150 HOLBORN TRANSPORT STATEMENT

DAR REAL ESTATES SARL

APRIL 2016

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150 Holborn

Transport Statement
March 2016

DAH Real Estate SARL

Our ref: 22888501

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1 Introduction

Background

1.1 This Transport Statement (TS) has been prepared by Steer Davies Gleave in support of a planning application for the redevelopment of 150 Holborn which is bound by Holborn to the south, Gray's Inn Road to the west and Brooke Street. The site falls within London Borough of Camden (LBC). The site location is shown on Figure 1.1.

1.2 The TS considers all aspects of movement by existing and future residents, employees and visitors. It also considers delivery and servicing trips associated with the site. The methodology adopted in the report was agreed, in principle, with officers from LBC during a Pre-Application meeting on 17 November 2015.

Development Proposals

1.3 The redevelopment will provide a mix of office accommodation (Class B1), retail floorspace (Class A1-A3), residential units (Class C3) and public realm improvements. The description of development is:

"Demolition of existing building and redevelopment for a mixed use development up to 9 storeys in height comprising 14,604 sqm GEA office floorspace (Use Class B1), 1,450 sqm GEA retail floorspace (Use Class A1-A3), 13 residential units (Use Class C3), improvements to the public realm and all other necessary enabling works."

1.4 Given the site's excellent access to public transport, it is proposed that the development would be car-free (with the exception of two disabled parking spaces). A total of 230 cycle parking spaces are proposed at the site in accordance with London Plan (FALP) standards.

Planning History

1.5 In January 2012, planning permission was granted (Planning Reference 2011/4198/P) for the redevelopment of the site to include commercial, retail and six residential units. The scheme included the provision of one disabled parking space. The permission has expired.

Application Documents

1.6 The following transport documents are submitted with this planning application:

- Transport Statement (TS);
- Framework Travel Plan (FTP); and
- Delivery and Servicing Plan (DSP).

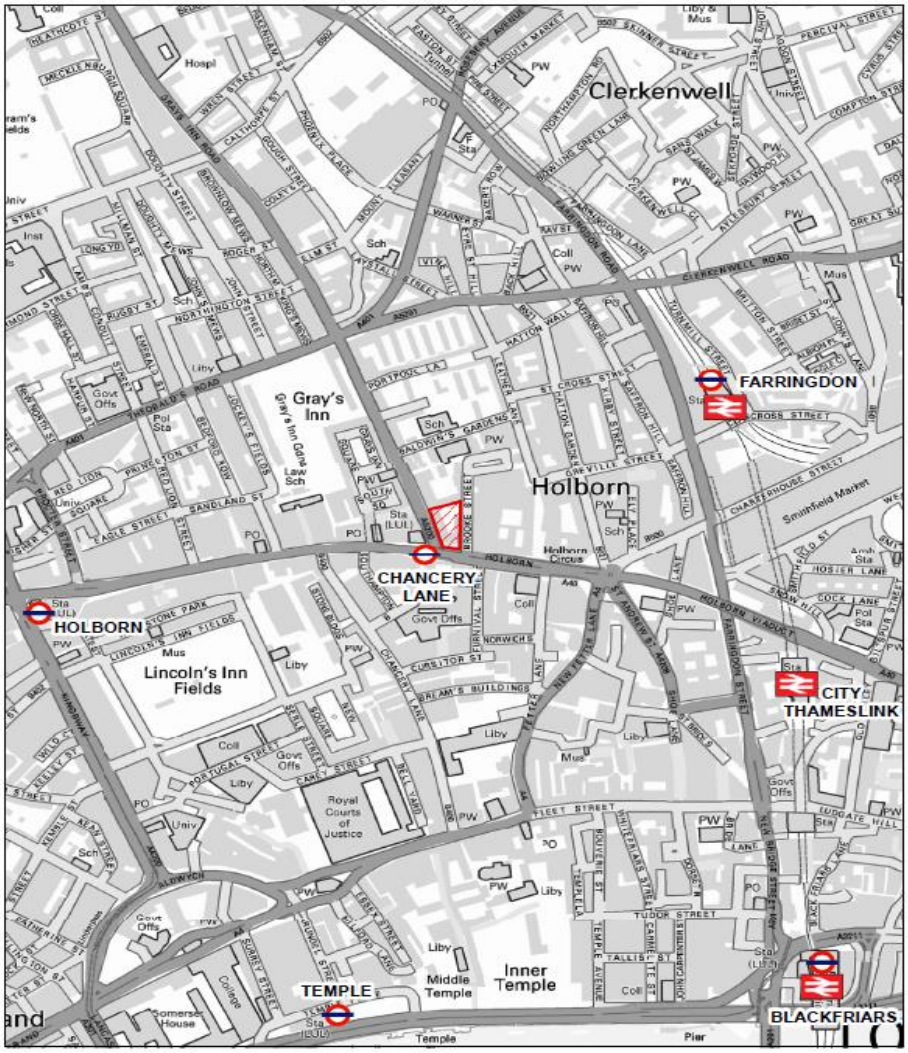
1.7 The FTP and DSP form appendices to this report.

Report Structure

1.8 This chapter forms the introduction and provides the background to this report and the proposals. Subsequent chapters are as follows:

- Chapter 2 details the existing transport conditions for the site and its surrounding highway network;
- Chapter 3 sets out the policy context;
- Chapter 4 details the development proposals and provides the proposed parking, pedestrian and private vehicle access arrangements;
- Chapter 5 details the number of person and vehicle trips generated by the proposed development and assessment of any impacts;
- Chapter 6 details the mitigation measures; and
- Chapter 7 concludes the Transport Statement.

Figure 1.1: Site Location Plan



2 Existing Situation

Introduction

2.1 This chapter provides existing baseline conditions in the vicinity of the development site. This includes a brief review of the following:

- Site location, use and layout;
- Local highway network;
- Vehicle access and parking;
- Servicing arrangements;
- Pedestrian and cycle access; and
- Public transport.

Site Location, Use and Layout

2.2 The site is bounded by three roads: A40 Holborn to the south; A5200 Gray's Inn Road to the west; and Brooke Street to the east. The existing site layout is shown in Figure 2.1.

2.3 The existing site comprises a part nine storey and part four storey building (including basement), with a total gross external floor area (GEA) of 12,798m^2 (excluding plant). The main land use is Class B1 office with some retail units occupying the ground and basement levels of the development. The existing building also contains a three bedroom residential unit on the second floor. The offices are currently vacant.

Table 2.1: Existing Land Use (excluding plant area)

Floor Area	C3 Residential (m^2)	B1 Office (m^2)	A1-A3 Retail (m^2)	Total (m^2)
Gross External Floor Area	193 (1 unit)	9,830	2,775	**12,798**

Figure 2.1: Existing Site Layout

2.4 The entrance to the office use is located at the corner of A5200 Gray's Inn Road and A40 Holborn. Retail entrances are located on A40 Holborn, A5200 Gray's Inn Road and Brooke Street.

Local Highway Network

2.5 Brooke Street falls under the control of LBC. Gray's Inn Road and the A40 Holborn form part of Transport for London's (TfL) Strategic Road Network.

2.6 The site falls within Controlled Parking Zone (CPZ) CA-D Kings Cross Area, which operates Monday to Friday 08:30 to 18:30, and Saturday 08:30 to 13:30. Parking in the surrounding streets is primarily residential permit parking, with one disabled bay located on Brooke Street to the north-east of the site.

2.7 The site fall within the London Congestion Charging Zone.

2.8 As noted above, the roads which provide access to the development site include:

- A40 Holborn
- A5200 Gray's Inn Road
- Brooke Street

2.9 A40 Holborn runs east/west to the south of the site, running towards St Paul's and Bank in the west and Oxford Street and Marble Arch in the east. At 150 Holborn, the eastbound carriageway has one lane for general traffic, a bus lane and a cycle lane. There are double yellow lines (24 hour no waiting) and no kerb marks (40 minutes maximum loading). The westbound carriageway has two lanes for general traffic and a cycle lane. There are double yellow lines (24 hour no waiting) and double kerb marks (24 hour no loading). In the middle of the road, there is a median strip which includes a traffic island for the north-south pedestrian crossing.

2.10 A5200 Gray's Inn Road is a two-way street, terminating at A40 Holborn to the south and running northbound towards A501 Euston Road at Kings Cross. At 150 Holborn, the southbound carriageway has a left turn lane and a right turn lane adjacent to a signalised junction with A40 Holborn. There are double yellow lines and double kerb marks. The northbound carriageway has a single lane of traffic. There is a single yellow line (with controlled hours Monday-Friday 08:30-18:30 and Saturday 08:30-13:30) and single kerb marks (with unlimited loading outside of controlled hours).

2.11 Brooke Street is a two-way street, terminating at the A40 Holborn to the south and running northbound towards a close with no through vehicle access. On both sides of the road, there is a single yellow line and no kerb marks (no loading restrictions).

Vehicle Access

2.12 All vehicular access to the site is from Brooke Street. An off-street service yard is located at the north-eastern corner of the site and is accessed via a crossover from Brooke Street. The crossover to the site is shared by a vehicular access to the basement of the adjacent Fox Court office building.

2.13 The service yard currently contains two servicing bays.

2.14 All deliveries at the site take place within the site's service yard.

2.15 Household waste and recycling collection from 150 Holborn occurs five times per week (Monday, Tuesday, Wednesday, Friday and Saturday). Food and garden waste are collected once per week (Wednesday).

Pedestrian and Cycle Access

2.16 There are good quality footways on both sides of A40 Holborn, A5200 Gray's Inn Road, and Brooke Street. The footways provide access to the local bus services and Chancery Lane Underground Station. The footways are well-lit and in an excellent state of repair.

2.17 Dropped kerbs and tactile paving are provided at the signalised junction of Gray's Inn Road and Holborn, and at the priority junction of Brooke Street and Holborn.

2.18 There are three Santander Cycle Hire docking stations within 300m of the site, which accommodate a total of 89 docks. A summary of these three stations is shown in Table 2.2.

