnecessary car use.

Cycle Parking

- 1.3.7 Based on the Schedule of Accommodation for the proposed development, requires a minimum cycle parking provision of 8 long stay spaces and 8 short stay spaces.
- 1.3.8 In line with the London Plan parking standards, a room in the basement is proposed to provide 16 long stay cycle parking spaces for staff and hotel guests, which is double the provision of long stay spaces required. **Plan 4** shows the proposed basement floor layout, including the room that would be dedicated for cycle parking.
- 1.3.9 In terms of short stay cycle parking provision, there are currently 19 "M" short stay cycle stands located along the central island on Southampton Row, directly across from the site. Each "M" stand can accommodate two cycles, which in total provides parking provision for 38 cycles.

- 1.3.10 With reference to the pre-application advice, however the Highway Authority has stated that the existing short stay cycle parking provision on Southampton Row is currently well used and additional provision would need to be accommodated in this area to cater for the proposed hotel development. As part of the proposed development the developer is therefore willing to fund the provision of 8 short stay cycle spaces to increase the existing provision on Southampton Row. The contribution for 8 short stay cycle spaces (circ. £2,000) would be provided through a Section 106 Agreement.

Coach Parking

- 1.3.11 The London Borough of Camden Council's parking standards also requires the need for coach parking to be considered for hotels above 2,500sqm. In addition, although the London Plan (March 2016) includes no policy in relation to coach parking for hotels, it does state at paragraph 6A.9 "*Developments should provide for one coach parking space per 50 rooms for hotels.*"
- 1.3.12 Based on a proposed hotel accommodating 120 rooms, up to 2 coach parking spaces would be required.
- 1.3.13 For the proposed development however, no coach parking spaces are proposed as the operator of the hotel would cater for the single business users and top end of the tourist market, as opposed to coach party bookings. In addition there are no meeting rooms or conference facilities proposed that could generate a large number of people.
- 1.3.14 A draft Transport Statement was produced in October 2016 and was submitted to the London Borough of Camden as part of a package of information to seek pre-application advice on the proposals. The Council's Transport Section of the pre-application advice is contained as **Appendix A**.
- 1.3.15 With reference to the Council's Transport Section of the pre-application advice it has been confirmed that the proposal not to cater for coach party bookings would need to be secured via a Section 106 legal agreement.

Car Parking

- 1.3.16 There are several public car parks available in the vicinity of the site. Bloomsbury Square Car Park is approximately 300m to the northwest of the site and Shaftesbury Car Park and Covent Garden Car Park are approximately 300m and 400m to the southwest of the site, respectively.
- 1.3.17 The standard rates for the Bloomsbury Square Car Park Monday to Sunday are the following: £6.00 for up to one hour; £11.50 for one to two hours; £16.50 for two to four hours; £22.00 for four to six hours; £26.50 for six to eight hours; and £32.00 for eight to 24 hours. Reduced rates are available for early bookings.
- 1.3.18 The Shaftesbury Car Park and Covent Garden Car Park belong to the National Car Parks (NCP). Pay on the day rates for the two aforementioned car parks are the following: £4.50 for up to 30 mins, £9.00 for up to 1 hour; £17.00 for one to two hours; £26.00 for two to three hours; £36.00 for three to four hours; £42.00 for four to 24 hours. Pre-booking with reduced fares is also available at both car parks.
- 1.3.19 In addition to the parking charges, the site and surrounding public car parks are located within the London Congestion Charge Zone. The Congestion Charge is an £11.50 daily charge for driving a vehicle within the charging zone between 7am and 6pm, Monday to Friday.

1.3.20 Despite the close proximity of the site to the car parks, the relatively high parking charges and the Congestion Charge would naturally make driving a less attractive option for staff commuting trips, and also for hotel guests.

Servicing

1.3.21 As it can be seen from **Plan 3**, the entrance to the servicing and refuse area is located on Catton Street, approximately at the midpoint of the building footprint.

1.3.22 Although service deliveries would be confirmed by the future hotel operator, Error! Reference source not found. provides a summary of the likely vehicles that would service the building, along with the frequency of visit. The maximum size of vehicle would be a rigid axle Heavy Goods Vehicles (HGV).

Table 1: Service Deliveries and Frequencies

Service Delivery	Frequency
Laundry	Every Day
Waste	Every Day, except Sunday
Food	Every Day, except Sunday
Beverage	3 Deliveries per week

1.3.23 As it can be seen from **Although service** deliveries would be confirmed by the future hotel operator, Error! Reference source not found. provides a summary of the likely vehicles that would service the building, along with the frequency of visit. The maximum size of vehicle would be a rigid axle Heavy Goods Vehicles (HGV).

1.3.24 **Table 1**, the proposed development would generate a maximum of four service vehicles per day. Timing of deliveries would also be managed to avoid more than one vehicle arriving at site at the same time.

1.3.25 As stated earlier in this Transport Statement, an approved hotel development (planning application ref: 2007/5204/P) is currently being built directly opposite the site, south of Catton Street. As part of the approved hotel development, highway works to the entire length of Catton Street are to be provided, including parking bays on the south side of Catton Street to serve the approved development, upgrading footway surfacing and providing raised tables at both ends of the road. The highway works will be provided by the London Borough of Camden Council.

1.3.26 Further to discussions with the Highway Officer, the details of the highway works are not known and the works have not commenced on site. It is therefore proposed that the highway works are amended accordingly to include the design of a service bay on the north side of Catton Street to cater for the proposed hotel development. The developer would be willing to fund a TRO for the provision of the service bay.

1.4 Format of the Travel Plan

1.4.1 Following this introduction, the format of the Draft Travel Plan is as follows:

- Section 2 sets out the National, Regional, Local policy and the TfL Guidance on the Requirements of Travel Plans;
- Section 3 describes the accessibility of the site by sustainable modes of transport;
- Section 4 describes the base mode split and travel patterns expected at the site;

- Section 5 sets out the objectives and targets of the Travel Plan;
- Section 6 outlines the measures that constitute the Travel Plan, including specific 'hard' and 'soft' measures to promote sustainable modes of transport;
- Section 7 sets out how the Travel Plan will be managed and communicated;
- Section 8 sets out how the Travel Plan will be monitored and reported; and
- Section 9 provides details of the Action Plan.

2 POLICY CONSIDERATIONS

2.1 Background

2.1.1 Reported benefits of Travel Plans include a reduction in traffic congestion, relieving parking pressure, making sites more accessible and improving travel choice. Travel Plans have become an important component of national, regional and local strategies to reduce traffic and cut CO2 emissions which contribute to climate change.

2.1.2 This section sets out the relevant national and local transportation related policies and guidance against which the proposed development should be assessed, comprising the following documents:

- National Planning Policy Framework;
- The London Plan;
- London Borough of Camden Council's Core Strategy 2010 to 2025;
- London Borough of Camden Council's Development Policies 2010 to 2025; and
- Guidance on the Requirements for Travel Plans.

2.2 National Planning Policy Framework

2.2.1 The Department for Communities and Local Government published its National Planning Policy Framework (NPPF) on 27th March 2012.

2.2.2 NPPF incorporates sustainable transport policy as a key plan for achieving sustainable development. At the heart of the NPPF is a:

'...presumption in favour of sustainable development...' (paragraph 14)

2.2.3 NPPF states at paragraph 15 that policies in Local Plans should follow the approach of the presumption in favour of sustainable development so that it is clear that development which is sustainable can be approved without delay. All plans should be based upon and reflect the presumption in favour of sustainable development, with clear policies that will guide how the presumption should be applied locally.

2.2.4 Local authorities will be required to grant permission, using NPPF as guidance, where the Local Plan is absent, silent, indeterminate or where relevant policies are out of date. Local Plans will therefore need to be prepared to take into account the content of NPPF.

2.2.5 With regards to the integration of transport and land-use planning, the overarching principle is that planning should (see paragraph 17 of NPPF):

'actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable'

2.2.6 In terms of promoting sustainable transport, NPPF states at paragraph 29 that transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives.

- 2.2.7 At paragraph 32 NPPF confirms that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:
- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
 - safe and suitable access to the site can be achieved for all people; and
 - improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development.
- 2.2.8 NPPF confirms that development should only be prevented or refused on transport grounds where the residual impacts of development are severe.
- 2.2.9 NPPF goes on to state at paragraph 35 that Local Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore developments should be located and designed where practical to:
- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
 - Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones; and
 - Consider the needs of people with disabilities by all modes of transport.
- 2.2.10 In respect of car parking provision NPPF states at paragraph 39 that if setting local parking standards for residential and non-residential development, Local Planning Authorities should take into account the following:
- the accessibility of the development;
 - the type, mix and use of development;
 - the availability of and opportunities for public transport;
 - local car ownership levels; and
 - an overall need to reduce the use of high-emission vehicles.

2.3 The London Plan

- 2.3.1 The Mayor's current Spatial Development Strategy, more commonly referred to as the London Plan was published in March 2016. The Plan provides the London wide context within which individual boroughs are required to set their local planning policies.
- 2.3.2 The site is located within the Central Activities Zone (CAZ) as identified within the London Plan. In relation to hotel's, policy 4.5 "London's Visitor Infrastructure" states:

"Strategic

A The Mayor will, and boroughs and relevant stakeholders should:

...b seek to achieve 40,000 net additional hotel bedrooms by 2036, of which at least 10 per cent should be wheelchair accessible

c ensure that new visitor accommodation is in appropriate locations:

– beyond the Central Activities Zone (CAZ) it should be focussed in town centres and opportunity and intensification areas, where there is good public transport access to central London and international and national transport termini...

Planning decisions

B Developments should:

a contribute towards the hotel provision target and ensure that at least 10 per cent of bedrooms are wheelchair accessible

b be consistent with the strategic location principles set out above

c not result in the loss of strategically important hotel capacity.

LDF preparation

C LDFs should:

...d promote and facilitate development of a range of visitor accommodation, such as hotels, bed and breakfast accommodation, self-catering facilities, youth hostels and camping and caravan sites..."

2.3.3 Chapter 6 of the London Plan sets out London's vision and aims for transport. Although there are no policies for hotel development, regarding parking for hotels, paragraph 6A.8 states:

"Although no maximum standards are set for hotels, the following approach should be taken for applications referred to the Mayor. In locations with a PTAL of 4–6, onsite provision should be limited to operational needs, parking for disabled people and that required for taxis, coaches and deliveries/servicing."

2.3.4 Paragraph 6A.9 goes on to state:

"Developments should provide for one coach parking space per 50 rooms for hotels."

2.3.5 In terms of cycling, the London Plan states for hotels there should be a minimum of one long stay space per 20 rooms and one short stay space per 50 rooms. For restaurants and drinking establishments with a gross floor area over 100sqm, the standards are one long stay space per 175sqm and one short stay space per 40sqm.

2.4 London Borough of Camden Council's Core Strategy 2010 to 2025

2.4.1 The Core Strategy was adopted in November 2010, which sets out the key elements of the council's planning vision and strategy for the borough and is the central part of the Local Development Framework.

2.4.2 Paragraph 11.1 of the Core Strategy acknowledges the highly sustainable credentials of Camden:

“Camden benefits from excellent transport provision, including a direct link to continental Europe through St Pancras International; national rail services at King’s Cross, St Pancras and Euston; 23 tube stations within the borough or on its boundary, 55 bus routes and 27 night bus routes. These provide excellent accessibility within Camden, to the rest of London and beyond.”

2.4.3 Policy CS11 “Promoting sustainable and efficient travel” sets out the council’s strategic transport objectives, which are to:

- Improve strategic transport infrastructure and support growth;
- Promote sustainable travel;
- Make private transport more sustainable; and
- Promote sustainable movement of freight.

2.5 London Borough of Camden Council’s Development Policies 2010 to 2025

2.5.1 The Camden Development Policies was adopted in November 2010 and contributes towards delivering the council’s Core Strategy by setting out the detailed planning policies that the council will use to determine planning applications.

2.5.2 Planning policies DP16 to DP21 sets out the council’s transport related detailed planning policies, which covers:

- DP16: The transport implications of development;
- DP17: Walking, cycling and public transport;
- DP18: Parking standards and limiting the availability of car parking;
- DP19: Managing the impact of parking;
- DP20: Movement of goods and materials; and
- DP21 Development connecting to the highway network.

2.5.3 In terms of the proposed development, Policy DP16 states that the council will ensure that safe pick-up, drop-off and waiting areas are provided. DP17 states that the council will resist development that would be dependent on travel by private vehicles. In terms of parking provision in highly accessible areas such as Holborn, which is located within the CAZ, policies DP18 and DP19 encourages development to be car free.

2.5.4 The council’s parking standards are contained within Appendix 2 of the Camden Development Policies, which have been superseded by the standards contained in the March 2016 London Plan.

2.6 Guidance on the Requirements for Travel Plans

2.6.1 This Draft Travel Plan has been prepared in accordance with the Transport for London (TfL) Travel Planning Guidance (November 2013), which supersedes ‘Travel Planning for New Development in London: Incorporating Deliveries and Servicing’ (January 2012).

- 2.6.2 The guidance website defines a Travel Plan as being *“a long term management strategy which encourages sustainable travel for new and existing developments. It sets out transport impacts, establishes targets and identifies a package of measures to encourage sustainable travel”* (see TfL official website, Urban planning & construction – Travel plans).
- 2.6.3 TfL has set development scale thresholds above which a full Travel Plan should be prepared. As the proposed hotel development would provide more than 100 beds, and in the context of the referred to thresholds, a Full Travel Plan is required.
- 2.6.4 The guidance website states that *“The overarching purpose of a travel plan should be to encourage behaviour change which will lead to the use of more sustainable modes of travel and reduce overall travel to and from the site”* (see TfL official website, Urban planning & construction – Travel plans – Travel plan content).
- 2.6.5 With reference to the guidance, the following elements are essential for a policy compliant Travel Plan: Introduction, Context, Site Assessment, Travel Surveys, Objectives, Targets, Package of Measures, Management, Monitoring, and Action Plan. This Draft Travel Plan has been prepared in accordance with the guidance and comprises the aforementioned elements to ensure it is policy compliant.

3 ACCESSIBILITY BY SUSTAINABLE TRAVEL MODES

3.1 Introduction

3.1.1 Current national and local policy on transportation states that new developments should promote more sustainable transport choices for people, particularly accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling, so as to reduce the dependence on private cars.

3.1.2 In view of the current transport policy requirements, this section considers the accessibility of the proposed development site by non-car modes.

3.2 Accessibility on Foot

3.2.1 Walking is generally accepted as the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2km.

3.2.2 The pedestrian entrances to the proposed development would be at the northwest (hotel entrance) and southwest (bar/restaurant entrance) corners of the site on Southampton Row. All of the roads within the immediate vicinity of the site have footways on both sides and the main junctions in the vicinity of the site are traffic signal controlled, incorporating pedestrian crossing facilities. Street lighting is also present.

3.2.3 **Plan 5** shows the 1km and 2km walk catchment areas from the centre of the proposed development, which with reference to the Chartered Institution of Highways and Transportation (CIHT) "Providing for Journeys on Foot" are the considered acceptable and preferred maximum walking distances for commuting and sight-seeing. Local facilities and amenities are also highlighted on the plan.

3.2.4 It can be seen from **Plan 5** that the site is located approximately 100m walking distance from Holborn Underground Tube Station, which is served by the Central and Piccadilly lines.

3.2.5 The site is located within a 1km walking distance from various sightseeing attractions, gardens and educational establishments such as the Royal College of Anaesthetists (230m to the northeast), British Museum (400m to the northwest), Bloomsbury Square Gardens and the Museum Archives and Libraries (100m to the northwest), Senate House Library (850m to the northwest), University of the Arts London (350m to the southeast), Sir John Soane's Museum (350m to the southeast), Phoenix Theatre (1km to the southwest), Royal Opera House (850m to the south), Novello Theatre (900m to the south), Peacock Theatre, London School of Economics and Political Science, Hunterian Museum (550m to the south), Dominion Theatre (950m to the west), and The Shaftesbury Theatre (650m to the west).

3.2.6 In addition to the above, there are numerous shops, bars, pubs, cafés and restaurants surrounding the site, and as such the potential for hotel guests to undertake trips to/from the site on foot is significant.

3.2.7 The 2km walking catchment area extends to include the majority of Central London, including the whole area of Bloomsbury, the majority of St Pancras located to the north, Fitzrovia to the northwest, Clerkenwell to the east, and Soho to the west with its numerous bars and restaurants.