Table 2.2: Santander Cycle Hire Docking Stations within 300m of the Site

Docking station	Distance from site (m)	Number of docks
Holborn Circus, Holborn	170	40
Hatton Garden, Holborn	210	28
New Fetter Lane, Holborn	230	21

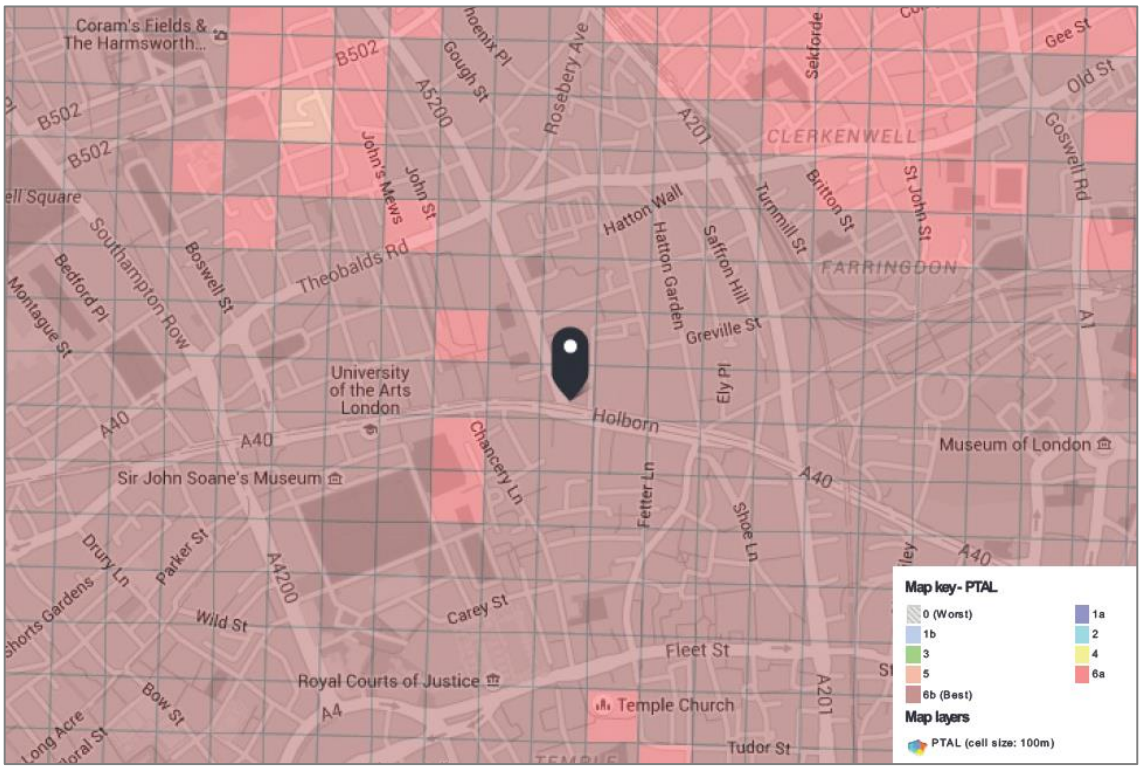
Public Transport

Public Transport Accessibility

2.19 PTAL (Public Transport Accessibility Level) is a detailed and accurate measure of the accessibility of a point to the public transport network, taking into account walk access time and service availability. The site is highly accessible by public transport and has a PTAL rating of 6b (Excellent).

2.20 Figure 2.2 shows the PTAL of the site and surrounding area. A detailed PTAL calculation report is presented in Appendix A.

Figure 2.2: PTAL Map



London Underground

2.21 Chancery Lane Underground Station is approximately 50m (less than a one minute walk) to the south-west of the site. The station is served by the Central Line, providing direct access or journeys with only one interchange to the major railway stations at Waterloo, London Bridge, Blackfriars, Liverpool Street, Kings Cross/St Pancras and London Paddington.

2.22 Farringdon Underground Station is a 600m (eight minute) walk north-east of the site. The station is served by the Metropolitan, Hammersmith & City and Circle Lines, providing direct access or journeys with only one interchange to the major railway stations.

National Rail

2.23 Farringdon National Rail Station is a 600m (eight minute) walk north-east of the site. The station is served by Thameslink trains from Brighton to Bedford, via Gatwick Airport, or from Luton to Sutton or Wimbledon. The station is also served by trains from Bedford/Luton/St Albans to Sevenoaks in peak hours, and West Hampstead and Kentish Town to Sevenoaks in off-peak hours.

2.24 From 2018, Farringdon station will also be served by Crossrail 1 (Elizabeth Line) services, which will eventually run from Reading/Heathrow via Central London to Shenfield/Abbey Wood.

Bus

2.25 There are a total of six bus routes with stops located within a 300m walk of the site. Table 2.3 provides a summary of these bus routes. The closest bus stop is located at the north-western edge of the site on Gray's Inn Road.

Table 2.3: Bus Routes with Stops within 300m of the Site

Service	Route	Peak frequency (vehicles per hour)
8	Bow Church – Oxford Circus, Holles Street	10
17	Archway Station, Junction Road – London Bridge, Southwark Cathederal	7
25 (24-hour)	Illford High Road, Hainault Street – Oxford Circus, Holles Street	16
46	Lancaster Gate Station – St Bartholomew Hospital	6
242 (24-hour)	Homerton Hospital, Wardle Street – Holborn Station, High Holborn	9
341	Northumberland Park, Tesco – County Hall, York Road	6

3 Policy Context

3.1 This Transport Statement considers the relevant national, regional and local planning policy and best practice guidance applicable to the development, including:

National Policy

- National Planning Policy Framework (2012)
- Planning Practice Guidance (2014)

Regional Policy

- The Mayor's Transport Strategy (2010)
- The London Plan (2015)

Local Policy

- Camden Core Strategy (2010)
- Camden Transport Strategy (2011)
- Camden Development Policies 2010-2025
- Camden Planning Guidance 1 – Design (2015)
- Camden Planning Guidance 7 – Transport

3.2 Relevant selected policy standards are provided below.

National Policy

National Planning Policy Framework (NPPF) (2012)

3.3 The National Planning Policy Framework (NPPF) encourages, where practical, solutions which support reductions in greenhouse gas emissions and reduce congestion. The planning system should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

3.4 To this end, the objectives of transport policy are to:

- Facilitate economic growth by taking a positive approach to planning for development; and

- Support reductions in greenhouse gas emissions and congestion, and promote accessibility through planning for the location and mix of development.

3.5 At the heart of the NPPF is a presumption in favour of sustainable development which "should be seen as a golden thread through both plan making and decision making". For decision making this means approving development proposals that accord with the development plan without delay, unless material considerations indicate otherwise.

3.6 In terms of land-use planning, the NPPF encourages the effective use of land by reusing land that has been previously developed (provided it is not of high environmental value). It also explains that land use planning should actively manage patterns of growth to make the fullest use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.

3.7 Transport policy is dealt with in the 'Promoting Sustainable Transport' section. This section emphasises the need for "the transport system to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel."

3.8 The NPPF also outlines in Paragraph 32 that all development that generates significant amounts of movement should be supported by a Transport Assessment. Local 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. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."*

3.9 The NPPF states in Paragraph 34 and 35 that "developments that generate significant movement should be located where the need to travel will be minimised and the use of sustainable transport modes can be maximised". There is an emphasis through Local Plans to "protect and exploit opportunities for the use of sustainable transport modes for the movement of goods and people". Developments should be located and designed where practical to:

- *"accommodate the efficient delivery of goods and supplies;*
- *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;*
- *incorporate facilities for charging plug-in and other ultra-low emission vehicles; and*
- *consider the needs of people with disabilities by all modes of transport."*

3.10 The NPPF suggests that a key tool for achieving these aims is a Travel Plan and that all developments that generate a significant amount of movement should be required to produce one.

3.11 Guidance is also provided on the setting of car parking standards, within Paragraph 39 of the NPPF. It advises that local planning authorities should take a number of factors into account for both residential and non-residential development when setting local parking standards. These include:

- 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.

Planning Practice Guidance (2014)

3.12 In March 2014 the Department for Communities and Local Government (DCLG) launched this web-based resource for planning practice guidance. It provides advice on Travel Plans, Transport Assessments and Statements, including guidance on when they are required, and what they should contain.

3.13 Paragraph 006 of the 'Overarching principles on Travel Plans (TPs), Transport Assessments (TAs) and Statements' states that: Travel Plans, Transport Assessments and Statements can positively contribute to:

- encouraging sustainable travel;
- lessening traffic generation and its detrimental impacts;
- reducing carbon emissions and climate impacts;
- creating accessible, connected, inclusive communities;
- improving health outcomes and quality of life;
- improving road safety; and
- reducing the need for new development to increase existing road capacity or provide new roads.

3.14 The resource goes on to explain that TPs and TAs "support national planning policy which sets out that planning should actively manage patterns of growth in order 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."

Regional Policy

The Mayor's Transport Strategy (2010)

3.15 The Mayor's Transport Strategy (MTS) is a statutory document that forms part of a strategic policy framework to support and shape the economic and social development of London over the next 20 years. It sets out the Mayor's transport vision:

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

3.16 To deliver this vision the MTS sets six thematic goals:

- Support economic development and population growth;
- Enhance the quality of life for all Londoners;
- Improve the safety and security of Londoners;
- Improve transport opportunities for all Londoners;
- Reduce transport's contribution to climate change, and improve its resilience; and
- Support delivery of the London 2012 Olympic and Paralympic Games and its legacy.

3.17 Specific improvements identified include expanding and affording greater Mayoral influence over the National Rail network, better integration of the National Rail Network with the rest of the transport system, improved connectivity and capacity through schemes such as Crossrail, new orbital services on London Overground, an upgraded tube system, value for money across the bus network, efficient movement of freight, and integrated fares and ticketing. Improving the linkages between transport and land-use planning is a core objective.

3.18 The MTS notes that the car will continue to play a role in journeys, but that these should be preserved for journeys that cannot be adequately catered for by public transport, walking or cycling.

3.19 The policies seek to improve public transport accessibility for all Londoners and to expand capacity and quality of public transport services to improve passenger comfort, reduce overcrowding and improve customer satisfaction.

3.20 It also encourages the promotion of healthy travel and details the Mayor's commitment to reducing CO2 emissions by 60% by 2025 from 1990 levels.

The London Plan: Spatial Development Strategy for Greater London (2015)

3.21 The London Plan details policies set against a long term period up to 2031. One of the fundamental objectives of the new plan in terms of transport is to ensure that London is: "A city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities with an efficient and effective transport system, which actively encourages walking and cycling and makes better use of the Thames."

3.22 It recognises that transport plays a fundamental role in addressing the whole range of spatial planning, environmental, economic and social policy priorities and is central to the achievement of all the Plan's objectives.

3.23 The London Plan is committed to encouraging more sustainable means of transport, through a cycling revolution, improving conditions for walking and enhancement of public transport.

3.24 As well as seeking to improve the capacity and accessibility of public transport in areas of greatest demand, the Mayor is also committed to increase the viability walking and cycling as an alternative to the private car. To achieve this, the London Plan requires developments to:

- Provide secure, integrated and accessible cycle parking facilities in line with the minimum standards set out in Table 6.3 of the London Plan;
- Provide on-site changing facilities and showers for cyclists;
- Facilitate the Cycle Super Highways;
- Facilitate the central London cycle hire scheme; and
- Ensure high quality pedestrian environments and emphasise the quality of the pedestrian and street space.

3.25 The Mayor wishes to see an appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.

3.26 The London Plan Table 6.3 shows cycle parking minimum standards. Table 3.1 below shows the cycle parking standards that are relevant to the proposed development.

Table 3.1: London Plan 2015 (FALP) Cycle Parking Standards

Land use	Long-stay	Short-stay
A1 Food retail	From a threshold of 100 sqm: 1 space per 175 sqm	From a threshold of 100 sqm: first 750 sqm: 1 space per 40 sqm, thereafter: 1 space per 300 sqm
A1 Non-food retail	From a threshold of 100 sqm: first 1000 sqm: 1 space per 250 sqm, thereafter: 1 space per 1000 sqm	From a threshold of 100 sqm: first 1000 sqm: 1 space per 125 sqm, thereafter, 1 space per 1000 sqm
A2-A5 Retail	From a threshold of 100 sqm: 1 space per 175 sqm	From a threshold of 100 sqm: 1 space per 40 sqm
B1 Office	1 space per 90 sqm	First 5000 sqm: 1 space per 500 sqm, thereafter: 1 space per 5000 sqm
C3 Residential	1 space per studio and 1 bedroom unit 2 spaces per all other dwellings	1 space per 40 units

Local Policy

Camden Core Strategy (2010)

3.27 Camden's Core Strategy sets out the key elements of the council's planning vision and strategy for the borough. It is the central document within the Local Development Framework (LDF), a group of documents setting out the council's planning strategy and policies.

3.28 The key transport challenges faced by Camden include capacity amongst rising population, road traffic, and air quality. The council seeks to promote travel that is easy, safe, healthy and does not harm the local environment or contribute to climate change.

3.29 Policy CS11 – Promoting sustainable and efficient travel states that the council will promote key transport choices in order to support Camden's growth, reduce the environmental impact of travel, and relieve the pressure on the borough's transport network. This includes improving facilities for cyclists, increasing cycle parking, and delivering the London Cycle Hire Scheme; expanding the availability of car clubs as an alternative to the private car; and minimising the provision of private parking in new developments, in particular through car-free developments in the borough's most accessible locations.

Camden Transport Strategy (2011)

3.30 The Camden Transport Strategy sets out the future direction for transport in Camden and describes the context of traffic and transport in the borough, the challenges faced, and how these challenges will be addressed.

3.31 Objective 6 of Camden's Transport Strategy is to ensure that the transport system supports sustainable growth and regeneration, and enhances economic and community development by linking land use planning with transport provision. Specifically, Camden seeks to:

- Promote development that will encourage travel by walking, cycling and public transport and not permit development that will depend on travel by private motor vehicles;
- Locate development that generates high numbers of additional person trip in locations with good to excellent access to public transport;
- Encourage mixed use development to reduce the need and extent of travel;
- Ensure that the amount of parking provided as part of development is the minimum necessary. In areas that have good to excellent access to public transport, the Council expects new developments to be car-free (i.e., they will not include off-street parking and

occupiers would not be eligible for on-street parking permits). Car free development can still provide off-street parking for disabled drivers who are also eligible for on-street parking permits;
- Ensure all impacts of development are mitigated through appropriate management of servicing, construction and travel behaviour;
- Ensure that there is sufficient capacity in the transport network to accommodate any additional trips generated by a development; and
- Ensure development is properly integrated into the surrounding highway and wider transport network.

Camden Development Policies 2010-2025

3.32 This document forms part of Camden's Local Development Framework (LDF), and sets out detailed planning policies that the council will use when determining applications for planning permission.

3.33 Policy DP16 – The transport implications of development states that the council will seek to ensure that development is properly integrated with the transport network and is supported by adequate walking, cycling and public transport links. Developments must address the need for movements to, from and within the site; additional transport capacity off-site where existing or committed capacity cannot meet the additional need generated by the development; and safe pick-up, drop-off and waiting areas for taxis, private cars and coaches where this activity is likely to be associated with the development.

3.34 Policy DP17 – Walking, cycling and public transport states that developments should make suitable provision for walking, cycling and public transport use. This includes convenient, safe and well-signalled routes; seating, cycle parking and showers and lockers; and bus stops, shelters and waiting areas.

3.35 Policy DP18 – Parking standards and limiting the availability of car parking states that development in town centres or other areas with high public transport accessibility should be car-free. To implement car-free parking, the council will seek a legal agreement with the developer to ensure that all incoming occupiers are not eligible for a permit to park on the street.

3.36 Policy DP21 – Development connecting to the highway network states that development must have regard to Camden's road hierarchy and must not cause harm to the management of the road network. This includes avoiding direct vehicular access to the Transport for London Road Network (TLRN) and other major roads; ensuring adequate sightlines for vehicles leaving the site; and addressing the needs of people with mobility difficulties and vulnerable users.

Appendix 1 of the document provides thresholds for the requirement of a Transport Statement or Transport Assessment. A summary of Appendix 1, as it applies to the development proposal at 150 Holborn, is summarised in Table 3.2.

Table 3.2: Thresholds for Transport Statement or Transport Assessment

Land Use	Guideline floorspace for minimum transport information	Guideline floorspace for Transport Assessment
A1-A5 Retail	500 sqm GFA or more	1,000 sqm GFA or more
B1 – Business	1,000 sqm GFA or more	2,500 sqm GFA or more
C3 - Residential	10 units or more	80 units or more

3.37 Appendix 2 of the document provides parking standards. A summary of Appendix 2, as it applies to the development proposal at 150 Holborn, is summarised in Table 3.3.

Table 3.3: Camden Parking Standards

Land Use	Vehicle Type	Parking Standard
A1-A5 Retail	Cycles	**Staff** – from a threshold of 500 sqm, 1 space per 250 sqm or part thereof. **Customer** – from a threshold of 500 sqm, 1 space per 250 sqm or part thereof.
	People with disabilities	**Staff/operational** – 1 space per disabled employee or, from a threshold of 1,000 sqm, 1 space per 20,000 sqm or part thereof – whichever is the greater. **Customer** – from a threshold of 1,000 sqm, 1 space per 500 sqm or part thereof.
	Service Vehicles	Required above 1,000 sqm. One 3.5 x 16.5m bay, or one 3.5 x 8m bay where a servicing agreement is secured as part of a Travel Plan.
	Taxis	One pick-up/set-down bay required above 1,000 sqm, with any departure justified by a Transport Assessment.
	Other staff / operational parking	Low parking provision areas: maximum of 1 space per 1,500 sqm. Rest of borough: maximum of 1 space per 1,000 sqm.
	Other customer parking	Only considered if supported by a Transport Assessment (or supporting information as appropriate for smaller schemes) showing that existing spaces, public transport and home delivery services cannot cater for the expected travel demand, and a Travel Plan can be secured).
B1 Business	Cycles	**Staff** – from a threshold of 500 sqm, 1 space per 250 sqm or part thereof. **Visitor** – from a threshold of 500 sqm, minimum of 2 if any visitors are expected, plus any additional spaces needed to bring the total number up to 10% of the visitors likely to be present at any time.
	People with disabilities	**Staff/operational** – 1 space per disabled employee or, from a threshold of 2,500 sqm, 1 space per 20,000 sqm or part thereof – whichever is greater. **Visitor** – from a threshold of 2,500 sqm, minimum of 1 if any visitors are expected, plus any additional spaces needed to bring the total number up to 5% of the visitors likely to be present at any time.
	Service vehicles	Required above 2,500 sqm. One 3.5m x 16.5m bay, or one 3.5m x 8m bay where a servicing agreement is secured as part of a Travel Plan.
	Other staff / operational parking	**Low parking provision areas**: maximum of 1 space per 1,500 sqm. **Rest of borough**: maximum of 1 space per 1,00 sqm.
C3 Residential	Cycles	**Residents** – 1 storage or parking space per unit. An exemption may be made for dwellings that are solely to occupants unlikely to use cycles due to age or disability. **Visitors** – from a threshold of 20 units, 1 space per 10 units or part thereof.

Land Use	Vehicle Type	Parking Standard
	People with disabilities	**Wheelchair housing**: 1 space per dwelling, with dimensions suitable for use by people with disabilities. **General housing**: where justified by the likely occupancy of the dwelling and reserved for use by people with disabilities, above a threshold of 10 units, 1 space per 20 units or part thereof, with dimensions suitable for use by people with disabilities.
	General car parking	**Low parking provision areas**: maximum of 0.5 spaces per dwelling. **Rest of borough**: maximum of 1 space per dwelling.

Camden Planning Guidance 1 – Design (2015)

3.38 Camden Planning Guidance is a Supplementary Planning Document (SPD), which is consistent with the Local Development Framework (LDF), and is a material consideration in planning decision. The design document provides guidance on design issues in order to create high quality buildings and spaces.

3.39 Chapter 10: Recycling and Waste Storage provides design guidance on waste generation, storage and collection. Residential waste generation volumes are identified in the table shown in section 10.11 of the document. The relevant details from this table are reproduced in Table 3.4.

Table 3.4: Camden Residential Waste Generation Standards

Size of household	Projected weekly waste per household
Studio / one bedroom	100 litres
Two bedroom	170 litres
Three bedroom	240 litres

3.40 For developments with more than six households, the guidance recommends the use of bulk bins. Bins are available in 1,100L and 1,280L Eurobins. Provision of bins should be split equally between refuse and recycling. With the provision of approximately 5,000L of waste, it is recommended that one 660L bin for food waste is provided.

3.41 For commercial uses, the guidance states that one cubic metre of storage space is required for every approximately 300-500 sqm of commercial space. This includes both recyclable and non-recyclable waste and these waste streams must be stored separately.