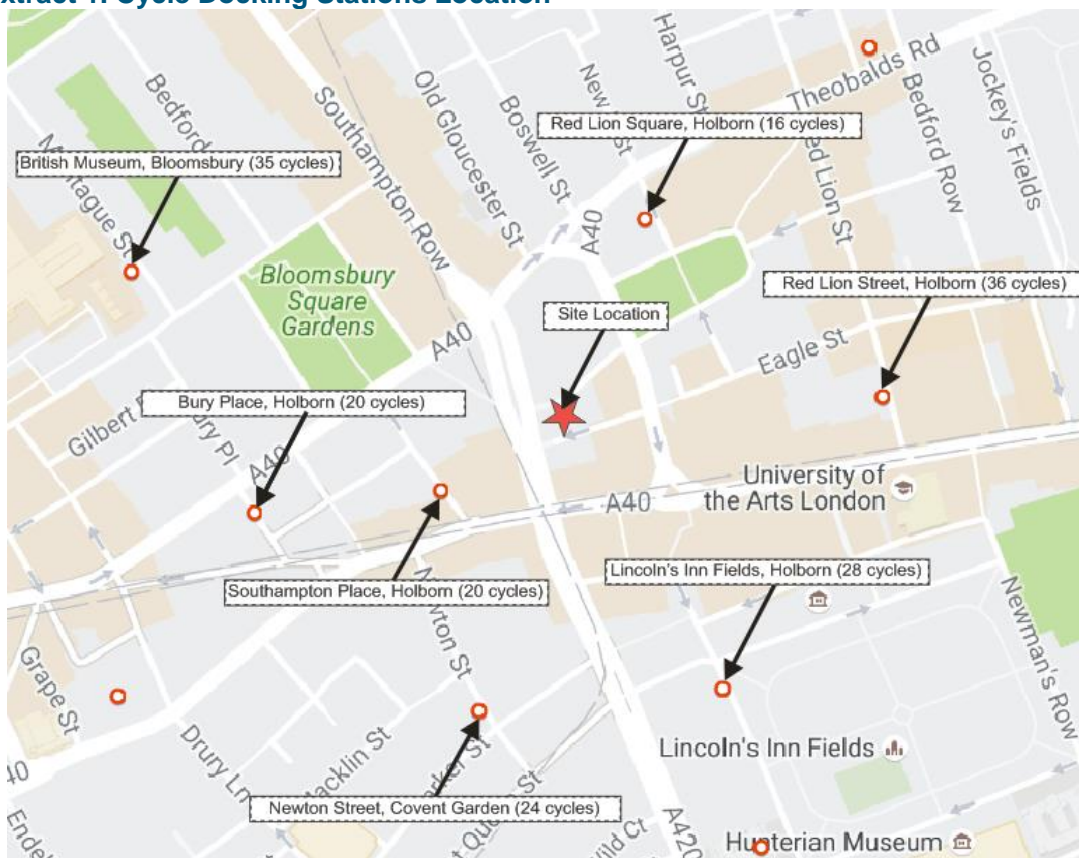
3.2.8 Three railway stations are accessible within the 2km walking catchment area, these are King's Cross (1.8km to the north), St Pancras International (1.7km to the north) and London Euston railway station (1.5km to the northwest).

- 3.2.9 Piccadilly Theatre and Piccadilly Circus are located approximately a 1.5km walking distance to the southwest of the site. English National Opera and The National Gallery are approximately 1.2km and 1.3km walking distances to the southwest of the site respectively. Oxford Circus and Hanover Square can be reached approximately 1.6km and 1.8km walking distances to the west of the site.
- 3.2.10 To the south, the 2km walking catchment area extends along the River Thames to the Playhouse Theatre and Somerset House on the north bank and London Eye, Southbank Centre and National Theatre on the south bank.
- 3.2.11 In conclusion, it has been demonstrated that the site is highly accessible on foot.

3.3 Accessibility by Cycle

- 3.3.1 As part of the proposed hotel development, 16 long stay parking spaces would be provided within a room on the basement level. In addition the developer would fund the provision of 8 short stay cycle parking spaces on Southampton Row, within the central island adjacent to the site, which would increase the existing provision to 44 short cycle stay spaces in this area.
- 3.3.2 The site is also conveniently located in the vicinity to cycle docking stations, which are bike hire schemes for short journeys. Hotel guests and staff would be able to hire a bike for the price of £2 for 24hrs and the bike could be returned to any docking station.
- 3.3.3 The location of the nearest docking stations and number of cycles they accommodate is shown on **Extract 1**.

Extract 1. Cycle Docking Stations Location



Source: The background map is extracted from TfL official website, Find a docking station section.

- 3.3.4 The nearest cycle docking station is located only 140m walking distance to the southwest of the site at Southampton Place. The current availability of cycles is updated online and can be checked on TfL's official website (see link: <https://tfl.gov.uk/modes/cycling/santander-cycles/find-a-docking-station>).
- 3.3.5 There are also 19 "M" short stay cycle stands located along the central island on Southampton Road, directly across from the site. Each "M" stand can accommodate two cycles, which in total provides parking provision for 38 cycles.
- 3.3.6 With regard to cycle routes, although the site is not located directly adjacent to any London Cycle Network signed routes, a good network of signed routes and roads is available in the wider Camden area. The routes are shown on **Plan 6**.
- 3.3.7 There is an existing cycle route located in St Pancras area along Tavistock Place and Regent Square to the north of the site, running in approximately a northeast/southwest direction. Another route runs north of the Tavistock Place route, along Marchmont Street towards Kentish Town Road (A400).
- 3.3.8 To the south of the site, an existing cycle route runs along the north bank of the River Thames, between Westminster and London Bridge. The River Thames can be crossed by following a cycle route which runs along Blackfriars Bridge connecting Farrington Street in the vicinity of Fleet Street on the northern side, to London South Bank University, on the southern side.
- 3.3.9 It is generally accepted that cycling has the potential to replace short car journeys, particularly those under 5 kilometres. The 3km and 5km cycling catchment areas have therefore been considered for this report.
- 3.3.10 **Plan 6** also illustrates the 3km (15 minutes) and 5km (25 minutes) cycling catchment from the site, recognised as acceptable cycling distances at a speed of 3.3m/s.
- 3.3.11 **Plan 6** shows that the 3km cycle catchment covers the majority of Central London, including St Pancras and Fitzrovia on the north bank of the River Thames where the main sightseeing attractions such as Parliament, Big Ben, Piccadilly Circus, Buckingham Palace, Green Park, St James's Park and Covent Garden .
- 3.3.12 The 5km cycle catchment extends to include Regents Park to the north of the site, the majority of Newington area to the south (south of River Thames), Hyde Park to the west of the site and numerous other attractions located in the Central London area.
- 3.3.13 With regard to the above, it is considered that there would be significant opportunities for leisure/sightseeing and commuting trips generated by the proposed development to take place via cycle.
- 3.3.14 In conclusion, it has been demonstrated that the site is highly accessible by cycle.

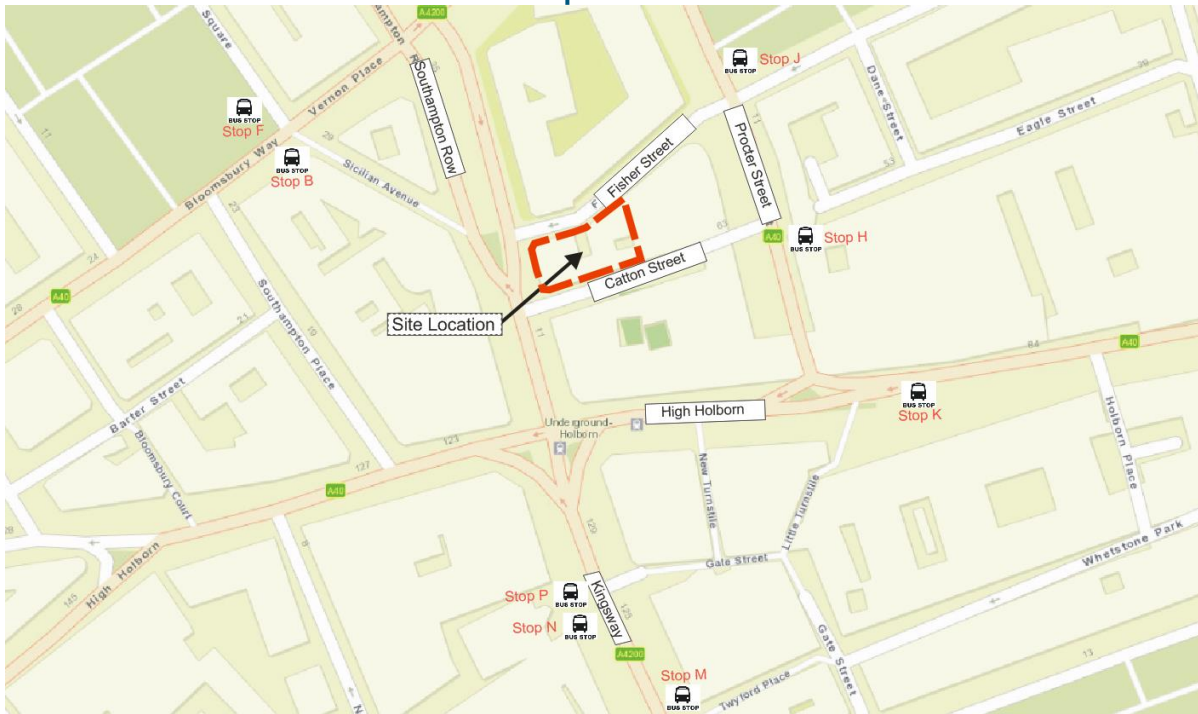
3.4 PTAL Assessment

- 3.4.1 The web-based Connectivity Assessment Toolkit (WebCAT) has been used to measure the Public Transport Access Level (PTAL) of the proposed development which is the most widely recognised way to measure connectivity to the public transport network in London. The result of the PTAL assessment is graded from 0 to 6 (including sub-divisions 1a, 1b, 6a and 6b), where a PTAL of 0 indicates extremely poor access to the location by public transport, and a PTAL of 6b indicates excellent access by public transport. PTAL values are influenced by the walking distance to nearby rail, tube or bus stations and bus stops and by the frequency of services at these stations and stops.
- 3.4.2 Transport for London's (TfL) official website has been used to determine the PTAL rating for the proposed development and the calculation output is included in **Appendix B**.
- 3.4.3 As can be seen from **Appendix B**, the site has a PTAL rate of 6b, which is the highest level of connectivity. With reference to PTAL, TfL's website (Accessibility & connectivity section) states: *"For the policies in the London Plan, it is important to use connectivity indicators like PTAL because sites with better connectivity provide opportunities for development at higher densities and for sustainable development that reduces the need to travel by car."* The PTAL assessment demonstrates that the proposed hotel development would have an excellent level of public transport accessibility.

3.5 Accessibility by Bus

- 3.5.1 The Institution of Highways and Transportation document 'Guidelines for Planning for Public Transport in Developments' (1999) recommends that new developments should be located so that public transport trips involve a walking distance of less than 400m from the nearest bus stop.
- 3.5.2 The site is well served by public transport and the location of bus stops in the vicinity of the site is shown on **Extract 2**.

Extract 2. Location of the Nearest Bus Stops



- 3.5.3 The nearest bus stops to the site are located on Procter Street, approximately 80m to the east (Stop H) and 150m northeast (Stop J) of the site. Stop H is served by bus routes 25 (24hr daily service towards Ilford), 242 (24hr daily service towards Homerton University Hospital), and N8 (towards Hainault). Stop J is served by bus routes 98 and N98 towards Willesden.
- 3.5.4 Additional bus stops are located on Kingsway (A4200) immediately south of the junction with High Holborn. Bus stops P and N provide northbound services and Stop M provides southbound services. An additional bus stop (Stop K providing westbound services) is located on High Holborn, to the east of the junction with Kingsway. The bus stops are within approximately 200m walking distance from the site.
- 3.5.5 The Kingsway Stop P is served by seven bus routes 1, 171, 243, 521, N1, N68 and N171. Bus Stop N is also served by seven bus routes 59, 68, 91, 168, 188, N91 and X68. Bus Stop M is served by 14 bus routes, which are 1, 59, 68, 91, 168, 171, 188, 243, 521, N1, N68, N91, N171 and X68.
- 3.5.6 The High Holborn bus Stop K is served by bus route 8, in addition to three bus routes which also stop at bus Stop H (25, 242 and N8), and bus route 521 which also stops at bus Stop M.
- 3.5.7 There are further bus stops (Stop B and Stop F providing eastbound services) located on Theobalds Road (A40), approximately 170m to the north of the site. Bus Stop B is served by six bus routes 19, 38, 55, N19, N38 and N41. Bus Stop F is served by nine bus routes 19, 38, 55, 98, N19, N38, N41, N98 and N207.
- 3.5.8 A summary of the bus routes available within a 200m walking distance from the site and their frequencies is included as **Appendix C**.

- 3.5.9 The aforementioned bus routes provide direct connections to numerous destinations within the Central London area in addition to covering wider geographic areas and such destinations as Hampstead Heath, Crouch End, Wood Green, North Greenwich, Bermondsey, Catford, Bellingham, West Croydon, Tulse Hill, and Streatham Hill.
- 3.5.10 With reference to **Section 3.4**, a PTAL assessment has been carried out to determine the site's connectivity to the existing public transport network. The results of the assessment demonstrated an excellent level of public transport accessibility. The combined daytime frequency of bus services accessible from the site is approximately 165 buses per hour.
- 3.5.11 It has therefore been demonstrated that the site is highly accessible by bus.

3.6 Accessibility by London Underground Tube

- 3.6.1 It can be seen from **Plan 2** that the site is located approximately a 100m walking distance from the Holborn Underground Tube Station, which is served by the Central and Piccadilly lines. On the Central line the station is between Tottenham Court Road and Chancery Lane stations and on the Piccadilly line it is between Covent Garden and Russel Square stations.
- 3.6.2 Holborn Underground Tube Station provides a direct link between the site and Heathrow Airport, King's Cross railway station, Ealing Broadway and Liverpool Street railway stations. The frequency of the tube services on the both lines varies between 2 and 6 minutes throughout the day.
- 3.6.3 It has therefore been demonstrated that the site is highly accessible by Tube.

3.7 Accessibility by Rail

- 3.7.1 There are three railway stations located within a 2km walking catchment area from the centre of the site; St Pancras International (1.7km to the north), King's Cross (1.8km to the north) and London Euston railway station (1.5km to the northwest).
- 3.7.2 St Pancras railway station is a central London railway terminus and is widely known for its Victorian architecture. The station is located approximately a 1.7km walking distance to the north of the site.
- 3.7.3 The station is a southern terminus for Midland Main Line trains operated by East Midlands Trains to/from the East Midlands and Yorkshire, including Leicester, Corby, Nottingham, Kettering, Derby and Sheffield. Occasional trains also run to Melton Mowbray, Lincoln, Leeds, York and Scarborough. The Monday to Saturday off-peak timetable has five services per hour (one to Corby, two to Nottingham, and two to Sheffield).
- 3.7.4 The Thameslink platforms at St Pancras railway station serve trains to Bedford, Luton and St Albans City in the north, and Wimbledon, Sutton, East Croydon, Gatwick Airport and Brighton in the south.
- 3.7.5 Southeastern runs high-speed trains from St Pancras railway station on High Speed 1 to Kent and the South East to Faversham, Margate, Ramsgate, Canterbury West, Dover Priory, Folkestone Central, Ashford, Ebbsfleet International and other destinations in Kent.

- 3.7.6 St Pancras railway station serves such international destinations as Paris Gare du Nord (17 trains every day in each direction), Brussels-Midi (10 trains every day in each direction), and Marne-la-Vallee for Disneyland Paris (one train in each direction per day). Extra services run to Paris on Fridays and Sundays. Additional weekend leisure-oriented trains run to the French Alps during the skiing season and to Avignon in the summer.
- 3.7.7 King's Cross railway station is located approximately a 1.8km walking distance to the north of the site. The station is the southern terminus of the East Coast Main Line, providing high speed inter-city services to Yorkshire, the North East and Scotland. Virgin Trains East Coast is the main inter-city operator with destinations including Leeds, Newcastle and Edinburgh. Other inter-city operators serving the station include Hull Trains and Grand Central. King's Cross is also a terminus for Great Northern which provides commuter services to North London, Hertfordshire, Cambridgeshire, Bedfordshire and Norfolk.
- 3.7.8 London Euston railway station is the southern terminus of the West Coast Main Line, and the main gateway from London to the West Midlands, the North West, North Wales and parts of Scotland. Virgin Trains provides high-speed intercity services to these regions. Its most important long-distance destinations are Birmingham, Liverpool, Manchester and Glasgow.
- 3.7.9 London Midland trains operate services from London Euston to Hertfordshire, Buckinghamshire, Bedfordshire, Northamptonshire and Warwickshire as well as long-distance services to the West Midlands, Staffordshire and Cheshire. Euston is also the terminus for suburban services on the Watford DC Line (commuter railway line to Watford Junction) operated by London Overground.
- 3.7.10 The railway station is also connected to Euston Underground Tube Station.

3.8 Summary

- 3.8.1 In summary, it can be stated that the site is highly accessible to a range of facilities and destinations by walking, cycling and public transport in accordance with national and local transport policies.

4 BASE MODE SPLIT AND TRAVEL PATTERNS

4.1 Background

4.1.1 A trip generation exercise has been undertaken to provide a multi-modal trip generation prediction associated with the proposed development.

4.2 Multi Modal Trip Generation

4.2.1 The Trip Rate Information Computer System (TRICS) database was interrogated to assess the trip generation associated with the proposed hotel development. The search identified only one hotel site located in the Greater London area that is similar to the proposal in terms of providing zero on-site parking.

4.2.2 The hotel site is located adjacent to Great Eastern Road, Shoreditch in the London Borough of Hackney, which is also highly accessible by sustainable modes of travel and has a PTAL rating of 6b. The full TRICS output for the site and trip rates are included as **Appendix D** and **Error! Not a valid bookmark self-reference.** provides a summary of the person trip rates and trip generation associated with a 120 room hotel during a typical weekday morning and evening peak hour and during a weekday from 7am to 10pm.