Camden Planning Guidance 7 – Transport

3.42 Camden Planning Guidance is a Supplementary Planning Document (SPD), which is consistent with the Local Development Framework (LDF), and is a material consideration in planning decision. The transport document provides guidance on transport issues including transport capacity, Travel Plans, Delivery and Servicing Management Plans, car free developments, car parking, and cycling facilities.

3.43 In Chapter 5, entitled 'Car free and car capped development,' the key message is: "We expect car free development in the borough's most accessible locations and where a development could lead to on-street parking problems. Legal agreements will be used to maintain car-free and car-capped development over the lifetime of a scheme." A car-free development is defined as: "A development which has no parking within the site and occupiers are not issued with on-street parking permits." Within car-free development, it is expected that designated parking for disabled people will be provided.

3.44 Chapter 9 provides details about the location, design and layout of off-street cycle parking. The document states that:

- Cycle parking outside buildings should be positioned near entrances, and where frequent surveillance is possible;
- The route to cycle parking should be step-free;
- Visitor cycle parking should be clearly visible or clearly signed;
- Parking for employees should be provided either within the building, or otherwise protected from the weather; and
- Parking for residents should be within the building.

Summary

3.45 The overriding theme of national policy is that developments must be accessible by sustainable means of transport as well as to all members of the local community. Local policy echoes the sustainability sentiment of national policy promoting low car use in suitable locations, and provides more detail relevant to the proposed development site. The following chapters of this report will demonstrate that the proposed development is compliant with the adopted policies outlined within this chapter.

4 Development Proposals

4.1 Full details of the development proposals are provided within the application drawings, the Design and Access Statement, and the Planning Statement which support the planning application. This chapter summarises the transport aspects of the development proposals, which includes information on the following:

- Quantum and type of land-use;
- Site access;
- Car parking;
- Cycle parking; and
- Waste and servicing.

Quantum and Type of Land-Use

4.2 The proposed site layout plan is shown in Figure 4.1.

4.3 The proposals at the site are summarised in Table 4.1.

Table 4.1: Proposed Land Use (excl. plant area)

Floor Area	C3 Residential (m^2)	B1 Office (m^2)	A1-A3 Retail (m^2)	Total (m^2)
Gross External Floor Area	1,336 (13 units)	14,604	1,450	17,372

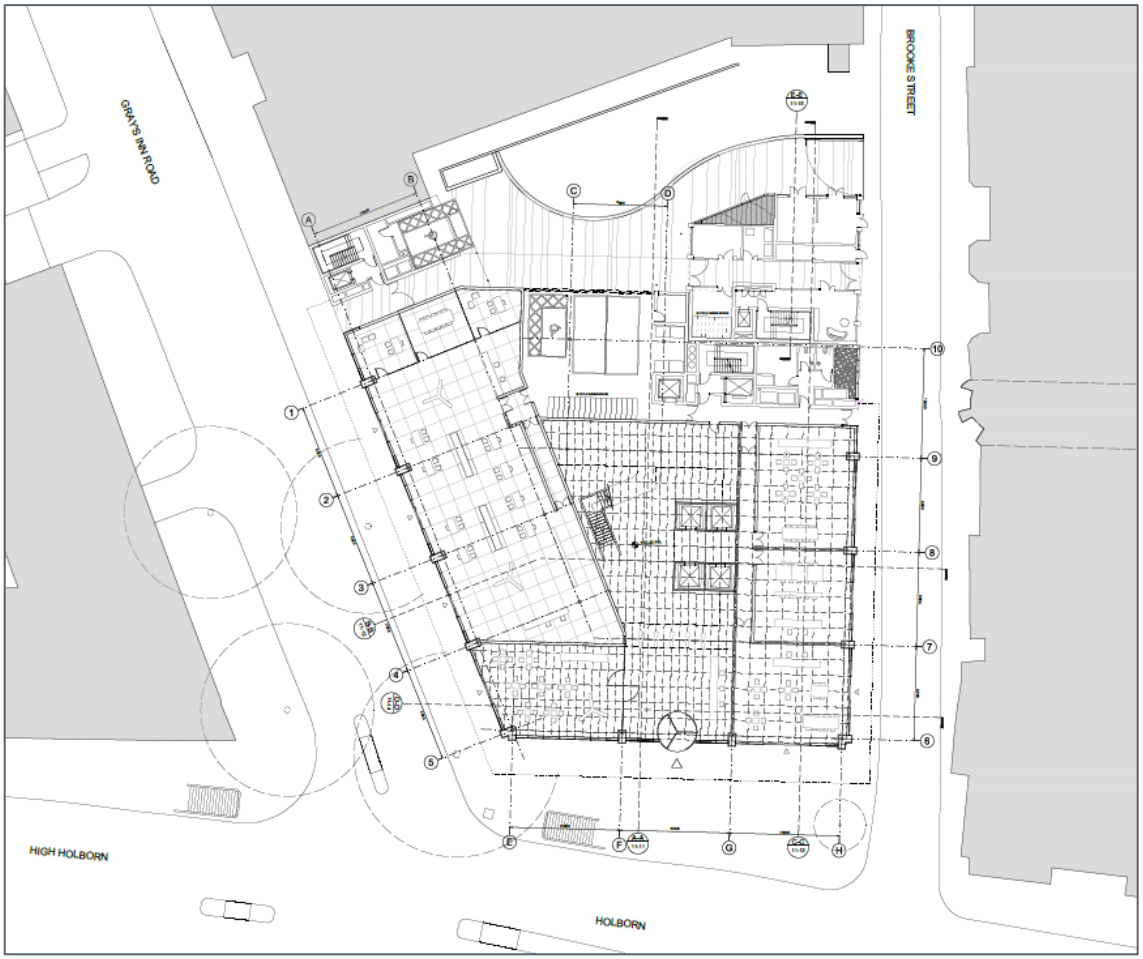
4.4 The residential unit mix is shown in Table 4.2.

Table 4.2: Proposed Residential Unit Mix

Unit type	Number of units
Studio	3
1 bed	3
2 bed*	5
3 bed	2
Total	**13**

*One of the 2 bed units is suitable for a wheelchair user

Figure 4.1: Proposed Site Layout



4.5 The proposals result in a net increase in the number of residential units (+12 units) at the site, a net increase in office floorspace (+4,774 m^2 GEA) and a reduction in the retail floorspace (-1,325 m^2 GEA).

Site Access

4.6 The access strategy for the site is provided at Appendix B, while the ground floor and basement layouts are provided at Appendix C.

4.7 The main pedestrian access to the office building would be from A40 Holborn. Access to the ground floor retail units would be from Brooke Street and Gray's Inn Road.

4.8 The development proposals include the creation of a passageway between Brooke Street and Gray's Inn Road which would be open to the public. This passageway would also provide access to the residential units, as well as pedestrian and cycle access to staff and visitors to the office and retail units.

4.9 A set of bollards has been provided at either end of the proposed pedestrian passageway through the servicing / parking area. The bollard lines would provide a safe area for pedestrians to wait, with excellent visibility of the whole area. This would allow pedestrians to view whether it is safe to cross the servicing area. Signage would be provided to ensure that drivers are aware that pedestrians may be present in the loading area and therefore to take extra care during manoeuvres.

4.10 Vehicle access would be unchanged from Brooke Street.

4.11 Pedestrian and cycle access at the site would be possible from Brooke Street and Gray's Inn Road.

Car Parking

4.12 The proposed car parking facilities at the site is provided at Appendix C.

General/Operational Car Parking

4.13 In accordance with LBC's Development Policy *DP18 – Parking standards and limiting the availability of car parking*, and DP 19 – *Managing the impact of parking*, the development would be car-free (with the exception of provision of disabled parking spaces), given its excellent access to public transport.

Disabled Car Parking

4.14 It is proposed to provide two disabled car parking spaces at the site. The disabled bays would be managed under the a site Travel Plan. There is currently no disabled parking provision at the site, other than the use of the on-street disabled bay on Brooke Street. The current proposal would thus be an improvement compared to the existing situation (and previous consent which included one disabled bay).

4.15 The level of disabled parking at the site was agreed in principle with the highways and planning officer during a Pre-Application meeting with LBC on 17 November 2015.

Cycle Parking

4.16 The proposed cycle parking facilities at the site is provided at Appendix C.

4.17 The number of cycle parking spaces required at the site is set out in Table 4.3 which is based on London Plan 2015 (FALP) cycle parking standards.

Table 4.3: Minimum Cycle Parking Requirements (per land use)

Land Use	Long Stay	Short Stay	Total
Residential	20	1	21
Office	163	12	175
Retail	8*	25*	33*
Total	**191**	**38**	**229**

* Retail is assumed to be evenly split between A1 and A2/A3 uses

4.18 Table 4.4 provides a summary of the proposed cycle parking provision at the site.

Table 4.4: Proposed Cycle Parking at the Site

Land Use	Long Stay (Basement/Ground Floor)	Short Stay (Ground Floor)	Short Stay (Public Realm)	Total
Residential	20**	1	-	21
Office	164	12	-	176
Retail	8	15	10*	33
Total	**192**	**28**	**10***	**230**

Notes:

* A financial contribution is proposed towards provision of 10 short stay cycle parking spaces (5 Sheffield stands) within the public realm.

** Residential long stay parking is provided at ground floor level in a dedicated cycle store.

4.19 As a whole, the proposed development would provide a total of 230 cycle parking spaces, which is 1 space in excess of the London Plan 2015 (FALP) standard requirement.

4.20 The 20 long stay residential parking spaces would be provided in a secure cycle store at ground floor level within the residential block. Long stay cycle parking for office and retail staff would be provided within the basement. All long stay cycle parking spaces at the site would be provided by means of two-tier Josta type racks.

4.21 It is proposed that short stay cycle parking at the is provided in two locations. Twenty eight (28) semi-vertical spaces are proposed along the northern boundary of the office building at ground floor level. These spaces are expected to be used primarily by visitors to the office building and residential units, while visitors to the retail units would either use these spaces or the proposed 10 cycle spaces within the public realm directly south of the site. As this land is outside of the applicants ownership, it is proposed that a financial contribution is provided to allow LBC to provide these spaces by means of 5 Sheffield stands.

Waste Management

4.22 The management of waste and deliveries at the site is discussed in detail in the Delivery and Servicing Plan which is included in Appendix D. The location of the waste stores for the commercial and residential uses is provided in Appendix E.

4.23 Chapter 10 of the Camden Planning Guidance 1 - CPG1: Design (2015) sets out the waste and storage requirements for residential developments.

4.24 The residential waste store would provide 1 x 1,100 litre bin for refuse and 1 x 1,100 litre bin for recycling, which is sufficient for the 1,930 litres of weekly waste forecast to be generated by the residential units. As the standards propose that a 660 litre Eurobin is provided for every 5,000 litres of waste, it is proposed that one 360 litre bin for food waste would be sufficient for the residential units at the site. The proposed bin provision thus meets Camden's weekly waste storage requirements for all waste streams for the proposed residential use.

4.25 Chapter 10 of Camden Planning Guidance 1 – Design (2015) sets out the waste and storage requirements for commercial developments. The standards show that the commercial uses would generate 24 cubic litres of waste per week , which equates to a requirement for 22 x 1,100 litre Eurobins based on weekly storage. It is proposed that waste collection occurs daily and that waste is compacted using a Eurobin compactor at a compaction ratio of 3:1 for general waste and 2:1 for recycling. This would reduce the Eurobin requirement to 1 x 1,100

Eurobin for general waste and 1 x 1,100 Eurobin for recycling. A 360L bin for food waste would also be provided for commercial uses.

4.26 There would be no changes in principle to the operation of the delivery area at the site. The provision of two 3.4m x 8m delivery bays provides sufficient capacity for the level of servicing expected at the site and also accords with the minimum standards for servicing vehicles set out in the Camden Development Policies document.

4.27 Commercial waste collection would take place daily by private contractor within the delivery area, while residential waste would be collected on-street (on Brooke Street) on a weekly basis.

4.28 The swept path analysis of the large refuse vehicle is provided in Appendix F. The swept path analysis shows that a refuse vehicle can enter the site in a forward gear, collect the commercial waste, and exit the site in a forward gear.

4.29 The waste storage facilities for both the commercial uses and the residential units are provided at ground floor level, within 10m of their collection points within the service yard and on-street, respectively.

Servicing and Deliveries

4.30 The management of deliveries and waste would be coordinated through a centrally managed system, details of which are set out in the DSP (see Appendix D).

4.31 The DSP notes that deliveries at the site are forecast to decrease from 51 to 42 deliveries per day due to the reduction in retail floor area at the site. This is considered to be a benefit of the current proposals.

4.32 Servicing and deliveries at the development using 7.5T box vans and small would take place off the public highway in a dedicated service area at ground level, accessed directly from Brooke Street. Deliveries by means of larger vehicles would take place from Brooke Street. The DSP will discourage deliveries by vehicles larger than a 7.5T box van.

4.33 The service area is proposed to be located close to the building's service routes to minimise the distance over which deliveries have to be transported. Deliveries to the retail units would be trolleyed from the delivery area to the retail units.

4.34 As noted above, based on the proposed floor areas at the site, two servicing bays would be required to accommodate peak demands. The layout of the service area s shown on the Aground floor layout plan in Appendix E.

4.35 Swept path analysis of a 7.5T box van shows that delivery vehicle can successfully enter the site from Brooke Street in a forward gear, undertake deliveries and exit the site in a forward gear. The swept path analysis for the two servicing bays is provided in Appendix G.

5 Impact of Development

Introduction

5.1 The previous sections have described the existing transport conditions in the vicinity of the site and the development proposals to be assessed. This section provides an assessment of the travel characteristics of the proposed development at the site.

5.2 The proposed development would be a generator of travel of various types. This chapter describes the likely quantum of those movements and the anticipated mode people would use for their journeys, e.g. walk, bus, rail, car etc.

Trip Generations Methodology

Retail

5.3 No assessments have been undertaken for the retail land use at the site. Retail trips were not considered at the site due to the:

- Lack of comparable surveys within the TRICS database; and
- Reduction in the retail offer at the site relative to the existing situation.

5.4 As the development proposals result in a net reduction of retail floor area at the site, the site would experience a net reduction in trips for this land-use. The exclusion of this reduction in trips within the assessments thus provides a worst case assessment for the development proposals in terms of transport impacts.

Office and Residential

5.5 The TRICS 7.2.4 database has been used to forecast the trips associated with the existing and proposed land uses at the site. The site selection criteria for the office and residential land uses are described below. The selected sites are summarised in Table 5.1.

Table 5.1: TRICS Sites

Site name	Borough	Survey date	Units or GFA (m^2)	TRICS reference
C3 Residential				
Vanston Place	Hammersmith & Fulham	16/07/2014	42 units	HM-03-C-01
Hoxton	Hackney	11/11/2008	9 units	HK-03-C-02
B1 Office				
Gracechurch Street	City of London	29/11/2013	9,803m^2	CI-02-A-02
Grays Inn Road	Camden	22/10/2008	6,056m^2	CN-02-A-02

Residential

5.6 The TRICS database was interrogated for comparative sites within the category residential – flats privately owned. The sites that were considered most comparable to the development site were the multi-modal survey sites within London with less than 50 units; in town centres locations; and with car ownership less than 1 space per unit. The trip rates for these sites are provided in Table 5.2 for the AM peak (08:00 – 09:00), PM peak hour (17:00 – 18:00) and daily total (07:00-19:00).

Table 5.2: Residential Person Trip Rates (per dwelling unit)

	Arrivals	Departures	Total
AM Peak (08:00-09:00)	0.078	0.275	0.353
PM Peak (17:00-18:00)	0.176	0.137	0.313
Daily Total (07:00-19:00)	1.313	1.961	3.274

5.7 The TRICS output is provided in Appendix H.

Office

5.8 The TRICS database was interrogated for comparative sites within the category employment - offices. The sites that were considered most comparable to the development site were the multi-modal surveys of sites within London ranging between 5,000m^2-15,000m^2 GFA; in town centre locations; with car ownership less than 1. The trip rates for these sites are provided in Table 5.3 for the AM peak (08:00 – 09:00), PM peak hour (17:00 – 18:00) and daily total (07:00-20:00).

Table 5.3: Office Person Trip Rates (per 100m^2 GEA)

	Arrivals	Departures	Total
AM Peak (08:00-09:00)	2.062	0.101	2.163
PM Peak (17:00-18:00)	0.195	1.917	2.112
Daily Total (07:00-19:00)	9.773	9.220	18.993

5.9 The TRICS output is provided in Appendix H.

Trip Generation

5.10 The trip generation of the existing and proposed uses at site is discussed below.

Existing Land Use

5.11 The forecast person trips related to the existing residential and office use at the site is provided in Table 5.4 and Table 5.5, respectively. The person trips were calculated based on the existing floor areas provided in Table 2.1, and the trip rates provided in Table 5.2 and Table 5.3.

Table 5.4: Residential Person Trips (Existing Use)

	Arrivals	Departures	Total
AM Peak (08:00-09:00)	0	0	0
PM Peak (17:00-18:00)	0	0	0
Daily Total (07:00-19:00)	1	2	3

Table 5.5: Office Person Trips (Existing Use)

	Arrivals	Departures	Total
AM Peak (08:00-09:00)	203	10	213
PM Peak (17:00-18:00)	19	188	208
Daily Total (07:00-19:00)	961	906	1,867

Proposed Land Use

5.12 The forecast person trips related to the proposed residential and office use at the site is provided in Table 5.6 and Table 5.7, respectively. The person trips were calculated based on the proposed floor areas provided in Table 4.1, and the trip rates provided in Table 5.2 and Table 5.3.

Table 5.6: Residential Person Trips (Proposed)

	Arrivals	Departures	Total
AM Peak (08:00-09:00)	1	4	5
PM Peak (17:00-18:00)	2	2	4
Daily Total (07:00-19:00)	17	25	42

Table 5.7: Office Person Trips (Proposed)

	Arrivals	Departures	Total
AM Peak (08:00-09:00)	301	15	316
PM Peak (17:00-18:00)	28	280	308
Daily Total (07:00-19:00)	1,427	1,346	2,773

Mode Share

5.13 To determine appropriate modal splits for the development, 2011 travel to work census data for Camden Super Output Area 028 was examined. The travel to work modal split for the daytime population as well as the resident population was considered, given that both employment and residential uses are proposed at the site.

5.14 The method of travel to work for the daytime population and for the resident population is provided in Table 5.8.

5.15 The mode share provided in Table 5.9 was adjusted to take into account the fact that the development would be 'car free'. This forecast mode share is used for assessment purposes in this development proposal.

Table 5.8: Mode Share – 2011 Census (Camden Output Area 028)

Mode	Daytime Population (Office)	Resident Population (Residential)
Underground	37%	21%
Train	34%	7%
Bus/coach	12%	16%
Taxi	0%	1%
Motorcycle	1%	1%
Car Driver	5%	4%
Car Passenger	0%	0%
Bicycle	6%	4%
Walk	5%	46%
Total	**100%**	**100%**

Table 5.9: Forecast Mode Share – 150 Holborn

Mode	Daytime Population (Office)	Resident Population (Residential)
Underground	40%	24%
Train	34%	7%
Bus/coach	12%	16%
Taxi	1%	1%
Motorcycle	1%	1%
Car Driver	0%	1%
Car Passenger	0%	0%
Bicycle	6%	4%
Walk	6%	46%
Total	**100%**	**100%**

Net Trip Generation

5.16 The net trip generation by mode of travel is provided in Table 5.10 (AM, PM and daily trips).

5.17 Table 5.10 shows that there would be an increase of 108 two-way person trips at the site during the AM peak hour, an increase of 105 two-way person trips during the PM peak hour, and an increase of 947 two way daily trips as a result of the development proposals. As the development is car free, there would be no change in vehicle movements at the site.

5.18 As noted earlier, the net increase in person trips is considered a worst case assessment of the impact of the development as the reduction in trips associated with the reduction in retail floor area is not included within the assessment.

5.19 There would be a net reduction in vehicle trips at the site as a result of the reduction in retail floor area, thus the proposed development would have no impact on the highway network and a small impact on the public transport network.