Table 2: Person Trip Rates and Proposed Person Trip Generation

Time Period	Arrivals		Departures		Total Trips
	Trip Rate	Trip Generation	Trip Rate	Trip Generation	
AM Peak Hour (0800-0900)	0.180	22	0.532	64	86
PM Peak Hour (1700-1800)	0.546	66	0.385	47	113
Weekday (0700-2200)	4.291	515	4.219	507	1,022

4.2.3 **Table 3** provides a summary of the modal split recorded at the Shoreditch hotel, which is also included in **Appendix D**.

Table 3: Proposed Modal Split

Mode of Transport	Percentage of Total Person Trips
Bus	2.1%
Rail (Over & Underground)	14.1%
Walk	51.5%
Cycle	1.2%
Car (drop-off/pick-up)	31.1%
Total	100%

4.2.4 The modal split shown in **Table 3** has been applied to the person trip generation shown in **The Trip Rate Information Computer System (TRICS)** database was interrogated to assess the trip generation associated with the proposed hotel development. The search identified only one hotel site located in the Greater London area that is similar to the proposal in terms of providing zero on-site parking.

4.2.5 The hotel site is located adjacent to Great Eastern Road, Shoreditch in the London Borough of Hackney, which is also highly accessible by sustainable modes of travel and has a PTAL rating of 6b. The full TRICS output for the site and trip rates are included as **Appendix D** and **Error! Not a valid bookmark self-reference.** provides a summary of the person trip rates and trip generation associated with a 120 room hotel during a typical weekday morning and evening peak hour and during a weekday from 7am to 10pm.

4.2.6 **Table 2. Table 4** provides a summary of the trip generation for each mode of transport during a weekday morning and evening peak hour and during a weekday from 7am to 10pm.

Table 4: Proposed Multi Modal Trip Generation

Mode of Transport	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)			Weekday (0700-2200)		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals	Arrivals	Departures	Totals
Bus	0	1	1	1	1	2	11	11	22
Rail (Over & Underground)	3	9	12	9	7	16	73	71	144
Walk	12	33	45	34	24	58	265	261	526
Cycle	0	1	1	1	1	2	6	6	12
Car (drop-off/pick-up)	7	20	27	21	14	35	160	158	318
Total	22	64	86	66	47	113	515	507	1,022

4.2.7 It can be seen that approximately half of the trips would be carried out on foot and approximately 20% would be carried out using public transport (bus, rail or underground). Few trips are predicted to be carried out by cycle.

4.2.8 In terms of vehicle trip generation it has been predicted that approximately 30% of all trips would be carried out by car/taxi, which equates to only 27 total tips during the weekday morning peak hour and 35 trips during the weekday evening peak hour.

4.2.9 It should be noted that despite providing zero car parking, the Shoreditch hotel site is located outside of the London Congestion Charge Zone. It is therefore likely that the proposed development (which is located within London Congestion Charge Zone) would generate even less vehicle trips than shown in **Table 4**. The Congestion Charge would naturally make driving a less attractive option for staff commuting trips.

4.2.10 Likewise Shoreditch hotel site, the proposed hotel development is located within a short walking distance from the Holborn Underground Tube Station and three main railway stations (St Pancras International, King's Cross and London Euston). It is therefore likely that the number of trips carried out using public transport (i.e. rail or underground) would be even higher than the predicted 20%.

4.3 Development of a Definitive Occupational Base Position

4.3.1 A critical part of the Travel Plan associated with the proposed hotel would be establishing a measured base position against which the impact of the Travel Plan can be judged.

4.3.2 Understanding travel patterns of staff and visitors should be the first task to be conducted as part of the implementation of the final Travel Plan. This would provide a definitive baseline position against which the impact of the Travel Plan can be judged. It is important that the staff and hotel guests occupancy levels at the site are sufficiently high to accurately reflect the overall travel patterns for the site at full occupancy.

4.3.3 The main criteria for the development of this baseline position are as follows:

- The surveys should be conducted within 3 month post-opening;
- The surveys should conform to guidance set out in **Section 4.5**.

4.4 Survey Groups and Response Rates

4.4.1 To achieve an accurate statistical appraisal of travel trends, an adequate number of responses would be obtained. As such, a suitable proportion of employees and hotel guests of the site would be included in the survey. A response rate of 50% of all site employees and hotel guests would be targeted.

4.5 Survey Methodology

4.5.1 The primary aim of the surveys would be to gather a sufficient level and range of information to tailor the Travel Plan measures most effectively to the hotel development. It is envisaged that an iTRACE survey, or equivalent, would be undertaken with staff to establish travel mode share. Key information to be extracted from the surveys would be the modal split of employees, who travel regularly to the hotel.

4.5.2 iTRACE is an online tool that supports the development and monitoring of travel plans in London. It comprises two key elements (see TfL official website, Urban planning & congestion – Travel plans – Monitoring travel plans):

- *“A range of tools including online site audits, online or paper-based employee travel surveys and travel plan templates which organisations may use to develop their travel plan. Use of these tools is not a mandatory requirement to achieve iTRACE compliance, although their use would help ensure this; and*
- *A travel plan project management application for use by local authority planning officers. This facility enables a range of key data related to individual sites (such as contact details, site description, baseline mode split and travel plan targets) with travel plans to be input into the iTRACE database by local authority officers. iTRACE generates automatic reminders at key milestones such as when surveys are required. This enables officers to monitor and keep track of the number, status and effectiveness of travel plans in their borough.”*

4.5.3 The following are examples of questions which may be included in the iTRACE travel survey for staff:

- On an average week, what time do you usually arrive and leave work?
- Do you have a disability that would affect your travel options?
- What was the main mode of transport you used to get to work today?
- Why do you use this mode of travel?
- Do you drive or car share for a part of your entire journey to work?
- What could be done to encourage you to travel by other modes of transport to work?

- 4.5.4 The opportunity to survey hotel visitors with a full iTRACE survey may be limited and it is recommended that the key information such as where they travel from and what mode of transport they used to visit hotel is gathered from guests at hotel check in.
- 4.5.5 The information obtained from the surveys would be used to appropriately implement the Travel Plan measures and to develop relevant modal shift targets.

5 OBJECTIVES AND TARGETS

5.1 Background

- 5.1.1 The overall objectives of a Travel Plan are to reduce the number of single occupancy car journeys to and from the site, and to achieve more sustainable travel patterns to and from the site by all staff and visitors.
- 5.1.2 Since the site has an excellent level of public transport connectivity and no car parking would be provided, the overall aim of the Travel Plan would be to seek to ensure that staff and visitors to have sufficient information to encourage the use of sustainable modes of transport.
- 5.1.3 In order to guide the Travel Plan, a list of objectives have been set to provide focus on what the Travel Plan is seeking to achieve.

5.2 Objectives

5.2.1 The objectives of the Travel Plan are set out below:

- To influence travel patterns of staff and visitors via the Travel Plan measures;
- To promote the health and environmental benefits associated with travel by foot and by bicycle;
- To encourage staff and visitors to visit the site in a sustainable way; and
- To ensure staff and hotel visitors are aware of travel options to/from the site.

5.3 Targets

- 5.3.1 A suitable indicator of the success of a Travel Plan is ultimately the mode-split of users of the site. The final Travel Plan targets would be agreed with the London Borough of Camden Council no more than three months following undertaking the baseline travel surveys.
- 5.3.2 TfL guidance requires targets to be set over a minimum five-year time frame, with interim targets set at year one and year three. The purpose of the Travel Plan target is to provide a benchmark against which the performance of the Travel Plan can be judged. Preliminary targets are defined below, based on the proposed multi-modal trip generation shown in **Table 4**. These would be reviewed post undertaking of the initial Travel Plan survey to ensure that the Travel Plan includes targets that are achievable and realistic.
- 5.3.3 The Travel Plan objectives would be realised through the achievement of SMART targets. SMART targets are:
- **Specific** – stating exactly what needs to be achieved;
 - **Measurable** – to allow effective monitoring and to identify when the objectives have been achieved;
 - **Achievable** – targets that can be achieved within the Travel Plan's duration;
 - **Realistic** – targets that can be achieved by the proposed Travel Plan measures; and

- Timed – to be achieved by a set deadline.

5.3.4 Taking into account that the site is located in a highly accessible location with an excellent level of public transport accessibility, the main focus of the Travel Plan is on ensuring that staff and visitors are sufficiently informed to commute and travel to the site using the most time efficient and financially viable sustainable modes of travel.

5.3.5 For the purpose of the Travel Plan, preliminary targets would be set with regard to car travel as follows.

- Reducing the predicted level of staff and hotel visitors traveling to the site by car by 25%. As no parking is to be provided on site, this target is aimed at reducing the number of pick-up/drop-off trips by car.

5.3.6 **Table 4** provides a prediction of trips by travel mode prior to the implementation of a Travel Plan. Taking account of a 25% reduction, **Table 5** summarises the targeted reduced number of car journeys during the weekday morning (8am to 9am) and evening (5pm and 6pm) peak hours and on a weekday between 7am and 10pm.

Table 5: Targeted Reduced Number of Pick-Up/Drop-Off by Car

Mode of Transport	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)			Weekday (0700-2200)		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals	Arrivals	Departures	Totals
Car (drop-off/pick-up)	5	15	20	16	11	27	120	119	239
Reduction in car trips	2	5	7	5	3	8	40	39	79

6 TRAVEL PLAN MEASURES

6.1 Background

- 6.1.1 The site is located in a highly sustainable location with an excellent level of public transport accessibility, a significant modal shift is therefore unlikely and so the emphasis would be on educating staff and visitors about sustainable travel and the financial and health benefits that it can provide.
- 6.1.2 A Travel Plan is an evolving document that would change over time to ensure that it meets the needs of the end user. As such, the measures set out within this section may be refined in order to ensure that they maintain their appropriateness.
- 6.1.3 The site currently has a good provision of hard infrastructure in place that would facilitate the desired travel choices. These include good public transport links, footway provision and local cycling facilities. In order to make travel to the site as simple as possible for staff and visitors, it is imperative that they are marketed and promoted on site. The strategy to ensure that this takes place is set out below.

6.2 Hard Measures

- 6.2.1 The site has been designed to facilitate cycling, with suitable cycle parking facilities for staff and visitors.
- 6.2.2 In line with the London Plan parking standards, a room in the basement is proposed to provide 16 long stay cycle parking spaces for staff and hotel guests, which is double the provision of long stay spaces required. **Plan 4** shows the proposed basement floor layout, including the room that would be dedicated for cycle parking.
- 6.2.3 Walking and cycling would be encouraged by providing changing facilities, lockers and shower facilities for employees.
- 6.2.4 As many public transport facilities (bus, underground and rail) are located within the vicinity of the site, the site would be developed as a car free development with no on-site car parking provided.
- 6.2.5 No coach parking spaces are proposed as the operator of the hotel would cater for single business users and the top end of the tourist market, as opposed to coach party bookings. In addition there are no meeting rooms or conference facilities proposed that could generate a large number of people. In order to ensure that the hotel would not cater to coach party bookings, the operator would be willing to accept a clause in a Section 106 Agreement that would prohibit this type of booking.

6.3 Soft Measures

Promotion of Walking

- 6.3.1 Walking to and from work is a viable option for staff living within 2km of the site, a walking distance that has historically been considered appropriate for commuting. It can also be combined as part of a wider journey involving the underground or bus. The proximity of the bus stops, London underground tube and rail stations, make this a viable option.

- 6.3.2 With reference to **Section 3.2**, it has been demonstrated that there would be significant opportunities also for hotel guests (tourist and business trips) for leisure/sightseeing and commuting trips generated by the proposed development to take place on foot.
- 6.3.3 In addition, the trip generation exercise (see **Section 5**) has predicted that the proposed hotel development would generate approximately half of the trips by foot.
- 6.3.4 Details of health benefits of walking to and from work would be communicated to staff. Information on increasing fitness levels and examples such as the number of calories burnt on the journey would help provide incentives to take up this mode.
- 6.3.5 Public health campaigns encouraging staff to walk for short trips around London would be promoted and encouraged. One of the measures to increase walking would be distribution of maps showing safe and convenient local walking routes to services and the nearest public transport stops for staff.
- 6.3.6 Hotel guests would also receive maps (at the reception desk upon arrival) showing walking routes to main sightseeing destinations and local services. A plan showing walking routes from the hotel would also be included on the website for the hotel.
- 6.3.7 The London Borough of Camden Council would also be informed if the adjacent footways are not being adequately maintained.

Promotion of Cycling

- 6.3.8 Cycling provides a realistic alternative to short car trips under distances of 5km. With reference to **Section 3.3**, it has been demonstrated that there would be significant opportunities for leisure/sightseeing and commuting trips generated by the proposed development to take place via cycle.
- 6.3.9 Only a small proportion of trips (1.2%) however are predicted to be carried out by cycle (see **Section 5.2**). Cycling would be actively encouraged in a number of ways and this would also be facilitated by the provision of secure cycle parking on site.
- 6.3.10 The site is conveniently located in the vicinity to cycle docking stations, which are bike hire schemes for short journeys (Santander Cycles hire scheme). Information would be distributed to staff regarding the nearest location of the cycle docking stations and hire fees.
- 6.3.11 Information would be distributed to hotel guests (at the reception upon arrival) regarding the major sightseeing destinations accessible within acceptable cycling distances from the proposed hotel development. A plan showing cycle routes from the hotel would also be included on the website for the hotel.
- 6.3.12 Liaison with local cycle companies seeking to negotiate discounts on cycles and cycle equipment for staff would also be carried out.
- 6.3.13 Any discounts achieved would be informed to staff. Furthermore, to facilitate cycling, staff would be given information about local cycle retailers and workshops. Free cycle training courses (i.e. free Camden Cycle Skills training) would also be communicated to staff for those wanting to take up cycling, to help improve confidence and gain useful on-road cycling skills. This information would be provided to staff to encourage those who are less confident to take up cycling.

6.3.14 Regular cycle promotion days for staff would be carried out. Information about numerous benefits of cycling such as increasing fitness levels and numerous health benefits would help to provide incentives to take up this mode

Promotion of Public Transport

6.3.15 With reference to **Section 3.4**, a PTAL assessment has been carried out to determine the site's connectivity to the existing public transport network. The results of the assessment demonstrated an excellent level of public transport accessibility.

6.3.16 The multi-modal trip generation exercise demonstrated that approximately 20% of trips would be carried out using public transport (bus, rail or underground). To encourage the uptake of public transport by staff and hotel visitors, the following measures would be implemented for staff and visitors:

- Provision of route maps (bus, rail and underground);
- Provision of timetables; and
- Provision of public transport accessibility on the hotel's website, including a note that no car parking is provided.

6.3.17 The additional following measures would be implemented for staff only:

- Provision of season ticket loans;
- Provision of ticket fare information; and
- Information on season tickets/discounts.

6.4 Delivery and Servicing Plan

6.4.1 The measures above are associated with the movement of staff or visitors to the site, however in this case it is equally relevant to target a reduction in the number of service vehicle movements associated with the hotel.

6.4.2 With reference to **Section 1.3**, and further to confirmation from the future hotel operator, the proposed development would generate a maximum of four service vehicles per day.

6.4.3 The development intends to reduce the impact of site servicing on highway users and local residents. The TPC would therefore monitor timing of deliveries, which would be managed to avoid more than one vehicle arriving at site at the same time. Some suppliers would also be encouraged to deliver outside of the highway network peak times.

7 TRAVEL PLAN MANAGEMENT AND COMMUNICATION

7.1 Background

7.1.1 This section sets out how the Travel Plan would be managed on a day to day basis. In order to ensure effective management the hotel operator would appoint a Travel Plan Coordinator (TPC).

7.2 Travel Plan Coordinator

7.2.1 In order to maximise the benefits of the Travel Plan the TPC would be required to communicate frequently with staff and management and the London Borough of Camden Council where appropriate. It is proposed that the TPC would carry out the following:

- Establish communications between themselves, staff and management and the London Borough of Camden Council's Travel Plan team;
- Oversee the development and implementation of the Travel Plan;
- Establish communication between senior managers and staff as required, ensuring a level of commitment and support is established;
- Raise the awareness of alternative transport options to and from the site;
- Act as a contact point for queries regarding the Travel Plan;
- Conduct the required travel surveys and provide details of current figures in line with the required targets;
- Hold a copy of the Travel Plan and provide a copy of it to members of staff and visitors should they wish to see one;
- Organisation of travel surveys; and
- Arrange and ensure Travel Plan measures are implemented.

7.3 Communication

7.3.1 The Travel Plan would be communicated to the staff to ensure that they are aware of the Travel Plan, its benefits and the options of sustainable travel available to them. This could be done via one or more of the following mediums:

- Notice boards within communal areas;
- Sustainable travel pack upon commencing employment;
- Newsflashes – posters/emails;
- On the main hotel website; and
- Information would be communicated to the staff via the TPC as and when necessary.

7.4 Staff Travel Pack

7.4.1 A Staff Travel Pack (STP) would be included with the 'new staff information' provided by the hotel operator.

7.4.2 The STP would be provided and funded by the hotel operator. It is envisaged that upon the appointment of new staff they would be briefed on the information in the STP. Furthermore, the hotel operator would provide all employees with a copy of the STP.

7.4.3 A summary version of this STP, detailing public transport timetables and route maps would be sent out on an annual basis to ensure all relevant travel information is kept up to date.