Table 5.10: Net Trip Generation at the Site

	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)			Daily (07:00 – 19:00)		
	In	Out	Total	In	Out	Total	In	Out	Total
Underground	40	3	43	4	37	41	190	182	372
National Rail	34	2	36	3	31	34	160	151	311
Bus/coach	12	1	13	1	11	12	59	57	116
Taxi	1	0	1	0	1	1	5	5	10
Car Driver	1	0	1	0	1	1	5	5	10
Car Passenger	0	0	0	0	0	0	0	0	0
Motorcycle	0	0	0	0	0	0	0	0	0
Bicycle	6	0	6	1	6	7	29	27	56
Walk	6	2	8	2	6	8	35	37	72
Total	**100**	**8**	**108**	**11**	**93**	**104**	**483**	**464**	**947**

* excluding retail use

6 Mitigation Measures

Framework Travel Plan (FTP)

6.1 The draft FTP is included at Appendix I.

6.2 The Applicant recognises that future tenants/occupiers would prepare and initiate individual travel plans in accordance with existing and emerging guidance from Transport for London (TfL). The FTP is intended to promote good travel plan practice and to encourage employers to introduce voluntary workplace travel plans that contribute towards its objectives.

6.3 The strategic objectives that 150 Holborn FTP adheres to are:

- Encouraging Walking and Cycling;
- Promoting Public Transport;
- Reducing Car Use; and
- Promoting Environmental Policies and Travel Monitoring.

Delivery and Servicing Plan (DSP)

6.4 A Delivery and Servicing Plan (DSP) has been produced as part of this application submission, which includes the following details:

- Details of the 150 Holborn servicing proposals;
- Policy context relevant to servicing and deliveries;
- Servicing and deliveries trip calculations;
- Servicing and waste arrangements;
- Measures and Targets to encourage sustainable freight travel; and
- DSP Strategy – including the management of the DSP, raising awareness and review and monitoring.

6.5 The full DSP is provided in Appendix D.

7 Summary and Conclusion

7.1 This Transport Statement has been produced to support the redevelopment proposals for 150 Holborn. The proposed development would replace the existing mixed use building with a modern office building with ground floor retail and 13 residential units.

7.2 The site has a PTAL rating of 6b demonstrating its excellent access to public transport. Chancery Lane Underground station is location directly south-west of the site, which provides access to Central Line services. Farrington Underground and mainline services are accessible within a 600m walk of the site. There are six bus routes within a 300m walk of the site.

7.3 The site has good pedestrian access. Pedestrian access to the offices would be from Holborn, while access to the ground floor retail units would be directly from Gray's Inn Road and Brooke Street. Access to the residential units would be from Brooke Street.

7.4 All vehicle access to the site would be via the existing access from Brooke Street. Deliveries and commercial waste collection would take place via the service yard, while residential waste collection would be on-street. This is unchanged from the existing situation. Deliveries and waste at the site would be managed by a Delivery and Servicing Plan.

7.5 The development would be car free, with the exception of two disabled car parking spaces, which would be monitored under the site Travel Plan.

7.6 230 cycle parking spaces are proposed at the site, which would be provided between a secure cycle store for the residential units, a secure cycle store for the commercial units, as well as 38 cycle parking spaces at ground floor level, which would be distributed between 28 cycle spaces within the service yard to the rear of the site and 10 spaces within the public realm. The proposed cycle parking provision complies with the London Plan 2015 (FALP) minimum cycle parking standards.

7.7 The assessments within the report show that the development would result in an increase in person trips at the site relative to the existing situation. However, as the development is an intensification of the same use and would be car free outside of two disabled bays, the primary increase in trips at the site would be by non-car modes. The forecast increase in car driver trips to the site would be a lower than the reduction in delivery trips to the site, thus

the proposed development would result in a net reduction of vehicle trips on the highway network. This is considered to be a benefit of the current proposals.

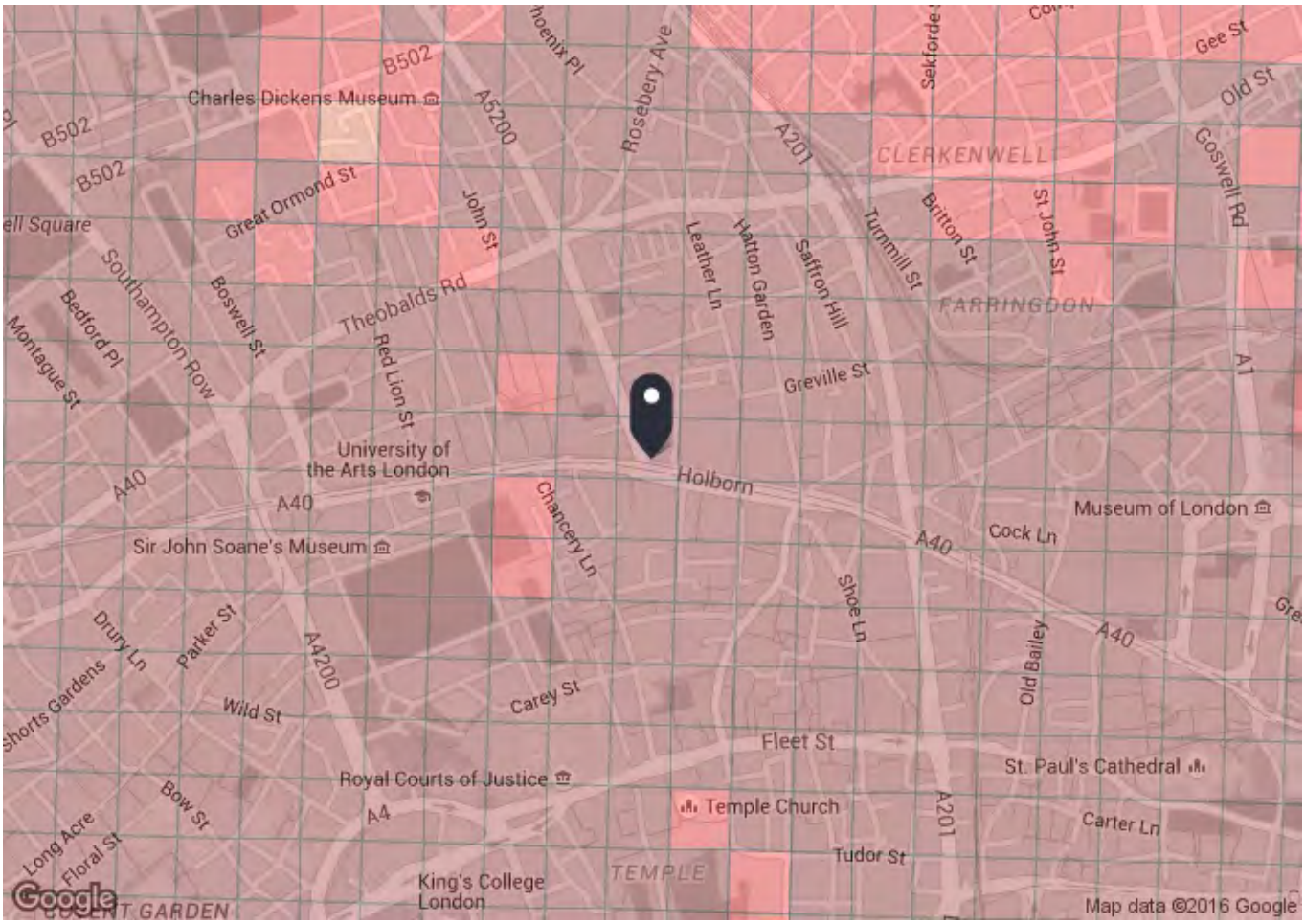
7.8 In summary, the proposed development would have positive impact on the highway network by reducing vehicle trips on the highway network, and a negligible impact on non-car modes and is therefore considered acceptable on highways and transport grounds.

steer davies gleave

Appendices

A PTAL Summary Report

TRANSPORT FOR LONDON



PTAL output for 2011 (Base year)
6b

150 Holborn
150 Holborn, London EC1N 2NS, UK

Easting: 531154, Northing: 181621

Grid Cell: 86365

Report generated: 03/03/2016

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

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	FARRINGDON ST SMITHFIELD	63	573.1	12	7.16	4.5	11.66	2.57	0.5	1.29
Bus	GRAYS INN RD CHANCERY LN	46	97.65	6	1.22	7	8.22	3.65	0.5	1.82
Bus	GRAYS INN RD CHANCERY LN	17	97.65	7.5	1.22	6	7.22	4.15	0.5	2.08
Bus	GRAYS INN RD CHANCERY LN	45	97.65	7	1.22	6.29	7.51	4	0.5	2
Bus	GRAYS INN RD CHANCERY LN	341	97.65	6	1.22	7	8.22	3.65	0.5	1.82
Bus	HOLBORN HALL	243	441.8	11	5.52	4.73	10.25	2.93	0.5	1.46
Bus	HOLBORN HALL	38	441.8	10	5.52	5	10.52	2.85	0.5	1.43
Bus	HOLBORN HALL	19	441.8	8	5.52	5.75	11.27	2.66	0.5	1.33
Bus	HOLBORN HALL	55	441.8	10	5.52	5	10.52	2.85	0.5	1.43
Bus	CHANCERY LANE STATION	8	116.52	10	1.46	5	6.46	4.65	0.5	2.32
Bus	CHANCERY LANE STATION	521	116.52	27	1.46	3.11	4.57	6.57	1	6.57
Bus	CHANCERY LANE STATION	242	116.52	6.5	1.46	6.62	8.07	3.72	0.5	1.86
Bus	CHANCERY LANE STATION	25	116.52	8	1.46	5.75	7.21	4.16	0.5	2.08
Rail	City Thameslink	'BEDFDM-SVNOAKS 1E62'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-BROMLYS 1E83'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-ORPNGTN 1L60'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-SUTTON 1O13'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-KENTHOS 1S85'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-BRGHTN 1T11'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-BRGHTN 1T15'	627.32	0.67	7.84	45.53	53.37	0.56	0.5	0.28
Rail	City Thameslink	'BRGHTN-BEDFDM 1T83'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-SUTTON 1V23'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-SUTTON 1V82'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-BEDFDM 1W06'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-BEDFDM 1W81'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-BRGHTN 1W84'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-BRGHTN 1W86'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'STALBCY-SVNOAKS 2E11'	627.32	1	7.84	30.75	38.59	0.78	1	0.78
Rail	City Thameslink	'BEDFDM-SVNOAKS 2E19'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'LUTON-SVNOAKS 2E21'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'STALBCY-SVNOAKS 2E95'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-LUTON 2O00'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-BEDFDM 2O04'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-STALBCY 2O06'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-LUTON 2O10'	627.32	1	7.84	30.75	38.59	0.78	0.5	0.39
Rail	City Thameslink	'LUTON-SUTTON 2O17'	627.32	0.67	7.84	45.53	53.37	0.56	0.5	0.28
Rail	City Thameslink	'STALBCY-SUTTON 2O21'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'STALBCY-SUTTON 2O29'	627.32	0.67	7.84	45.53	53.37	0.56	0.5	0.28
Rail	City Thameslink	'LUTON-BCKNHMJ 2S91'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'STALBCY-BROMLYS 2S93'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-BEDFDM 2T02'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-BEDFDM 2T04'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-BRGHTN 2T15'	627.32	1	7.84	30.75	38.59	0.78	0.5	0.39
Rail	City Thameslink	'BEDFDM-BRGHTN 2T25'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-LUTON 2T99'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-STALBCY 2V02'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-STALBCY 2V08'	627.32	0.67	7.84	45.53	53.37	0.56	0.5	0.28
Rail	City Thameslink	'BEDFDM-SUTTON 2V15'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-BEDFDM 2V16'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'LUTON-SUTTON 2V19'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SUTTON-KNTSHTN 2V20'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'STALBCY-SUTTON 2V27'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'LUTON-SUTTON 2V31'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-BEDFDM 2W08'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-BEDFDM 2W12'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BRGHTN-BEDFDM 2W16'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'ASHFKY-BEDFDM 1E61'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'ASHFKY-BEDFDM 1E63'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Rail	City Thameslink	'RCHT-BEDFDM 1E67'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SVNOAKS-BEDFDM 1E69'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BROMLYS-BEDFDM 1E82'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BCKNHMJ-BEDFDM 1G65'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'KENTHOS-BEDFDM 1G71'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'ORPNGTN-STALBCY 2D93'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'ORPNGTN-LUTON 2D95'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SVNOAKS-STALBCY 2E59'	627.32	0.67	7.84	45.53	53.37	0.56	0.5	0.28
Rail	City Thameslink	'SVNOAKS-LUTON 2E61'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SVNOAKS-WHMPSTM 2E63'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SVNOAKS-KNTSHTN 2E65'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'SVNOAKS-KNTSHTN 2E67'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BROMLYS-LUTON 2E93'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'ORPNGTN-LUTON 2L59'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'ORPNGTN-KNTSHTN 2L65'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-ELPHNAC 1J87'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
Rail	City Thameslink	'BEDFDM-ELPHNAC 1J88'	627.32	0.33	7.84	91.66	99.5	0.3	0.5	0.15
LUL	Farringdon	'Edgware-Hammersmith'	717.43	6	8.97	5.75	14.72	2.04	0.5	1.02
LUL	Farringdon	'Barking-Hammersmith'	717.43	6.34	8.97	5.48	14.45	2.08	0.5	1.04
LUL	Farringdon	'Hammersmith-Plaistow'	717.43	1	8.97	30.75	39.72	0.76	0.5	0.38
LUL	Farringdon	'Aldgate-AmerFast'	717.43	1	8.97	30.75	39.72	0.76	0.5	0.38
LUL	Farringdon	'Ches-AldgateFast'	717.43	2	8.97	15.75	24.72	1.21	0.5	0.61
LUL	Farringdon	'Uxbridge-AldSlow'	717.43	5.33	8.97	6.38	15.35	1.95	0.5	0.98
LUL	Farringdon	'Watford-AldSfast'	717.43	3.67	8.97	8.92	17.89	1.68	0.5	0.84
LUL	Farringdon	'Aldg-WatfordSlow'	717.43	3.67	8.97	8.92	17.89	1.68	0.5	0.84
LUL	Farringdon	'Ald-HarrowHill'	717.43	1.33	8.97	23.31	32.27	0.93	0.5	0.46
LUL	Chancery Lane	'Epping-Ealing'	78.32	3	0.98	10.75	11.73	2.56	0.5	1.28
LUL	Chancery Lane	'Epping-Wruislip'	78.32	3	0.98	10.75	11.73	2.56	0.5	1.28
LUL	Chancery Lane	'WhiteCity-Epping'	78.32	0.33	0.98	91.66	92.64	0.32	0.5	0.16
LUL	Chancery Lane	'Epping-NActon'	78.32	1	0.98	30.75	31.73	0.95	0.5	0.47
LUL	Chancery Lane	'Northolt-Epping'	78.32	0.67	0.98	45.53	46.51	0.65	0.5	0.32
LUL	Chancery Lane	'Debden-WRuislip'	78.32	0.33	0.98	91.66	92.64	0.32	0.5	0.16
LUL	Chancery Lane	'WhiteCity-Debden'	78.32	0.33	0.98	91.66	92.64	0.32	0.5	0.16
LUL	Chancery Lane	'Debden-Northolt'	78.32	1	0.98	30.75	31.73	0.95	0.5	0.47
LUL	Chancery Lane	'RuislipGdns-Debden'	78.32	0.33	0.98	91.66	92.64	0.32	0.5	0.16
LUL	Chancery Lane	'Loughton-WRuislip'	78.32	1	0.98	30.75	31.73	0.95	0.5	0.47
LUL	Chancery Lane	'NActon-Loughton'	78.32	0.67	0.98	45.53	46.51	0.65	0.5	0.32
LUL	Chancery Lane	'Loughton-WhiteCity'	78.32	0.67	0.98	45.53	46.51	0.65	0.5	0.32
LUL	Chancery Lane	'Loughton-Northolt'	78.32	0.33	0.98	91.66	92.64	0.32	0.5	0.16
LUL	Chancery Lane	'Ealing-Loughton'	78.32	1	0.98	30.75	31.73	0.95	0.5	0.47
LUL	Chancery Lane	'Ealing-NewburyPark'	78.32	0.67	0.98	45.53	46.51	0.65	0.5	0.32
LUL	Chancery Lane	'WRuislip-NewburyPark'	78.32	0.33	0.98	91.66	92.64	0.32	0.5	0.16
LUL	Chancery Lane	'NActon-NewburyPark'	78.32	0.33	0.98	91.66	92.64	0.32	0.5	0.16
LUL	Chancery Lane	'Hainault-Ealing'	78.32	5.33	0.98	6.38	7.36	4.08	1	4.08
LUL	Chancery Lane	'Hainault-Nacton'	78.32	1.33	0.98	23.31	24.29	1.24	0.5	0.62
LUL	Chancery Lane	'Hainault-WRuislip'	78.32	3.33	0.98	9.76	10.74	2.79	0.5	1.4
LUL	Chancery Lane	'RuislipGdns-NP-Hain'	78.32	0.67	0.98	45.53	46.51	0.65	0.5	0.32
LUL	Chancery Lane	'WhiteCity-Hainault'	78.32	1.67	0.98	18.71	19.69	1.52	0.5	0.76
LUL	Chancery Lane	'Hainault-NP-Northolt'	78.32	1	0.98	30.75	31.73	0.95	0.5	0.47
LUL	Chancery Lane	'GrangeHill-WD-Eal'	78.32	1	0.98	30.75	31.73	0.95	0.5	0.47
LUL	Chancery Lane	'GrangeHill-Wdfd-Whit'	78.32	0.67	0.98	45.53	46.51	0.65	0.5	0.32
LUL	Chancery Lane	'GrangeHill-Wdfd-WRsp'	78.32	0.67	0.98	45.53	46.51	0.65	0.5	0.32
LUL	Holborn	'RuislipGar-Epping'	748.63	1	9.36	30.75	40.11	0.75	0.5	0.37
LUL	Holborn	'RuislipGdns-Loughton'	748.63	0.67	9.36	45.53	54.88	0.55	0.5	0.27
LUL	Holborn	'Cockfosters-LHRT4LT'	748.63	4.67	9.36	7.17	16.53	1.81	0.5	0.91
LUL	Holborn	'Cockfosters-RayLane'	748.63	3	9.36	10.75	20.11	1.49	0.5	0.75
LUL	Holborn	'LHRT4LT-ArnosGrove'	748.63	4.67	9.36	7.17	16.53	1.81	0.5	0.91
LUL	Holborn	'ArnosGrove-RayLane'	748.63	0.33	9.36	91.66	101.02	0.3	0.5	0.15

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
LUL	Holborn	'ArnosGrove-Nthfields'	748.63	3	9.36	10.75	20.11	1.49	0.5	0.75
LUL	Holborn	'Oakwood-RayLane'	748.63	0.33	9.36	91.66	101.02	0.3	0.5	0.15
LUL	Holborn	'Nthfields-Cockfoster'	748.63	1	9.36	30.75	40.11	0.75	0.5	0.37
LUL	Holborn	'LHRT5-Cockfosters'	748.63	6	9.36	5.75	15.11	1.99	0.5	0.99
LUL	Holborn	'Uxbridge-Cockfosters'	748.63	3.67	9.36	8.92	18.28	1.64	0.5	0.82
LUL	Holborn	'Cockfosters-Ruislip'	748.63	1	9.36	30.75	40.11	0.75	0.5	0.37
LUL	Holborn	'ArnosGrove-Uxbridge'	748.63	1	9.36	30.75	40.11	0.75	0.5	0.37
LUL	Holborn	'Oakwood-Uxbridge'	748.63	0.33	9.36	91.66	101.02	0.3	0.5	0.15
LUL	Holborn	'Oakwood-Ruislip'	748.63	0.33	9.36	91.66	101.02	0.3	0.5	0.15
									Total Grid Cell AI:	**68.18**

B Access Strategy

NOTES:

1. THIS DRAWING IS BASED ON "325424 A-04-00.DWG" PROVIDED BY PBPW ON 160225.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. DO NOT SCALE FROM THIS DRAWING.