7.4.4 The STP would include the following:

- A mission statement detailing the objective of the Travel Plan;
- Contact details of the Travel Plan Coordinator and a brief introduction about their role and commitment to promoting sustainable travel. The duties that the TPC is responsible for would also be detailed;
- Site location plan highlighting the hotel's proximity to local facilities and public transport services;
- Health, environmental and economic benefits of travelling via sustainable modes;
- Public transport routes, spider maps and timetables;
- Details of ticket fare information, how to obtain season tickets/discounts and season ticket loan for public transport;
- Maps showing safe and convenient local walking routes to services and stops for public transport;
- Details of cycle routes within the local area;
- Details of cycling initiatives and workshops provided by the London Borough of Camden Council;
- Location of the nearest cycle docking stations (Santander Cycles hire scheme) and hire fees;
- Information about local cycle retailers and discounts achieved on cycles and cycle equipment for staff; and
- Details of local taxi services.

7.5 Noticeboard

7.5.1 A Noticeboard would be provided within the site, located in a central area that is easily accessible by staff and hotel guests. The notice board would hold the following information:

- A mission statement of the Travel Plan;

- Contact details of the TPC and brief introduction about them such as their commitment to promoting sustainable travel;
- A location plan of the site and the local facilities and public transport services;
- Public transport route maps and timetables;
- Details of ticket fare information and season ticket load for public transport;
- Local walking and cycling routes;
- Details of local taxi services;
- Details of cycle training information and contact details to register interest;
- Details of cycling initiatives and workshops;
- Details of the nearest cycle docking stations and hire fees; and
- Details of cycle retailers and discounts.

7.5.2 An area would be provided for promotional material to be clearly displayed. This material would include nationwide promotional material such as 'bike to work week' posters (many of which can be obtained from the internet) and local promotional events. A visit from a cycle mechanic, for example, could be arranged by the TPC and advertised on the notice board.

7.6 Hotel Website

7.6.1 An online version of the hotel's Noticeboard would be provided on the hotel's website. This would be funded by the hotel operator on an on-going basis. It would provide the following:

- A digital version of the information on the Noticeboard for anyone wishing to visit the hotel;
- An electronic STP that can be downloaded for employees of the hotel;
- The option of joining a forum to discuss site wide travel issues.

7.6.2 Most of the above information would require updating as details change, such as timetable changes. The TPC would ultimately be responsible for the provision of up to date and relevant information on all the communication methods set out within this section.

7.6.3 The promotional material would be more frequently updated and this would be communicated via the following mediums:

- Noticeboard;
- Hotel Website;
- Email; and
- Postal Drops.

7.7 Summary

- 7.7.1 The above section highlights the variety of communication methods that would be used within the development. This would ensure maximum exposure of the Travel Plan, its aims and initiatives. It would strengthen its ability to self-market itself throughout the site ensuring that it is highly visible to all site users.

8 TRAVEL PLAN MONITORING

8.1 Background

8.1.1 This section provides information regarding Travel Plan monitoring and reporting to ensure the site achieves the travel plan targets and objectives.

8.2 Monitoring

8.2.1 In order to understand how effective the measures within the Travel Plan are and if the set targets are achievable, regular Travel Plan monitoring would be undertaken.

8.2.2 Monitoring would be undertaken in Year 1 of the site's occupation in order to determine the base position against which the implementation of Travel Plan measures can be judged. The monitoring exercise would be repeated in Year 3 and Year 5 of the site's occupation, so that an assessment can be made in terms of the Travel Plan's success. The outcome of the monitoring procedure allows the TPC to understand if the Travel Plan is effective in meeting adopted targets and to tailor measures as appropriate.

8.2.3 The exact form of the monitoring procedure would be agreed with the London Borough of Camden Council. For the hotel staff it is however suggested that the monitoring exercise would take the form of a staff questionnaire. It is anticipated that a survey compliant with the iTRACE methodology (see **Section 4.5**) would be undertaken.

8.3 Reporting

8.3.1 The outcome of the monitoring process should be reported to the London Borough of Camden Council. If the survey has been undertaken in line with iTRACE, then the reporting can be undertaken on-line through the iTRACE web-page. The TPC would request log-in details from the London Borough of Camden Council to enable on-line reporting to be undertaken.

8.3.2 The information required in the reporting process would include:

- The number of respondents to the questionnaire, and overall number of staff/visitors that were invited to take part in the survey (i.e. the response rate);
- The number of respondents to the questionnaire travelling by each mode of travel (to allow the calculation of the modal split of trips);
- The number of cycle parking spaces available to site occupiers; and
- The number and timing of service vehicle movements.

8.3.3 The results of the monitoring process would enable a review of the Travel Plan to be undertaken, the purpose being to ensure that the measures adopted in the Travel Plan are effective.

9 ACTION PLAN

9.1 Background

9.1.1 The TfL guidelines on the preparation of a Travel Plan requires an Action Plan to be prepared. The purpose of the Action Plan is to identify actions for Travel Plan development, refinement and implementation. With reference to TfL Guidelines on Travel Plan preparation, the Action Plan should be concise and focused on the delivery of the Travel Plan measures.

9.2 Action Plan

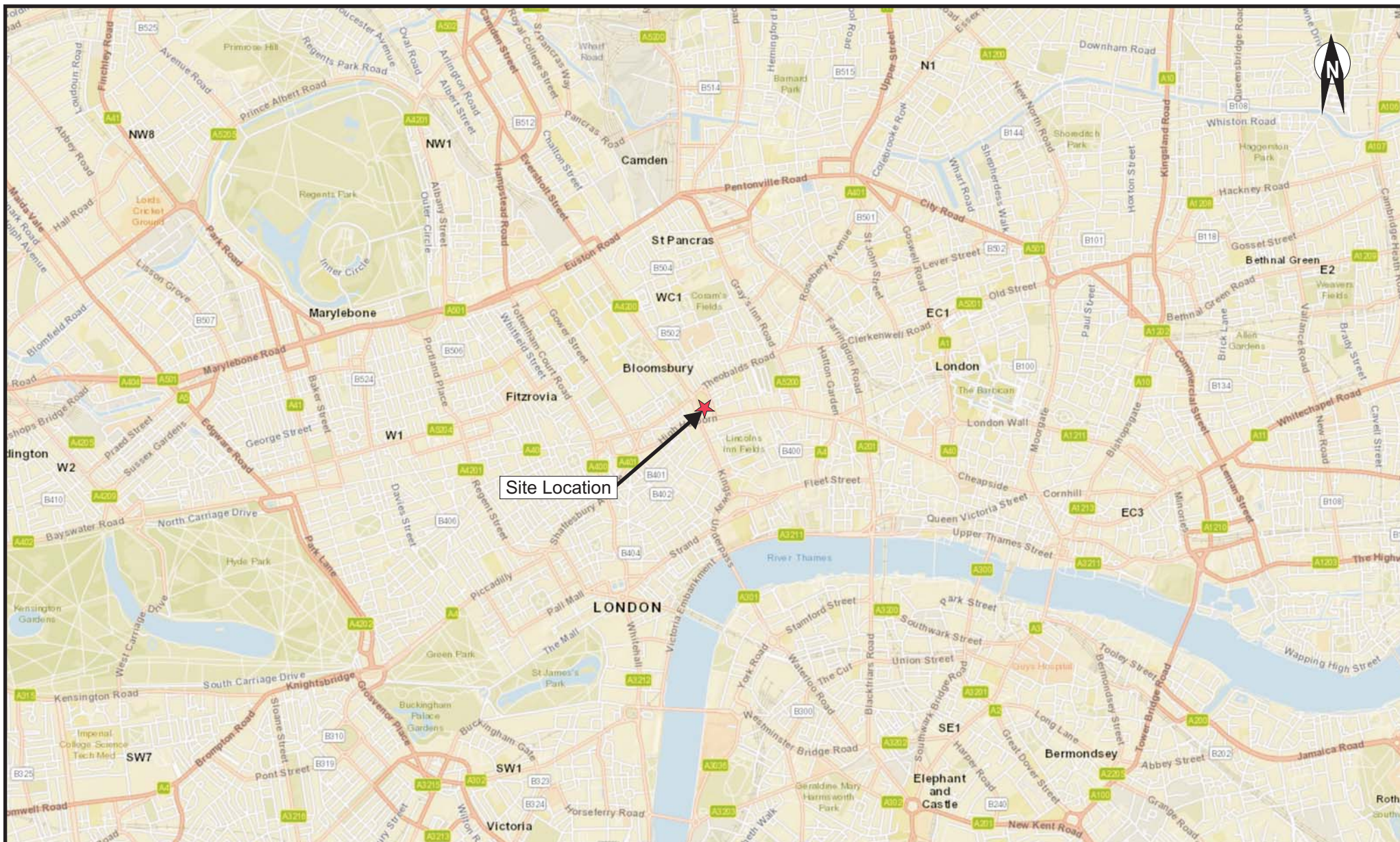
9.2.1 The Action Plan for the proposed hotel development is provided below.

Action	Responsibility	Timescale	Notes
Appoint Travel Plan Coordinator	Hotel Operator	Within 3 months prior to occupation	The Travel Plan Coordinator is to be provided a copy of this Draft Travel Plan
Carry Out Baseline Travel Surveys	Travel Plan Coordinator	Within 3 months post opening	The surveys should conform to guidance set out in Section 4.5 of this Draft Travel Plan
Prepare a final Travel Plan for submission to the London Borough of Camden Council	Travel Plan Coordinator	Agree the content of the final Travel Plan with the London Borough of Camden Council within 6 months of site occupation	The document can be prepared by the TPC or by an appointed external organisation, on the TPC's behalf. The commitment made within this Draft Travel Plan should be in context with the level of travel demand anticipated
Communicate the objectives of the Travel Plan to staff and visitors and initiate 'measures' designed to encourage sustainable travel patterns	Travel Plan Coordinator	On-going	Measures can be initiated in advance of agreeing the content of the final Travel Plan with the London Borough of Camden Council
Year 1 of site occupation – Monitor travel demand and travel mode split	Travel Plan Coordinator	Within 9 months of occupation – the content of the questionnaire would be agreed with the London Borough of Camden Council	Circulate a Travel Questionnaire or undertake alternative survey methodology (to be agreed), to establish existing travel patterns and mode split & undertake survey of service vehicle activity. An iTRACE survey or equivalent should be undertaken to allow a comparison to be made with the results of the Baseline Travel Surveys
Year 1 of site occupation – Report outcome of Travel Plan monitoring to the London Borough of Camden Council	Travel Plan Coordinator	Within 12 months of occupation	Prepare a report identifying the results of the questionnaire survey, and confirming the travel initiatives that are currently being undertaken to encourage sustainable travel patterns. This could involve entering data into the iTRACE website. Provide the London Borough of Camden Council with a copy of the report

Action	Responsibility	Timescale	Notes
Travel Plan Review	Travel Plan Coordinator	On-going, further to Travel Plan monitoring procedure	The TPC would review the 'measures' undertaken as part of the Travel Plan, to ensure that the most effective measures are being utilised to encourage sustainable travel
Years 3 and 5 of site occupation – Monitor travel demand and travel mode split	Travel Plan Coordinator	Monitoring should be undertaken at time of the year which is broadly consistent with the timing of the Year 1 travel survey	Circulate a Travel Questionnaire to staff to establish their travel patterns and mode split. The questionnaire should allow a comparison to be made with the results of the Year 1 survey. Repeat survey of service vehicle activity
Years 3 and 5 of site occupation – Report outcome of Travel Plan monitoring to the London Borough of Camden Council	Travel Plan Coordinator	Within 3 months of the Year 3 or Year 5 travel survey	Prepare a report identifying the results of the questionnaire survey, and confirming the travel initiatives that are currently being undertaken to encourage sustainable travel patterns. This could involve entering data into the iTRACE website. Provide the London Borough of Camden Council with a copy of the report



PLANS



Southampton Row, Holborn

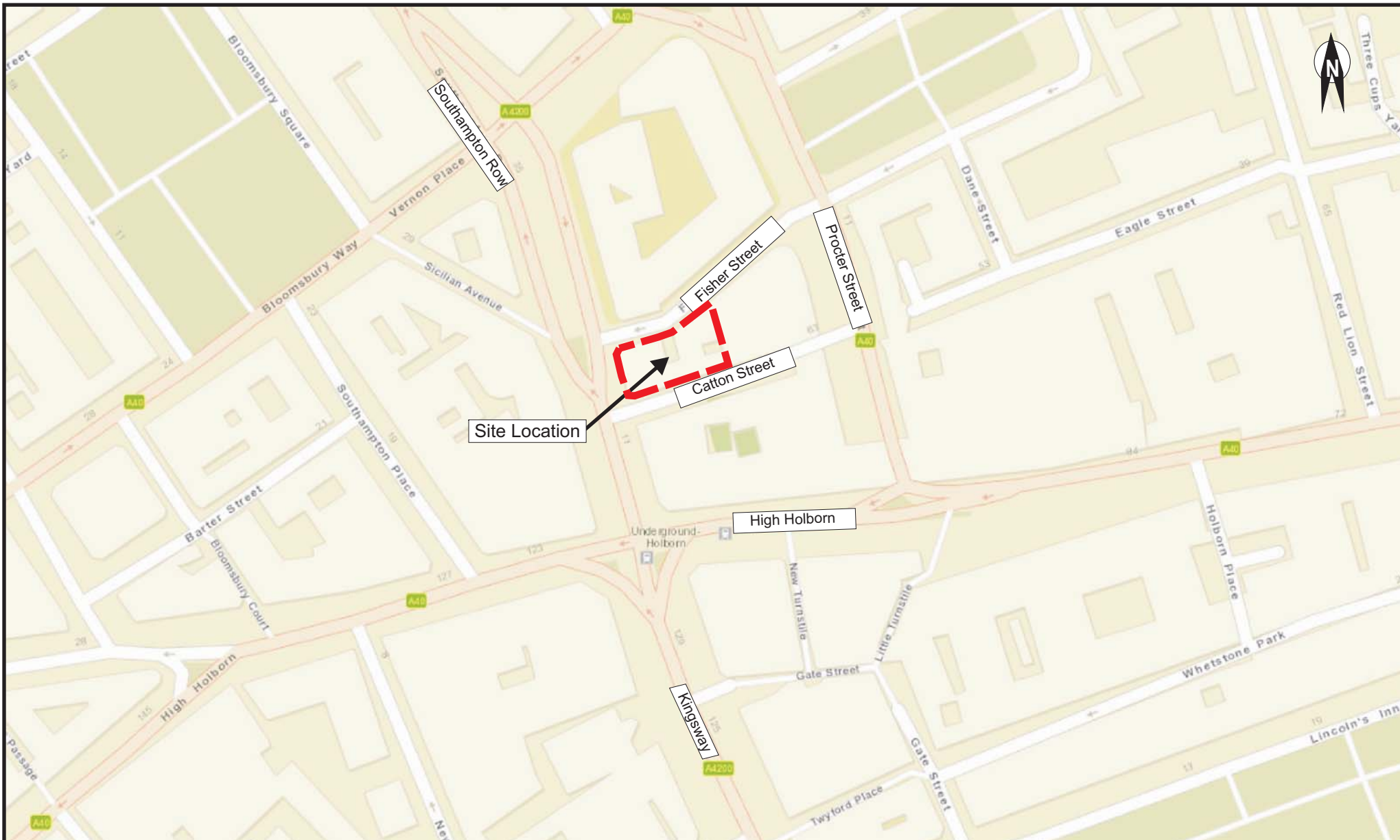
Plan 1: Site Location

Job No: PB6701

HASKONINGDHV UK LTD.
TRANSPORT UK

9th Floor, Manchester One
53 Portland Street, Manchester M1 3LF
Telephone: +44(0)161 236 1018
Email: info@manchester.royalhaskoning.com
Internet: www.royalhaskoningdhv.com





Southampton Row, Holborn

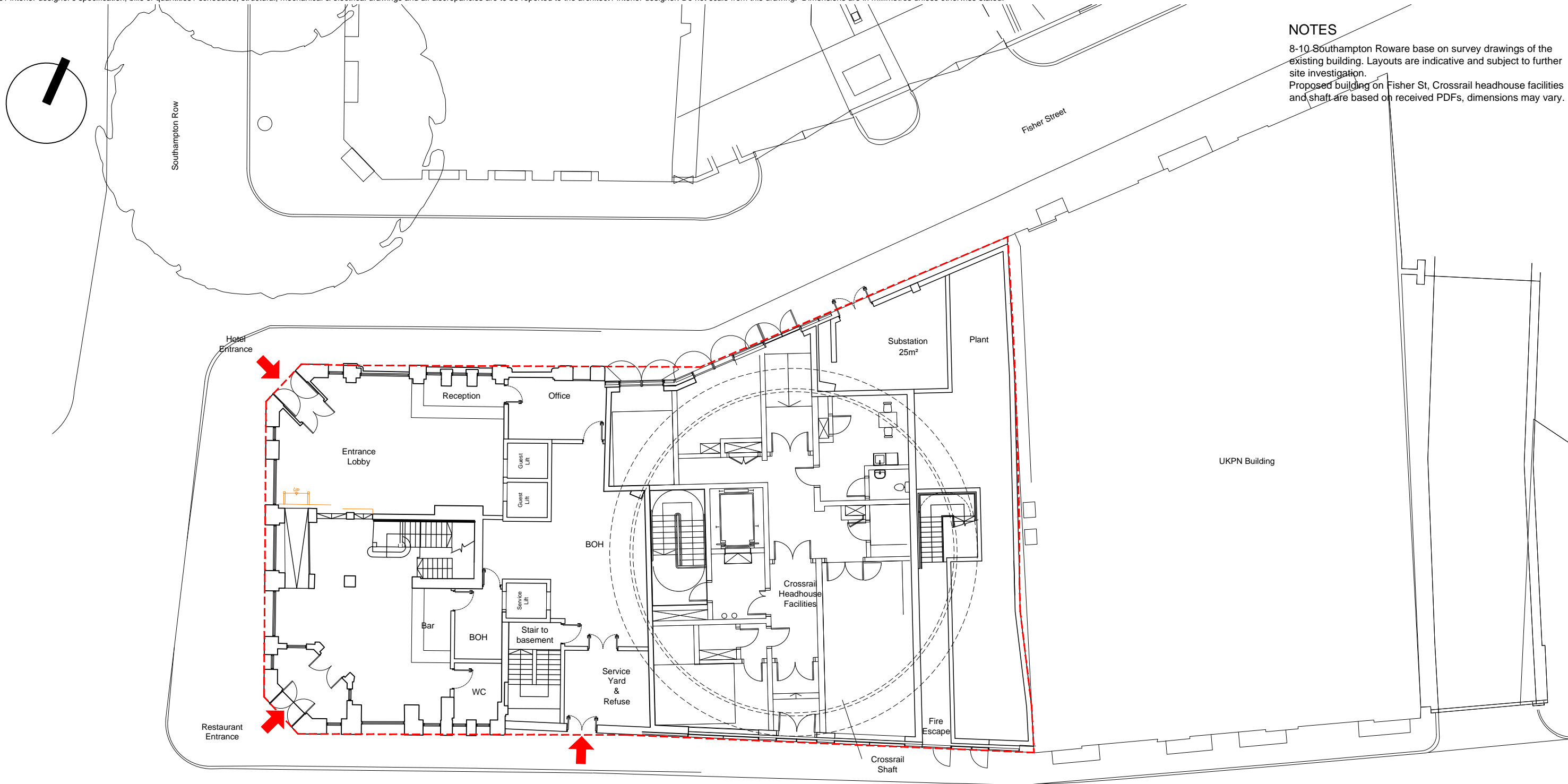
Plan 2: Local Highway Network

Job No: PB6701

HASKONINGDHV UK LTD.
TRANSPORT UK

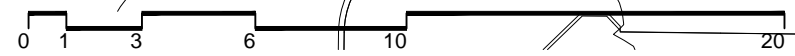
9th Floor, Manchester One
53 Portland Street, Manchester M1 3LF
Telephone: +44(0)161 236 1018
Email: info@manchester.royalhaskoning.com
Internet: www.royalhaskoningdhv.com





NOTES
 8-10 Southampton Row are based on survey drawings of the existing building. Layouts are indicative and subject to further site investigation.
 Proposed building on Fisher St, Crossrail headhouse facilities and shaft are based on received PDFs, dimensions may vary.

Ground Floor Plan
 Scale 1:200



**dexter
 moren
 associates**
 architecture urban design
 interior design creative media
 www.dextermoren.com

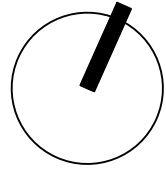
57d
 jamestown road
 london nw1 7db
 UK
 t: 020 7267 4440
 f: 020 7267 6044

Plan 3

architecture

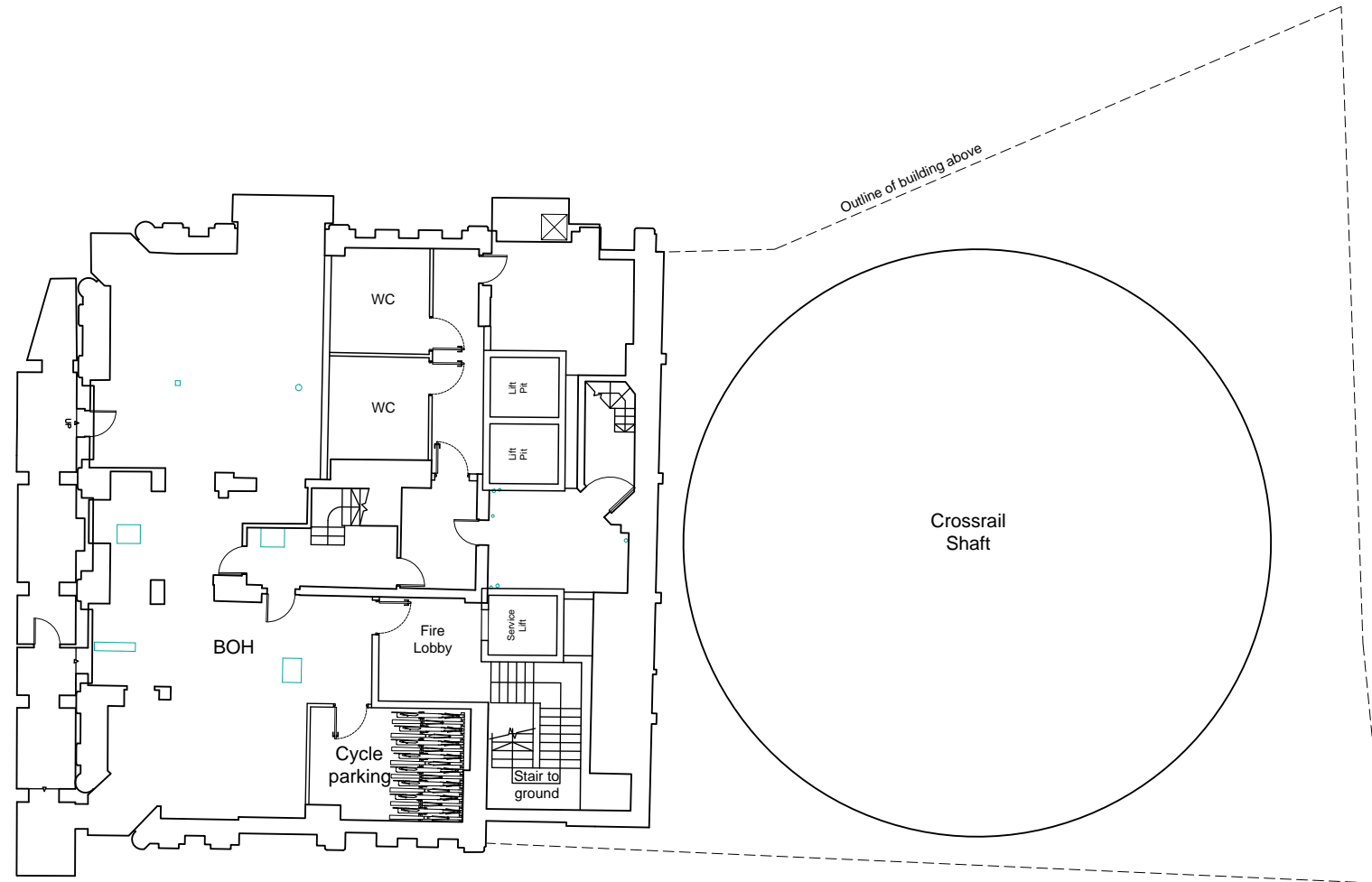
P0 ISSUED FOR PRE APPLICATION
 rev amendments
 31.10.16 date
 RA by

project	drawing title	scale	date	drawn by	checked by
PRE APPLICATION	Ground Floor Plan	1:200 @ A3 NTS @ A4	31.10.16	RA	WY
client	drawing status	job no.	drawing no.	revision	
Idé Real Estate	PRE APPLICATION	1365	A-100-002	P0	



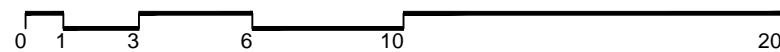
NOTES

8-10 Southampton Row are layouts are indicative and subject to further site investigation.
Proposed building on Fisher St, Crossrail headhouse facilities and shaft are based on received PDFs, dimensions may vary.



Basement Floor Plan

Scale 1:200



**dexter
moren
associates**
architecture urban design
interior design creative media
www.dextermoren.com

57d
jamestown road
london nw1 7db
UK

t: 020 7267 4440
f: 020 7267 6044

Plan 4

P0 ISSUED FOR PRE APPLICATION
rev amendments

31.10.16 RA
date by

project
Holborn Fisher Street

drawing title
Basement Floor Plan

scale
1:200 @ A3
NTS @ A4

date
31.10.16

drawn by
RA

checked by
WY

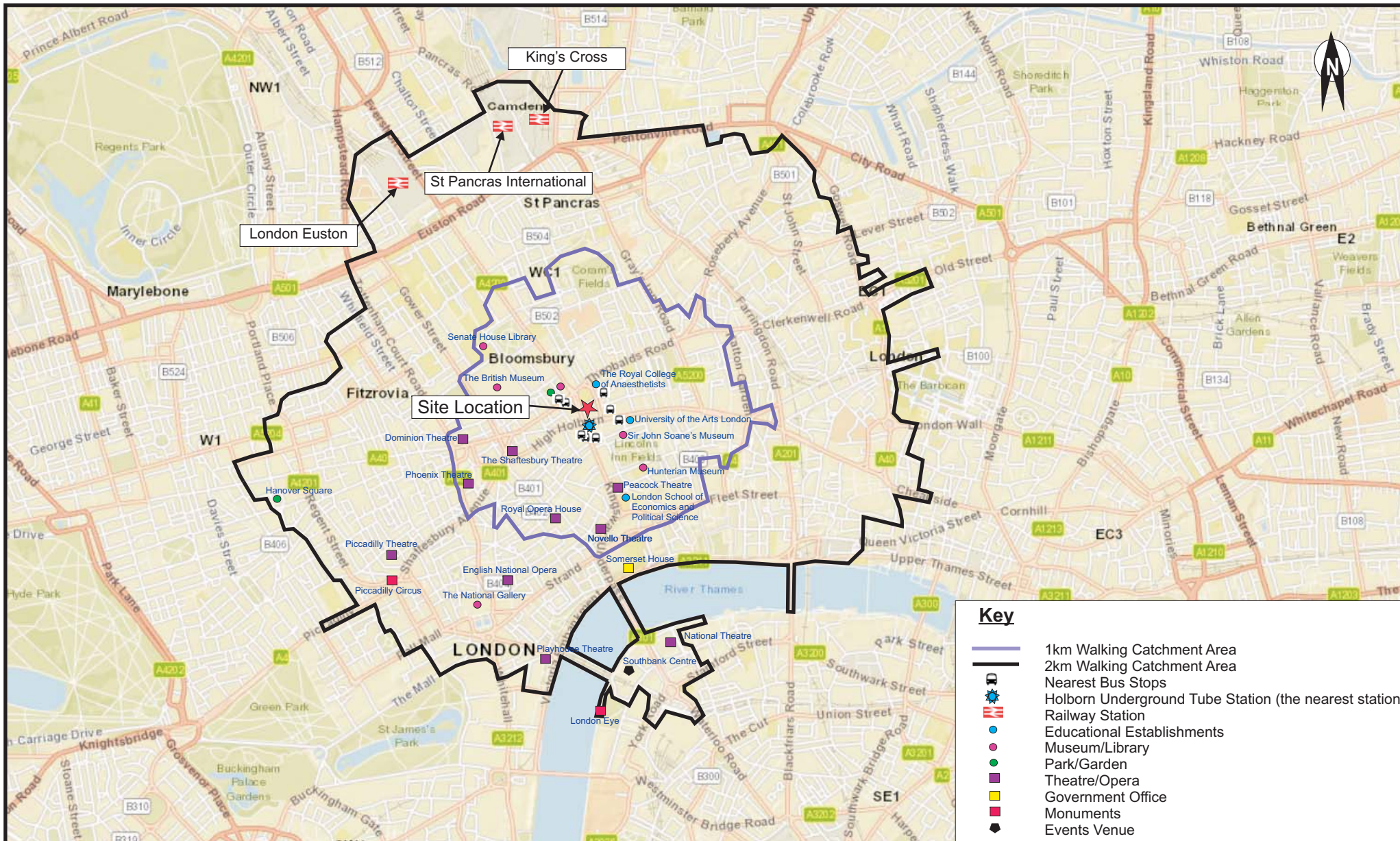
client
Idé Real Estate

drawing status
PRE APPLICATION

job no.
1365

drawing no.
A-100-001

revision
P0



Southampton Row, Holborn

Plan 5: 1km and 2km Walking Catchment Area

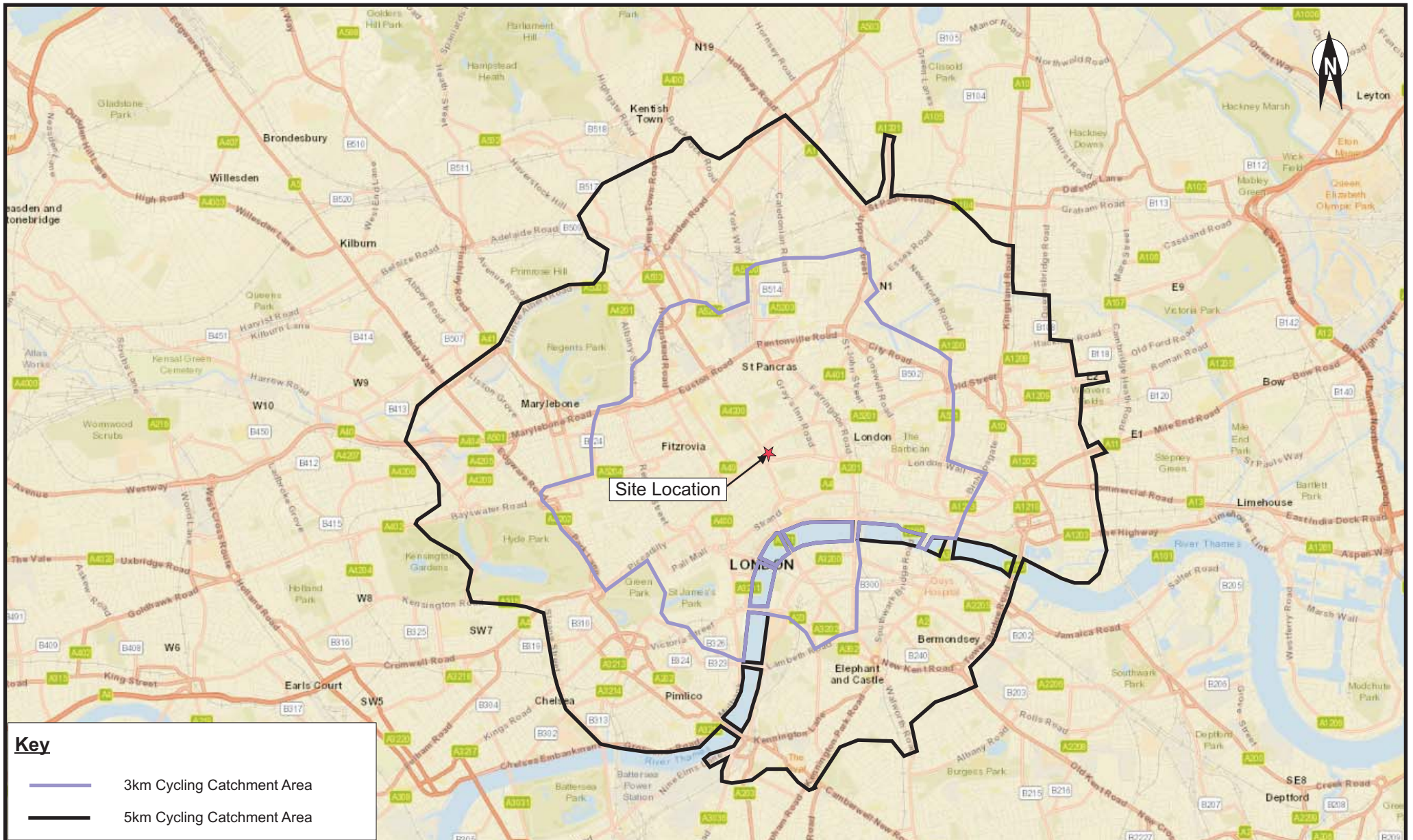
Job No: PB6701

HASKONINGDHV UK LTD.
TRANSPORT UK



9th Floor, Manchester One
53 Portland Street, Manchester M1 3LF
+44(0)161 236 1018
info@manchester.royalhaskoning.com
www.royalhaskoningdhv.com

Telephone:
Email:
Internet



Key

- 3km Cycling Catchment Area
- 5km Cycling Catchment Area

Southampton Row, Holborn
 Plan 6: 3km and 5km Cycling Catchment Area

Job No: PB6701

HASKONINGDHV UK LTD.
 TRANSPORT UK

9th Floor, Manchester One
 53 Portland Street, Manchester M1 3LF
 Telephone: +44(0)161 236 1018
 Email: info@manchester.royalhaskoning.com
 Internet: www.royalhaskoningdhv.com





APPENDICES



APPENDIX A

Pre-Application Response - Transport Section

It is also regrettable that the proposed materials are now seeking to blend in with; rather than compliment and contrast with those existing surrounding the site. The change in material to the top storeys and the glass break in between further enhances the bulk and massing of the building exceeding the limits of the site.

It would be useful to have visuals/elevations/sections to appreciate the impact and understand the connection between the two buildings. The visual break does seem to help create a divide, but there is further work required here to ensure not only a definitive break but visually connect and interestingly juxtapose the two architectural styles. The blank return elevations of the new build which face in to the link recesses bring very little to the overall scheme and should ensure enhancement and little harm to the setting of the listed building. Each elevational treatments understandably will need to correlate and be informed by the interior anatomy, however that currently proposed appears to lack some interest and originality to the scheme overall.

Very little detail has been provided to understand the ground floor elevation to Fisher and Catton Street and therefore it is difficult to comment in detail. It is appreciated that the proposed use does limit the interest and activity here however careful design and material detailing would bring enhancement to the streetscape. It was suggested at the meeting if there was opportunity to pick up references of the tram station nearby; however that may be interpreted by the architects.

Subject to the above comments being taken into consideration, the proposed scheme could result in enhancement to and reinstatement of key historic elements, detailing and materials of the listed building, which could be supported subject to further information, justification and a site visit. The proposed rear building however cannot be supported in its current form and additional work is required here to ensure its impact is far less on the designated heritage assets and wider context. This would be through design, scale, massing and materials. There is an opportunity here (as with the previous proposal) to create a unique building of high quality and curious architecture.

During our site visit in January, it would be useful to agree key views at the site visit; suggestions would be to include those as the previous scheme plus any others within the wider context if the scheme adds further bulk and height to that previously proposed.

The Design and Access Statement required to accompany the application should cover works approved via the Heritage Deed and any subsequent applications to appreciate the position we are currently in (mostly relating to the LB and its rear elevation).

Transport

During our meeting we touched briefly on transport. One of our Transport Planners had reviewed the Transport Statement that was provided with the pre-application submission.

Car/Coach Parking

It is welcomed that the development would not provide any off street car parking and were a residential use to come forward on the site units would be secured as car free via a Section 106 legal agreement to ensure there would be no additional strain on on-street car parking and the development would promote sustainable modes of transport in this highly accessible location.

The proposal suggests that the hotel element of the development would be 'coach free'. This would need to be secured via a Section 106 legal agreement.

Cycle Parking

With regard to the number of cycles, type of parking and space standards, we would expect provision in line with the London Plan standards. This should be designed in line with the Camden Planning Guidance 7 (Transport) section 9.

In respect of long stay parking, this is proposed within the basement cycle store. Although our preference would be for this to be located at ground level, as long as step-free access is provided via a suitably sized lift, (similar to a service lift), this would need to be demonstrated on the proposed plans. We would require a more detailed basement plan to be submitted in support of any subsequent planning application. This should indicate the dimensions of the cycle store while also stating how many cycle parking spaces would be provided. It should also show clearly the type of cycle parking facility to be provided (e.g. 'Sheffield' stands or 'Josta' two-tier racks).

Short stay cycle parking facilities should be provided within the site boundary as per Camden development policies and the London Plan. Paragraph 3.4.3 of the Transport Statement suggests that short stay cycle parking facilities would not be provided and that visitors would need to make use of existing cycle parking facilities located nearby on the public highway. This is not acceptable. These existing cycle parking facilities are already well used and their availability cannot be assumed. You would need to review the proposed strategy for short stay cycle parking. We would expect provision to be made within the site boundary. If it can be demonstrated that this is not possible, we would seek to secure an appropriate financial contribution to provide additional cycle parking facilities on the public highway (approx. £250 per cycle parking stand).

Servicing

The Transport Statement suggests that the Council should provide 2 dedicated taxi bays on Fisher Street. Please be advised we would not support this as it would encourage and promote trips by taxi to the detriment of more sustainable modes of transport. It would be more appropriate for taxis to drop off and pick up passengers from yellow lines. This is what currently happens throughout Central London.

The Transport Statement suggests that the Council should provide a dedicated loading bay on Catton Street. This isn't something we would support as we do not have information on what impact this would have on Catton Street. Our concern would be it would obstruct traffic flow while placing cyclists and pedestrians at risk. A development of this scale should accommodate an on-site loading bay (minimum dimensions of 9.5m long by 3.5m wide). We discussed this briefly during our meeting and it was agreed your transport consultant would discuss in more detail with our transport planner, Steve Cardno.

Other Transport considerations

The proposed ground floor plans suggest that some doors would open outwards on to the public highway (e.g. Fisher Street elevation). This would be contrary to development policy DP21. The plans should be amended slightly so that all doors open inwards. This would remove any impact on pedestrian movement, comfort and safety.

The proposal suggests that a travel plan and a servicing management plan would be submitted in support of any subsequent planning application. We consider these strategies should be outlined in the Transport Statement. At this stage it is considered a travel plan, associated monitoring contribution of approx. £6,122, and a servicing management plan would need to be secured as section 106 planning obligations.

A draft construction management plan (CMP) should be submitted in support of any subsequent planning application. The Council's CMP pro-forma should be used. This is available on the planning obligations webpage at the hyperlink below: <http://www.camden.gov.uk/ccm/content/environment/planning-and-built-environment/two/planning-applications/making-an-application/supporting-documentation/planning-obligations-section-106/>

A CMP and associated implementation support contribution would need to be secured as section 106 planning obligations. The level of CMP implementation support contribution required would be determined during the assessment of any subsequent planning application.

The Council would seek to secure financial contributions for highway works directly adjacent to the site, and pedestrian, cycling and environmental improvements in the local area if planning permission is granted. The level of financial contributions required would be determined during the assessment of any subsequent planning application.

It is my understanding that a short service road currently exists within the site. This links Catton Street with Fisher Street. It is assumed that this is an established right of way. The proposal would appear to extinguish this right of way. A stopping up order would therefore be required (e.g. Section 247 of the Town and Country Planning Act). This issue needs to be discussed in the Transport Statement. It also needs to be shown more clearly on the existing and proposed plans.

Other material considerations

Below I have addressed other material considerations which would be of consideration.

Housing

With the advice provided within the land use section in mind, should you decide to propose residential on the site I thought it would be useful to provide some advice in respect of affordable housing and the type of housing to be provided.

Affordable Housing

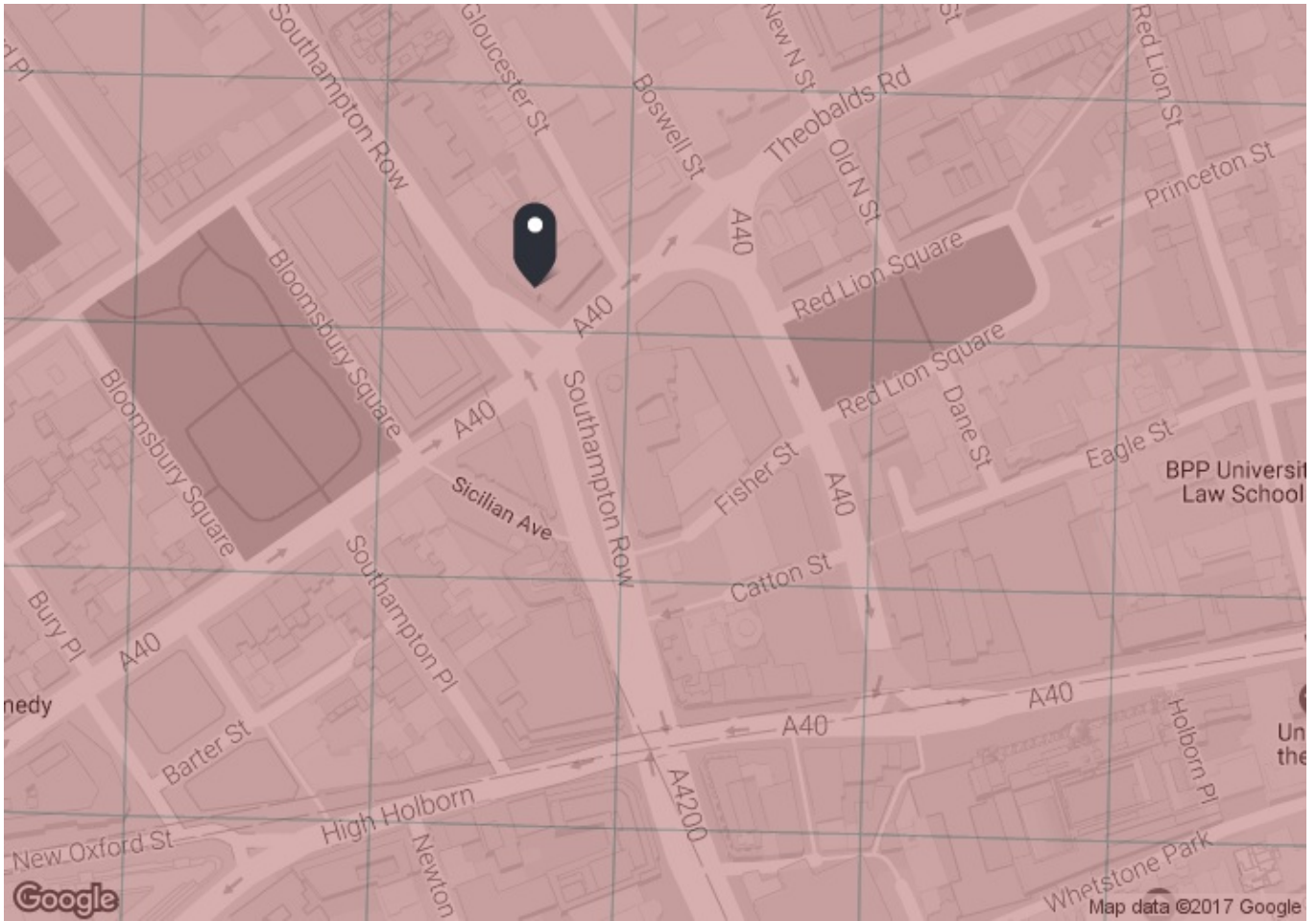
Our preference would always be the provision of affordable units on site. Given the arrangement of the site, I consider it would potentially be possible to accommodate affordable units on site. The policy target would be the provision of 50% of affordable housing. Any development which does not meet the policy target of 50% should be supported with a viability statement to justify the level of provision. This would be independently reviewed at the applicants' expense to ensure the viability is sound.

With regard to the content of the affordable housing, CS6 notes that the guidelines are for 60% social rented housing and 40% intermediate affordable.



APPENDIX B

PTAL Output



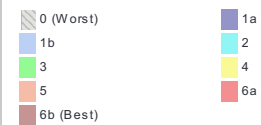
PTAL output for Base Year
6b

Grange Holborn Hotel
50 - 60 Southampton Row London WC1B 4AR, UK
Easting: 530459, Northing: 181712

Grid Cell: 86866

Report generated: 28/04/2017

Map key - PTAL



Map layers

 PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	CONWAY HALL	243	230.24	11	2.88	4.73	7.61	3.94	0.5	1.97
Bus	HIGH HOLBORN PROCTER ST	521	319.42	27	3.99	3.11	7.1	4.22	1	4.22
Bus	HIGH HOLBORN PROCTER ST	25	319.42	8	3.99	5.75	9.74	3.08	0.5	1.54
Bus	S'HAMPTON ROW T'BALDS RD	59	200.39	10	2.5	5	7.5	4	0.5	2
Bus	S'HAMPTON ROW T'BALDS RD	91	200.39	9	2.5	5.33	7.84	3.83	0.5	1.91
Bus	S'HAMPTON ROW T'BALDS RD	68	200.39	9	2.5	5.33	7.84	3.83	0.5	1.91
Bus	S'HAMPTON ROW T'BALDS RD	X68	200.39	4	2.5	9.5	12	2.5	0.5	1.25
Bus	S'HAMPTON ROW T'BALDS RD	188	200.39	8	2.5	5.75	8.25	3.63	0.5	1.82
Bus	S'HAMPTON ROW T'BALDS RD	168	200.39	9	2.5	5.33	7.84	3.83	0.5	1.91
Bus	BLOOMSBURY SQUARE	8	215.79	10	2.7	5	7.7	3.9	0.5	1.95
Bus	BLOOMSBURY SQUARE	242	215.79	6.5	2.7	6.62	9.31	3.22	0.5	1.61
Bus	BLOOMSBURY SQUARE	38	215.79	10	2.7	5	7.7	3.9	0.5	1.95
Bus	BLOOMSBURY SQUARE	1	215.79	8	2.7	5.75	8.45	3.55	0.5	1.78
Bus	BLOOMSBURY SQUARE	19	215.79	8	2.7	5.75	8.45	3.55	0.5	1.78
Bus	BLOOMSBURY SQUARE	171	215.79	7.5	2.7	6	8.7	3.45	0.5	1.72
Bus	BLOOMSBURY SQUARE	55	215.79	10	2.7	5	7.7	3.9	0.5	1.95
Bus	BLOOMSBURY ST SHAFTESBURY AVE	24	629.95	10	7.87	5	12.87	2.33	0.5	1.17
Bus	BLOOMSBURY ST SHAFTESBURY AVE	134	629.95	12	7.87	4.5	12.37	2.42	0.5	1.21
Bus	BLOOMSBURY ST SHAFTESBURY AVE	29	629.95	15	7.87	4	11.87	2.53	0.5	1.26
Bus	BLOOMSBURY ST SHAFTESBURY AVE	176	629.95	8.5	7.87	5.53	13.4	2.24	0.5	1.12
Bus	BLOOMSBURY ST SHAFTESBURY AVE	14	629.95	13	7.87	4.31	12.18	2.46	0.5	1.23
Bus	BRITISH MUSEUM	98	448.68	9	5.61	5.33	10.94	2.74	0.5	1.37
LUL	Tottenham Court Road	'Morden-Edgware'	870.1	4.67	10.88	7.17	18.05	1.66	0.5	0.83
LUL	Tottenham Court Road	'HighBarnet-Morden'	870.1	0.33	10.88	91.66	102.54	0.29	0.5	0.15
LUL	Tottenham Court Road	'Kennington-Edgware'	870.1	14.67	10.88	2.79	13.67	2.19	0.5	1.1
LUL	Tottenham Court Road	'HighBarnet-Kenningt'	870.1	5.33	10.88	6.38	17.25	1.74	0.5	0.87
LUL	Tottenham Court Road	'MillHill-Morden'	870.1	1.67	10.88	18.71	29.59	1.01	0.5	0.51
LUL	Tottenham Court Road	'MillHillE-Kenningt'	870.1	1.67	10.88	18.71	29.59	1.01	0.5	0.51
LUL	Chancery Lane	'NActon-Loughton'	836.49	0.67	10.46	45.53	55.98	0.54	0.5	0.27
LUL	Chancery Lane	'Loughton-Northolt'	836.49	0.33	10.46	91.66	102.12	0.29	0.5	0.15
LUL	Chancery Lane	'Hain-NP-RuislipGdns'	836.49	0.67	10.46	45.53	55.98	0.54	0.5	0.27
LUL	Holborn	'Epping-Ealing'	339.73	3	4.25	10.75	15	2	0.5	1
LUL	Holborn	'Epping-Wruislip'	339.73	3	4.25	10.75	15	2	0.5	1
LUL	Holborn	'RuislipGar-Epping'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'WhiteCity-Epping'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'Epping-NActon'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'Epping-Northolt'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'Debden-WRuislip'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'WhiteCity-Debden'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'Debden-Northolt'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'RuislipGdns-Debden'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'Loughton-WRuislip'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'RuislipGdns-Loughton'	339.73	0.67	4.25	45.53	49.77	0.6	0.5	0.3
LUL	Holborn	'Loughton-WhiteCity'	339.73	0.67	4.25	45.53	49.77	0.6	0.5	0.3
LUL	Holborn	'Ealing-Loughton'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'Ealing-NewburyPark'	339.73	0.67	4.25	45.53	49.77	0.6	0.5	0.3
LUL	Holborn	'WRuislip-NewburyPark'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'NActon-NewburyPark'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'Hainault-Ealing'	339.73	5.33	4.25	6.38	10.63	2.82	0.5	1.41
LUL	Holborn	'Hainault-Nacton'	339.73	1.33	4.25	23.31	27.55	1.09	0.5	0.54
LUL	Holborn	'Hainault-WRuislip'	339.73	3.33	4.25	9.76	14.01	2.14	0.5	1.07
LUL	Holborn	'Hainault-WhiteCity'	339.73	1.67	4.25	18.71	22.96	1.31	0.5	0.65
LUL	Holborn	'Hainault-NP-Northolt'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'GrangeHill-WD-Eal'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'GrangeHill-Wdld-Whit'	339.73	0.67	4.25	45.53	49.77	0.6	0.5	0.3
LUL	Holborn	'GrangeHill-Wdld-WRsp'	339.73	0.67	4.25	45.53	49.77	0.6	0.5	0.3
LUL	Holborn	'Cockfosters-LHRT4LT'	339.73	4.67	4.25	7.17	11.42	2.63	0.5	1.31
LUL	Holborn	'RayLane-Cockfosters'	339.73	3.67	4.25	8.92	13.17	2.28	0.5	1.14

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
LUL	Holborn	'LHRT4LI-ArnosGrove'	339.73	4.67	4.25	7.17	11.42	2.63	0.5	1.31
LUL	Holborn	'ArnosGrove-RayLane'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'ArnosGrove-Nthfields'	339.73	3	4.25	10.75	15	2	0.5	1
LUL	Holborn	'Oakwood-RayLane'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'Nthfields-Cockfosters'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'LHRT5-Cockfosters'	339.73	6	4.25	5.75	10	3	1	3
LUL	Holborn	'Uxbridge-Cockfosters'	339.73	3.67	4.25	8.92	13.17	2.28	0.5	1.14
LUL	Holborn	'Ruislip-Cockfosters'	339.73	2.33	4.25	13.63	17.87	1.68	0.5	0.84
LUL	Holborn	'ArnosGrove-Uxbridge'	339.73	1	4.25	30.75	35	0.86	0.5	0.43
LUL	Holborn	'Oakwood-Uxbridge'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
LUL	Holborn	'Oakwood-Ruislip'	339.73	0.33	4.25	91.66	95.91	0.31	0.5	0.16
Total Grid Cell AI:										65.84



APPENDIX C

Bus Routes and Frequencies Summary Table

Bus Services Available from the Site

Service Number	The Nearest Bus Stop	Route	Frequency		
			Monday to Friday	Saturday	Sunday
1	M	New Oxford Street – Canada Water Bus Station	First Bus 0548, then every 6-10mins until 1900, then every 8-11mins until 2000 then every 10-13mins until 0000. Last Bus 0004	First Bus 0548, then approximately every 12 mins until 1000, then every 8-10mins until 2000, then every 12-13mins until 0000. Last Bus 0005	First Bus 0548, 0608, 0628, 0648, 0703, 0718, 0733, 0748, then every 11-12mins. Last Bus 0004
	P	Canada Water Bus Station – Tottenham Court Road	First Bus 0529, 0559, 0631, 0642, 0653, then every 6-9mins until 2000, then every 9-12mins until 0000, 0004, 0015, 0027, 0039. Last Bus 0051	First Bus 0557, 0628, 0643, 0658, then every 10-13mins until 0900, then every 7-10mins until 2000, then every 9-12mins until 0005, 0017, 0029, 0041. Last Bus 0053	First Bus 0629, 0649, 0709, 0729, 0744, 0759, 0814, 0829, 0841, 0853, then every 10-13mins until 0003, 0015, 0027, 0039. Last Bus 0051
8	K	Bow Church – Tottenham Court Road Station	First Bus 0531, 0551, then every 6-10mins until 0800, then every 4-8mins until 2100, then every 9-10mins until 0001, 0011, 0021, 0031, 0041. Last Bus 0051	First Bus 0604, then every 10-11 mins until 0700, then every 6-10mins until 0006, then every 10mins until 0056	First Bus 0604, then every 15mins until 0800, then every 8-12mins until 0051
19	B	Finsbury Park Interchange – Parkgate Road	First Bus 0545, 0555, then every 9-12mins until 0700, then every 6-10mins until 0002, 0009, 0020, 0032. Last Bus 0044	First Bus 0544, 0556, then every 10-14mins until 0900, then every 6-10mins until 0004, 0014, 0025, 0037. Last Bus 0049	First Bus 0559, then every 15mins until 1001, then every 8-11mins until 0001, 0011, 0021, 0032, 0044
	F	Battersea Bridge – Finsbury Park Interchange	First Bus 0554, then every 7-10mins until 0900, then every 5-9mins until 2100, then every 7-11mins until 0004, 0013, 0022, 0030, 0040, 0050	First Bus 0553, 0605, 0620, 0632, 0644, 0656, then every 7-11mins until 0104	First Bus 0554, then every 20mins until 0900, then every 11-13mins until 1000, then every 7-11mins until 0008, 0018, 0028, 0038, 0048
25	H	Holles Street – Hainault Street	0003, 0009, 0015, 0020, 0026, 0033, 0040, 0048, 0054, then every 5-9mins until 1800, then every 4-8mins until 0000	0005, 0011, 0017, 0022, 0028, 0034, 0040, 0051, 0057, then every 5-9mins until 0000	0003, 0009, 0015, 0020, 0025, 0031, 0037, 0041, 0050, 0056, then every 4-7mins until 0500, then every 5-9mins until 0600, then every 4-8mins until 0000
38	B	Clapton Pond – Victoria Bus Station	First Bus 0548, 0556, then every 2-6 mins until 2355	First Bus 0640, 0647, 0653, 0659, then every 3-7mins until 0900, then every 2-6mins until 2300, then every 5mins until 2356	First Bus 0640, 0648, 0656, then every 5-8mins until 0900, then every 2-6mins until 2353
	F	Victoria Bus Station – Lea Bridge Roundabout	First Bus 0631, 0639, 0646, 0652, 0657, then every 2-6mins until 0103	First Bus 0630, 0638, 0645, 0653, then every 6-8mins until 0800, then every 3-7mins until 0106	First Bus 0630, 0638, 0645, 0653, then every 4-8mins until 0103
55	B	Lea Bridge Road/Bakers Arms – Oxford Circus	First Bus 0435, 0506, 0537, 0550, then every 12-14mins until 0700, then every 5-8mins until 2100, then every 9-11mins until 0039	First Bus 0536, 0551, then every 15mins until 0700, then every 10-12mins until 0800, then every 7-11mins until 0057	First Bus 0535, 0550, then every 15mins until 0700, then every 10-14mins until 0900, then every 8-11mins until 0002, 0012, 0022, 0032, 0042
	F	Holles Street – Leyton Green	First Bus 0502, 0517, 0532, 0547, then every 5-7mins until 2000, then every 7-11mins until 0109	First Bus 0502, 0517, 0532, 0547, 0602, 0617, 0632, 0647, then every 10-13mins until 0800, then every 6-10mins until 0900, then every 7-11mins until 0106, 0118	First Bus 0503, 0518, 0533, 0548, then every 10-15 mins until 1000, then every 8-11mins until 0102, 0112
59	M	Wharfdale Road/London Canal Museum – Streatham Hill/Telford Avenue	First Bus 0443, 0455, then every 11-13mins until 0700, then every 5-9mins until 2006, 2013, 2019, 2029, 2040, 2051, then every 11-13mins until 0103. Last Bus 0115	First Bus 0506, 0536, 0548, then every 10-13mins until 0906, 0917, 0925, 0933, 0940, 0946, 0952, 0958, then every 7-10mins until 2100, then every 11-12mins until 0103. Last Bus 0115	First Bus 0533, 0545, 0557, then every 10-13mins until 0101. Last Bus 0113
	N	Telford Avenue – King's Cross Station/York Way	First Bus 0431, 0446, 0459, then every 12-13mins until 0600, then every 8-12mins until 0700, then every 4-8mins until 1902, 1910, 1917, 1925, 1934, 1944, 1956, then every 11-12mins until 0003, 0015, 0026. Last Bus 0037	First Bus 0431, then every 10-13mins until 0800, then every 6-10mins until 1900, then every 10-12mins until 0003, 0014, 0026. Last Bus 0038	First Bus 0501, 0513, 0525, 0537, 0549, then every 10-12mins until 0003, 0015, 0026. Last Bus 0038
68	M	Euston Station – Ernest Avenue	First Bus 0525, 0540, 0552, then every 6-10mins until 2100, then every 11-13mins until 0000. Last Bus 0012	First Bus 0525, 0540, 0555, 0610, 0625, 0640, 0655, 0710, 0723, 0738, 0750, then every 9-12mins until 0900, then every 6-10mins until 2000, then every 12-13mins until 0000. Last Bus 0012.	First Bus 0529, 0544, 0559, 0614, 0629, 0644, 0658, 0712, 0726, 0741, 0756, 0811, 0826, 0841, 0855, then every 10-13mins until 0000. Last Bus 0012
	N	St Julian's Farm Road – Euston Bus Station	First Bus 0555, then every 12-13mins until 0700, then every 8-11mins until 0800, then every 6-10mins until 1900, then every 5-8mins until 2000, then every 7-11mins until 2100, then every 10-13mins until 0006, 0017, 0031, 0047. Last Bus 0047	First Bus 0552, 0607, 0622, 0637, 0652, 0710, 0728, 0742, 0754, then every 7-11mins until 2000, then every 10-12mins until 0000, 0009, 0020, 0035, 0051. Last Bus 0111	First Bus 0552, 0607, 0622, 0637, 0652, 0710, 0728, 07

Service Number	The Nearest Bus Stop	Route	Frequency		
			Monday to Friday	Saturday	Sunday
91	M	Tottenham Lane YMCA – Whitehall/Trafalgar Square	First Bus 0532, 0552, then every 6-10mins until 0004, 0014, 0022, 0032. Last Bus 0042	First Bus 0532, 0552, then every 12-14mins until 0900, then every 7-10mins until 0004, 0013, 0022, 0032. Last Bus 0042	First Bus 0632, 0652, 0712, 0732, 0744, 0756, 0808, 0823, 0838, 0850, then every 12-14mins until 1000, then every 7-11mins until 0004, 0022. Last Bus 0042
	N	Northumberland Avenue/Trafalgar Square	First Bus 0538, 0548, 0558, then every 6-10mins until 0008. Last Bus 0018	First Bus 0538, 0550, then every 8-12mins until 0008. Last Bus 0018	First Bus 0658, then every 8-12mins until 0008. Last Bus 0018
98	J	Red Lion Square - Pound Lane	First Bus 0610, 0625, 0635, 0645, 0653, then every 6-8mins until 2000, then every 9-12mins until 0005	First Bus 0610, 0625, 0640, 0655, then every 7-10mins until 1903, 1910, 1918, 1925, 1933, 1945, 1955, then every 9-12mins until 0005	First Bus 0740, 0755, then every 8-12mins until 0005
168	M	Royal Free Hospital – Dunton Road	First Bus 0523, 0535, 0547, 0559, then every 10-12mins until 0700, then every 5-8mins until 2000, then every 8-10mins until 0007, 0017. Last Bus 0027	First Bus 0523, 0535, 0547, 0559, then every 8-12mins until 0900, then every 6-10mins until 0007, 0017. Last Bus 0027	First Bus 0523, 0538, 0553, 0608, 0623, 0638, 0653, 0708, 0723, 0735, 0747, 0759, then every 9-12mins until 0007, 0017. Last Bus 0027
	N	Dunton Road – South End Green	First Bus 0559, then every 8-12mins until 0700, then every 6-8mins until 0906, 0914, 0922, 0927, 0937, 0943, 0950, 0957, then every 6-10mins until 0001, 0011, 0021, 0031. Last Bus 0041	First Bus 0559, then every 9-12mins until 0900, then every 6-10mins until 0001, 0011, 0021, 0031. Last Bus 0041	First Bus 0559, 0614, 0629, 0644, 0659, 0714, 0729, 0744, 0756, then every 8-12mins until 0001, 0011, 0021, 0031. Last Bus 0041
171	M	Museum Street – Catford Garage	First Bus 0502, 0522, 0542, 0554, 0606, 0617, 0629, 0640, 0648, 0655, then every 5-9mins until 0800, then every 7-10mins until 2000, then every 12-13mins until 2310, 2322, 2334, 2346. Last Bus 2358	First Bus 0501, 0531, 0601, 0631, 0646, 0702, 0715, 0730, 0745, then every 8-12mins until 0900, then every 7-10mins until 1900, then every 10-12mins until 2308, 2320, 2333, 2345. Last Bus 2357	First Bus 0501, 0601, 0631, 0701, 0729, 0744, 0759, 0814, 0829, 0843, 0856, 0912, 0927, 0941, 0952, then every 10-12mins until 2309, 2321, 2333, 2345. Last Bus 2357
	P	Newquay Road – Holborn Station	Terminus Stop		
188	M	Russell Square Station – North Greenwich Station	0006, 0018, 0030, 0049, 0119, 0149, 0219, 0249, 0319, 0349, 0419, 0448, 0503, 0518, 0533, 0548, 0603, 0618, 0629, 0639, 0650, 0657, then every 7-10mins until 2000, then every 11-12mins until 2307, 2318, 2330, 2342, 2354	0007, 0019, 0031, 0051, 0121, 0151, 0221, 0251, 0319, 0349, 0419, 0448, 0503, 0518, 0533, 0548, 0604, 0619, 0634, 0646, 0658, then every 10-12mins until 0900, then every 7-10mins until 1900, then every 11-12mins until 2307, 2319, 2331, 2343, 2355	0005, 0017, 0029, 0051, 0121, 0151, 0221, 0251, 0320, 0350, 0419, 0449, 0509, 0529, 0549, 0604, 0619, 0634, 0649, 0704, 0719, 0734, 0749, 0804, 0819, 0834, 0846, 0858, then every 10-12mins until 2306, 2318, 2329, 2341, 2353
	N	North Greenwich Station – Russell Square Station	0010, 0022, 0034, 0046, 0058, then every 12mins until 0210, 0233, 0303, 0333, 0403, 0433, 0503, 0528, 0543, 0559, 0616, 0633, 0649, 0705, 0720, 0732, 0741, 0749, 0757, then every 7-9mins until 2000, then every 9-12mins until 0000	0103, 0115, 0127, 0139, 0151, 0203, 0215, 0232, 0302, 0332, 0402, 0432, 0502, 0523, 0538, 0553, 0608, 0625, 0642, 0658, 0714, 0730, 0743, 0756, then every 10-13mins until 1000, then every 7-9mins until 2000, then every 9-12mins until 0003, 0015, 0027, 0039, 0051	0009, 0021, 0033, 0045, 0057, then every 11-12mins until 0206, 0234, 0304, 0334, 0404, 0434, 0504, 0524, 0544, 0605, 0627, 0648, 0708, 0728, 0743, 0758, 0813, 0829, 0845, 0857, then every 10-14mins until 0000
242	H	New Oxford Street – Homerton Hospital	First Bus 0118, 0138, 0158, 0218, 0238, 0258, 0318, 0338, 0358, 0418, 0438, 0458, 0518, 0538, 0548, 0558, then every 8-11mins until 0700, then every 6-10mins until 0059	At 03, 18, 33 and 48 mins between 0200 and 0600, then every 12mins until 0800, 0812, 0820, 0828, 0836, 0843, 0849, 0857, then every 6-10mins until 0008, 0018, 0028, 0038, 0048, 0103, 0118, 0133, 0148	First Bus 0204, 0219, 0234, 0249, 0304, 0319, 0334, 0348, 0405, 0422, 0428, 0453, 0508, 0523, 0538, 0548, 0603, 0618, 0633, 0648, 0703, 0718, 0731, 0744, 0756, then every 9-12mins until 0118. Last Bus 0138
243	M	Redvers Road – Waterloo Station/Mepham Street	0007, 0018, 0028, 0038, 0049, 0112, 0141, 0211, 0241, 0311, 0341, 0411, 0440, 0509, 0530, 0546, 0601, 0611, 0620, 0631, 0637, 0642, 0649, 0654, 0702, 0707, 0714, 0722, 0732, 0740, 0748, 0755, then every 5-8mins until 2000, then every 8-12mins until 0000	0100, 0112, 0124, 0136, 0147, 0202, 0216, 0231, 0246, 0259, 0313, 0327, 0342, 0356, 0411, 0425, 0440, 0452, 0505, 0519, 0534, 0549, 0609, 0624, 0639, 0647, 0655, then every 12-13mins until 1000, then every 7-11mins until 2000, then every 10-12mins until 0003, 0014, 0026, 0038, 0049	0112, 0124, 0136, 0147, then every 15mins until 0609, 0629, 0649, 0709, 0730, 0747, then every 9-12mins until 0004, 0015, 0026, 0037, 0049
	P	Waterloo Station/Tenison Way – Wood Green Station	0003, 0015, 0026, 0037, 0048, 0059, then at 20 and 50 mins between 0100 and 0400, 0510, 0530, 0551, 0606, 0621, 0631, 0641, 0651, 0657, then every 5-8mins until 2000, then every 7-10mins until 2100, then every 10-12mins until 0000	0002, 0013, 0025, 0037, 0049, then every 15 mins between 0101 and 0346, 0401, 0415, 0430, 0445, 0458, then every 12mins until 0613, 0625, 0640, 0655, then every 10-12mins until 0900, then every 7-11mins until 2100, then every 11-12mins until 0000	0005, 0015, 0026, 0037, 0048, 0059, 0116, 0131, 0146, then every 15mins between 0201 and 0346, 0401, 0415, 0430, 0445, 0458, then every 12mins until 0613, 0628, 0648, 0708, 0728, 0748, 0808, 0823, 0838, 0850, then every 110-12mins until 0000

Service Number	The Nearest Bus Stop	Route	Frequency		
			Monday to Friday	Saturday	Sunday
521	K	London Bridge Station – Waterloo Station/Mepham Street	First Bus 0645, 0655, then every 3-6mins until 0800, then every 1-3mins until 1100, then every 6-10mins until 1600, then every 2-5mins until 2002, 2009, 2017, 2025, 2037, 2048, then every 10-12mins until 0011. Last Bus 0023	n/a	n/a
	P	Waterloo Station/Tenison Way – London Bridge Station	First Bus 0634, 0644, 0649, 0654, 0659, then every 2-5mins until 1100, then every 10mins until 1600, then every 2-5mins until 2000, then every 8-12mins until 0000	n/a	n/a
N171	M	Museum Street – Catford Garage	First Bus 0502, 0522, 0542, 0554, then every 5-9mins until 0800, then every 7-10mins until 2000, then every 12-13mins until 2310, 2322, 2334, 2346. Last Bus 2358	First Bus 0501, 0531, 0646, 0702, 0715, 0730, 0745, then every 8-12mins until 0900, then every 7-10mins until 1900, then every 10-12mins until 2308, 2320, 2333, 2345. Last Bus 2357	First Bus 0501, 0531, 0646, 0702, 0715, 0730, 0745, then every 8-12mins until 0900, then every 7-10mins until 1900, then every 10-12mins until 2308, 2320, 2333, 2345. Last Bus 2357
	P	Newquay Road – Holborn STation	Terminus Stop		
X68	M	Southampton Row – West Croydon Bus Station	First Bus 1555, then every 20mins until 1902	n/a	n/a
	N	West Croydon Bus Station – Russell Square	First Bus 0638, 0655, then every 20mins until 0944	n/a	n/a

Night Services					
Service Number	Bus Stop	Route	Monday – Thursday Nights/Tuesday-Friday Morning	Friday Night/Saturday Morning Saturday Night/Sunday Morning	Sunday Night/Monday Morning
N1	M	New Oxford Street – Titmuss Avenue	First Bus 0028, then at 28 and 58 mins past each hour. Last Bus 0528	0024, 0044, 0104, 0124, 0144, then at 07, 27, 47 mins past each hour until 0508. Last Bus 0528	0028, 0058, then at 28, 58 mins past each hour until 0528
	P	Titmuss Avenue – Tottenham Court Road	First Bus 0116, 0146, 0216, 0247, 0317, 0352, 0424, 0457, 0528. Last Bus 0601	Friday Night First Bus 0143, then 3 services each hour until 0606. Saturday Night First Bus 0124, 0144, the 3 services each hour until 0607	0116, 0146, 0216, 0247, 0317, 0352, 0424, 0457, 0528, 0601
N8	H	Holles Street – The Lowe	First Bus 0015, 0034, 0054, then at 14, 34, 54 mins past each hour until 0513. Last Bus 0533	First Bus 0012, then every 6-8mins until 0506, 0513, 0521, 0528. Last Bus 0536	First Bus 0015, 0034, 0054, then at 14, 34, 54 mins past each hour until 0513. Last Bus 0533
N19	B	Finsbury Park Interchange – Clapham Junction Station	First Bus 0100, then at 28, 57 mins past each hour until 0459, 0530	First Bus 0110, 0128, 0149, then every 20mins until 0523	First Bus 0059, 0128, then every 30mins until 0530
	F	Clapham Junction Station - Finsbury Park Interchange	First Bus 0110, 0142, then at 09, 39 mins past each hour until 0508, 0540	First Bus 0119, 0139, 0158, then every 20min until 0401, 0417, 0436, 0455, 0514, 0533	First Bus 0113, 0144, 0210, then every 30mins until 0509, 0540
N38	B	Walthamstow Bus Station – Victoria Bus Station	First Bus 0003, then every 11-15mins until 0508, 0521, 0532, 0543	First Bus 0008, then every 6mins until 0607, 0615, 0625, 0633	First Bus 0003, then every 11-15mins until 0508, 0521, 0532, 0543
	F	Victoria Bus Station – Walthamstow Bus Station	First Bus 0108, then every 10-15mins until 0604, 0614, 0625	First Bus 0107, then every 4-6mins until 0603, 0613, 0623	First Bus 0108, 0120, 0132, 0144, 0154, then every 10-12mins until 0604, 0614, 0625
N41	B	Tottenham Hale Bus Station or Tottenham Hale Bus Station - Trafalgar Sq / Charing Cross Stn or Trafalgar Sq / Charing Cross Stn	First Bus 0041, then every 30mins until 0444	First Bus 0046, then every 20mins until 0444	First Bus 0041, then every 30mins until 0444
	F	Trafalgar Sq / Charing Cross Stn or Trafalgar Sq / Charing Cross Stn - Tottenham Hale Bus Station or Tottenham Hale Bus Station	First Bus 0123, 0153, then every 30min until 0522	First Bus 0131, then every 20mins until 0525	First Bus 0123, 0153, then every 30min until 0522
N68	M	New Oxford Street – Old Coulsdon/Tudor Rose	First Bus 0023, 0053, then at 23, 53 mins past each hour until 0453	First Bus 0025, 0039, 0054, then 3 services each hour until 0453	First Bus 0025, 0039, 0054, then 3 services each hour until 0453
	P	Old Coulsdon/Tudor Rose – St Giles High Street	First Bus 0137, 0205, 0233, 0301, 0334, 0404, 0438, 0513. Last Bus 0545	Friday Night First Bus 0136, 0156, then 3 services each hour until 0402, 0422, 0439, 0459, 0519. Last Bus 0539 Saturday Night First Bus 0140, 0158, then 3 services each hour until 0402, 0421, 0438, 0459, 0516. Last Bus 0536	First Bus 0137, then 2 services each hour until 0513. Last Bus 0545
N91	M	Cockfosters Station – Whitehall/Trafalgar Square	First Bus 0103, then 2 services each hour until 0522. Last Bus 0542	First Bus 0045, then 4 services each hour until 0502, 0522. Last Bus 0542	First Bus 0013, 0033, 0103, 0131, 0159, then 2 services each hour until 0430, 0502, 0522. Last Bus 0542
	N	Northumberland Avenue/Trafalgar Square – Cockfosters Station	First Bus 0028, 0058, then 2 services each hour until 0528	First Bus 0030, 0045, then every 15mins until 0413, 0428, 0448, 0508. Last Bus 0528	First Bus 0028, then every 30mins until 0458. Last Bus 0528
N98	J	Red Lion Square – Stanmore Station	First Bus 0015, 0030, 0045,, then every 15mins until 0600	First Bus 0015, then every 15mins until 0100, then every 10mins until 0555	First Bus 0015, 0030, 0045,, then every 15mins until 0600
N207	F	Uxbridge Station – Bloomsbury Square	Terminus Stop		



APPENDIX D

TRICS Output

Calculation Reference: AUDIT-703103-170428-0419

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : A - HOTELS
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

01 GREATER LONDON
HK HACKNEY 1 days

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

Secondary Filtering selection:

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

Parameter: Number of bedrooms
Actual Range: 205 to 205 (units:)
Range Selected by User: 82 to 224 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 05/11/08

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

Selected survey days:

Wednesday 1 days

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

Selected survey types:

Manual count 1 days
Directional ATC Count 0 days

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

Selected Locations:

Town Centre 1

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

Selected Location Sub Categories:

Built-Up Zone 1

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

Secondary Filtering selection:

Use Class:

C1 1 days

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

Secondary Filtering selection (Cont.):

Population within 1 mile:

50,001 to 100,000 1 days

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

Population within 5 miles:

500,001 or More 1 days

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

Car ownership within 5 miles:

0.5 or Less 1 days

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

Travel Plan:

No 1 days

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

PTAL Rating:

No PTAL Present 1 days

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

LIST OF SITES relevant to selection parameters

1	HK-06-A-02	HOTEL	HACKNEY
	GREAT EASTERN STREET		
	SHOREDITCH		
	Town Centre		
	Built-Up Zone		
	Total Number of bedrooms:	205	
	Survey date: WEDNESDAY	05/11/08	Survey Type: MANUAL

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 BEDRMS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	205	0.141	1	205	0.283	1	205	0.424
08:00 - 09:00	1	205	0.180	1	205	0.532	1	205	0.712
09:00 - 10:00	1	205	0.263	1	205	0.259	1	205	0.522
10:00 - 11:00	1	205	0.224	1	205	0.151	1	205	0.375
11:00 - 12:00	1	205	0.151	1	205	0.185	1	205	0.336
12:00 - 13:00	1	205	0.205	1	205	0.205	1	205	0.410
13:00 - 14:00	1	205	0.327	1	205	0.322	1	205	0.649
14:00 - 15:00	1	205	0.376	1	205	0.263	1	205	0.639
15:00 - 16:00	1	205	0.210	1	205	0.200	1	205	0.410
16:00 - 17:00	1	205	0.434	1	205	0.351	1	205	0.785
17:00 - 18:00	1	205	0.546	1	205	0.385	1	205	0.931
18:00 - 19:00	1	205	0.410	1	205	0.322	1	205	0.732
19:00 - 20:00	1	205	0.278	1	205	0.341	1	205	0.619
20:00 - 21:00	1	205	0.263	1	205	0.215	1	205	0.478
21:00 - 22:00	1	205	0.283	1	205	0.205	1	205	0.488
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.291			4.219			8.510

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

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

Parameter summary

Trip rate parameter range selected: 205 - 205 (units:)
Survey date date range: 01/01/08 - 05/11/08
Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

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

Royal Haskoning Portland Street Manchester

Licence No: 703103

Site Reference: HK-06-A-02 Multi-Modal Site
 Created: Version: 2009(b)v6.4.1 08/01/09
 Latitude/Longitude: 51.5245, -0.0806
 Land Use Type: 06 - HOTEL, FOOD & DRINK/A - HOTELS
 Region/Area: GREATER LONDONHACKNEY
 Version/Creation Date: 2009(b)v6.4.1 08/01/09

Description: HOTEL
 Street: GREAT EASTERN STREET
 District:
 Town: SHOREDITCH
 Post Code: EC2A 3HU
 Planning Authority:

Location: Town Centre
 Location Sub Category: Built-Up Zone
 Use Class: C1

Population within 500m: 3795
 Population within 1 Mile: 50,001 to 100,000
 Population within 5 Miles: 500,001 or More
 Car ownership within 5 Miles: 0.5 or Less

Public Transport Provision Summary

Day	Period	Total buses/trams within 400m	Total Trains within 1000m	Total Services
Monday-Friday	0700-1900	3720	2112	5832
Monday-Friday	0700-1000	936	528	1464
Monday-Friday	1600-1900	936	528	1464
Saturday	0700-1900	3264	1656	4920
Sunday	0700-1900	2544	1680	4224

Is site associated with a travel plan: No
 If not, are there any plans to implement a Travel Plan in the future? No
 Is survey data available before the implementation of the Travel Plan?
 Is the location of the site hilly or flat: Flat
 Urban Regeneration: No

PTAL Rating:

Gross floor area: 7268 sqm
 Number of bedrooms: 205
 Total Employees: 40

No. of developments for this Site: 1
 No. of survey Days for this Site: 1

Comments

The site is located in east London on Great Eastern Street in the Old Street area of Shoreditch. The site is located just off the A10 which provides access north through London to the M25 and just to the west of the Old Street roundabout which provides access in all directions through London. The site also provides easy access to Whitechapel via Commercial Street to the south. Local roads lead in all directions. There are two access points into the site for pedestrians through the front and back entrances, with a staff and deliveries entrance to the rear of the site on Willow Street. The site is adjacent to shops, bars and offices with various city centre developments in the surrounding area. There is bus stop outside the site on Great eastern Street.

Bus (or tram) site accessibility

3. Is there at least 1 bus (or tram) stop within the site frontage or within 400m of the site frontage? : Yes
4. If yes to question 3, where it is necessary to cross a road between the development and the stop, is there a conveniently placed crossing facility? : Yes
5. If yes to question 3, are there at least 2 buses (or trams) per hour (per direction between 0700 and 1900) with routes serving significant areas of population within a 5 kilometre radius? (Mon-Sat): Yes
6. If yes to question 5, what are the service characteristics? (please complete the outline information below)

Destination (town/area)	Number per hour	Approx. journey time
Friern Barnet Library	9	56
Lewisham	9	46
Clapham Junction	9	54
Edmonton Green	9	49

Rail accessibility

7. Is there at least one railway station within 1 kilometre radius of the site?: Yes
8. If yes to question 7, is pedestrian access to the station satisfactory?: Yes
 9. If yes to question 7, are there at least 2 stopping trains per hour (per direction between 0700 and 1900) with routes serving stations within a 10 kilometre radius (Mon-Sat)?: Yes
10. If yes to question 9, what are the service characteristics? (please complete the outline information below)

Destination (town/area)	Number per hour	Approx. journey time
Liverpool Street Station	12	7
Hammersmith	8	34
Alexandra Palace Rail	6	18
High Barnet	6	40

11. Please enter general comments/views about the relevance, quality and importance of public transport services relating to this development.

In addition to the bus services shown there are many other frequent services running to various parts of south and north-east London.

There are also many additional rail services to those shown in the table above. These services run to West Ruislip, Chesham, Seven Sister, Tottenham Hale, and Walthamstow.

Design features encouraging non-car modes

12. Pedestrians

There are good pedestrian crossing facilities in the local area.

13. Pedal cycles

There is some cycle parking located behind the hotel, situated on a footway.

14. Public transport

There are good rail and bus services available in the local area.

Design features encouraging non-car modes

Road Network Distance to Local Developments	
Year of Analysis	2008
Nearest Primary School	0.4 kilometres
Nearest Secondary School	1.7 kilometres
Nearest Local Shop/Corner Shop	0.8 kilometres
Nearest Main Supermarket	0.1 kilometres
Nearest Doctors Surgery	0.8 kilometres
Nearest Hospital with Minor Injuries/A & E	2.0 kilometres
Nearest Sports/Leisure Centre	1.1 kilometres

Census Data	
Year of Census	2001
Census Output Area/Data Zone	
Number of people employed within Census Output Area	209
Number of households within Census Output Area	131
Number of people living within Census Output Area	446
Area of Census Output Area (hectares)	8.00
Population density within Census Output Area (per hectare)	53.48

Site reference:	HK-06-A-02	Multi-Modal survey site
Trade name:	THE HOXTON	
Site area (h/a):	0.07	
Gross floor area (sqm)	7402	
GFA not in use (sqm)	134	
Open since	2006	
Total Employees	40	
Full Time Employees	15	37%
Part Time Employees	25	63%
Approximate % of total employees working standard 9-5 hours or similar	20%	
Percentage Split of Employee Gender		
Male	40%	
Female	60%	
GFA per employee	264.357	
Number of bedrooms	205	
Name of nearest site	HOLIDAY INN	
Distance to nearest similar site	1 Km	

OPENING TIMES (24 Hour format)

Mon to Thurs	00:00	to	24:00
Friday	00:00	to	24:00
Saturday	00:00	to	24:00
Sunday	00:00	to	24:00

Conference Facilities:

Comments

The site also has 6 meeting rooms, The Hoxton Grille Restaurant, free Wifi and holds yoga classes on Tuesday evenings.

The nearest site is 0.5km away.

Multi-Modal survey site

On-Site parking

Total no. of parking spaces 0

Number of spacesComments about the management of the site car park, along with enforcement measures

There is a delivery door at the rear of the site however there is no specified parking for vehicles.
The hotel have a contract with a local car park, they own several spaces.

Off-Site parking details

Is there off-site parking available

Yes

Off-Site parking included in the counts

Yes

Free On-Street parking available nearby

No

If prepared to pay, easy to find somewhere to park off-site all day

Yes

Parking restrictions

Area subject to parking restrictions (controlled parking zone - CPZ)

Yes, Most of the Area

Permitted on-street parking for non-residents available within this CPZ

Yes, at Special Times of the Day

If yes, time limited for non-residents

Yes

Charges for non-residents parking if permitted

Yes, All Day

Average charge per hour

200

Maximum parking duration

2

Off-Street parking

Off-Street parking available Yes, Public Off-Street Parking is Available

Approx. available spaces 45

Parking located within a control parking zone (CPZ)

Yes

Charges for this Off-Street parking

Yes, All Day

Charge amount

1650

Charge period

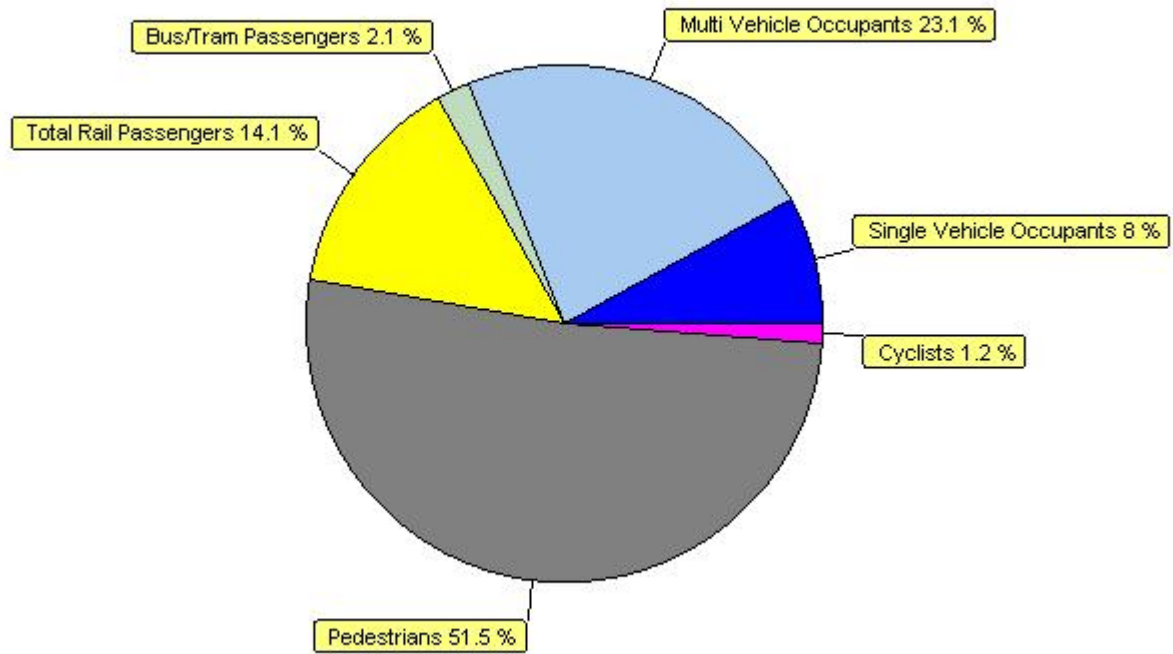
Day

Park & Ride

Park & Ride Type Facility providing relevant means of accessing the site

No

Modal Split Percentages



Time Range/Peak Period Selection
Direction: Totals / Use All Times