□E□:

- SERVICING ACCESS
- CAR ACCESS
- PEDESTRIAN ACCESS
- RETAIL ACCESS
- CYCLIST ACCESS

Rev.	Date	Comments	Des	Chk	App
-	02/03/16	ORIGINAL ISSUE	MSB	JZC	DMZ

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Client :

DAH REAL ESTATE SARL

Title:

150 HOLBORN

GROUND FLOOR
ILLUSTRATIVE ACCESS PLAN

Drawing No.	Sheet No.	Rev.
22888501-GF-ACC-01	01 OF 01	-

1:200 @ A3

CAD REFERENCE: U:\London\Projects\228\8\85\01\CAD\Drawings\22888501-GF-ACC-01 - 01

DATE: 03/03/2016

C Proposed Ground and Basement Floor Layouts

N

RESIDENTIAL CYCLE PARKING x 20 SPACES

COMMERCIAL USE CYCLE PARKING IN SEMI-VERTICAL RACKS X 28 SPACES

CYCLE LIFT

2.40

1.60

1.5

1.54

+20.25 FFL

1:200 @ A3

NOTES:

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□E□:

CYCLE FACILITIES

TWO TIER CYCLE RACK

SEMI VERTICAL CYCLE RACK

SHEFFIELD CYCLE STAND

Rev.	Date	Comments	Des	Chk	App
-	02/03/16	ORIGINAL ISSUE	MSB	JZC	DMZ

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Client :

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Title:

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GROUND FLOOR

CYCLE FACILITIES

Drawing No.	Sheet No.	Rev.
22888501-GF-CYC-01	01 OF 01	-

CAD REFERENCE: U:\London\Projects\228\8\85\01\CAD\Drawings\22888501-GF-CYC-01 - 01

DATE: 03/03/2016

N

EXTENSION

PLANT ROOM

PLANT ROOM

PLANT ROOM

CYCLE LIFT

PLANT REPLACEMENT, SOFT SPOT

174 CYCLE PARKING SPACES, LONG STAY

+15.45 FFL

UNISEX ACCESSIBLE CHANGING ROOM

DRYING AREA

PLANT ROOM

COMMERCIAL CYCLE PARKING IN TWO TIER RACKS x 86 (172 SPACES)

RETAIL

LOCKERS

CHANGING ROOM

UNISEX ACCESSIBLE CHANGING ROOM

DRYING AREA

STORAGE

CHANGING ROOM

LOCKERS

CHANGING ROOM / SHOWER FACILITIES

PLANT ROOM

RETAIL

1:200 @ A3

NOTES:

1. THIS DRAWING IS BASED ON "325424 A-04-B1.DWG" PROVIDED BY PBPW ON 160225.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. DO NOT SCALE FROM THIS DRAWING.

□E□:

CYCLE FACILITIES x 162 SPACES TOTAL

TWO TIER CYCLE RACK

Rev.	Date	Comments	Des	Chk	App
A	04/03/16	REVISED FOR PLANNING ISSUE	MSB	JZC	DMZ
-	02/03/16	ORIGINAL ISSUE	MSB	JZC	DMZ

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Client :

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Title:

150 HOLBORN

BASEMENT LEVEL 1
CYCLE FACILITIES

Drawing No.	Sheet No.	Rev.
22888501-B1-CYC-01	01 of 01	A

CAD REFERENCE: U:\London\Projects\228\8\85\01\CAD\Drawings\22888501-B1-CYC-01 - 01

DATE: 04/03/2016

D Delivery and Servicing Plan (DSP)

steer davies gleave

150 Holborn

Delivery & Servicing Plan
March 2016

DAH Real Estate SARL

Our ref: 22888501

steer davies gleave

150 Holborn

Delivery and Servicing Plan
March 2016

DAH Real Estate SARL

Our ref: 22888501

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Contents

Appendices

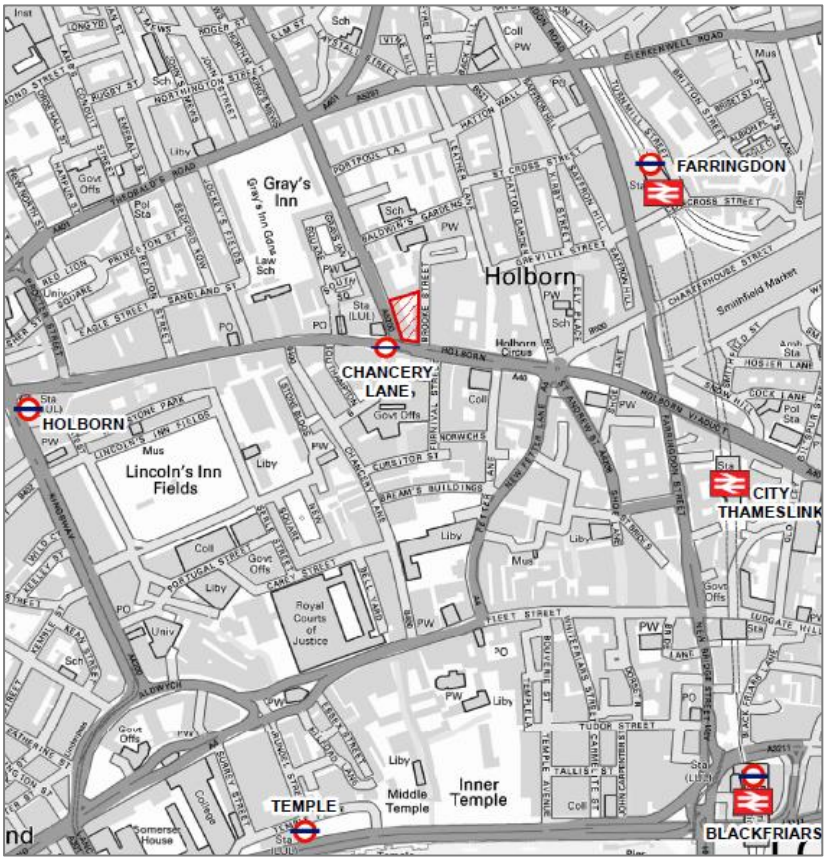
1 Introduction

Background

1.1 This Delivery and Servicing Plan (DSP) has been prepared by Steer Davies Gleave in support of the detailed planning application for the proposed development at 150 Holborn, London Borough of Camden.

1.2 The site location is shown in Figure 1.1.

Figure 1.1: Site Location Plan



150 Holborn Proposals

1.3 The application seeks detailed planning permission for the redevelopment of the site to provide a mix of office accommodation (Class B1), retail floorspace (Class A1-A3), residential units (Class C3) and public realm improvements. The description of development is:

"Demolition of existing building and redevelopment for a mixed use development up to 9 storeys in height comprising 14,604 sqm GEA office floorspace (Use Class B1), 1,450 sqm GEA retail floorspace (Use Class A1-A3), 13 residential units (Use Class C3), improvements to the public realm and all other necessary enabling works."

1.4 The development site is bound by Holborn to the south, Gray's Inn Road to the west and Brooke Street to the east.

1.5 Servicing for the development by means of vehicles up to 8m in length will take place off the public highway in a dedicated ground floor service area. Delivery by larger vehicles will need to take place on street. Service vehicle access will be provided directly from Brooke Street.

What is a DSP?

1.6 Delivery and Servicing Plans (DSPs) provide a framework to better manage all types of freight vehicle movement to and from individual buildings. A DSP is essentially the equivalent of a workplace travel plan for freight.

1.7 The London Freight Plan highlights DSPs as one of the four measures to improve freight and servicing in London. The other three measures include the Freight Operator Recognition Scheme (FORS), Construction Logistics Plans (CLPs) and the Freight Information Portal (FIP).

Benefits of DSPs

1.8 The 'Managing Freight Effectively: Delivery and Servicing Plans' document identifies the benefits of DSPs to local authorities and residents, building developers and businesses and freight operators.

1.9 In summary, DSPs will:

- Help developers and local authority planning officials comply with:
  - National Planning Policy Framework (NPPF), which requires the promotion of more sustainable transport choices for moving freight; and
  - The Traffic Management Act, the London Plan and any borough-specific policies, such as road safety and air quality action plans.
- Demonstrate that goods and services can be delivered, and waste removed, in a safe, efficient and environmentally-friendly way;
- Identify deliveries that could be reduced, re-timed or even consolidated, particularly during busy periods;
- Help cut congestion on London's roads and ease pressure on the environment;
- Improve the reliability of deliveries to the site concerned;
- Reduce the operating costs of building occupants and freight companies; and
- Reduce the impact of freight activity on local residents.

1.10 The London Freight Plan (2007) recognises that:

- The improvement of the efficiency of the freight sector will help reduce the environmental and social impacts of freight transport on London, particularly the contribution to climate change;
- Achieving sustainable freight distribution in London will make a real and positive contribution to improving the lives of those who live, work and visit London; and
- Road network efficiency will be increased by each traffic authority's response to its Network Management Duty, which will include the reduction of freight vehicle Penalty Charge Notice (PCN) hotspots to improve congestion and help reduce CO2 emissions.

DSP Objectives

1.11 The overall objective of this DSP is:

"To minimise the impacts of delivery and servicing movements and facilitate delivery and servicing trips to and from the proposed development".

1.12 To support the realisation of this overarching objective, several sub-objectives have been set out:

- promoting smarter operations that reduce the need for freight travel overall or that reduce or eliminate trips particularly those in peak periods;
- encouraging greater use of sustainable freight modes;
- encouraging use of greener vehicles;
- managing the ongoing development and delivery of the DSP with future tenants;
- communication of site servicing/delivery facilities (through dissemination of information) to staff and suppliers;
- communication of the DSP and its constituent measures to the site occupiers; and
- encouraging the most efficient use of freight vehicles and servicing/deliveries.

DSP Structure

1.13 This DSP is divided into the following chapters:

- Chapter 1: Introduction;
- Chapter 2: Policy Context;
- Chapter 3: Servicing and Deliveries Trip Calculations;
- Chapter 4: Servicing and Waste Arrangements;
- Chapter 5: Encouraging Sustainable Freight;
- Chapter 6: DSP Strategy; and
- Chapter 7: Conclusions

1.14 This DSP has been prepared in accordance with best practice guidance.

2 Policy Context

2.1 The National, Regional and Local DSP related policy guidance is listed below:

National Policy and Guidance

- BS:5906 Waste Management in Buildings - Code of Practice (2005); and
- Designing for Deliveries, Freight Transport Association (2006).

Regional Policy and Guidance

- The London Plan: Further Alterations to the London Plan (2015);
- The Mayor's Transport Strategy (2010);
- The London Freight Plan (2007);
- Freight Operator Recognition Scheme (FORS);
- Delivery and Servicing Plans: Making freight work for you;
- Managing Freight Effectively: Delivery and Servicing Plans (DSPs); and
- Freight Information Portal (FIP).

Local Policy and Guidance

- Camden Transport Strategy
- Camden Development Policies
- Camden Planning Guidance 1 – Design
- Camden Planning Guidance 7 - Transport

2.2 A review of the most relevant documents is provided below.

Further Alterations to the London Plan (2015)

2.3 The Further Alterations to the London Plan (FALP) addresses the key trends and challenges that London will be required to address up to 2031. Of particular importance is the need to encourage more sustainable forms of transport, through cycling, improving conditions for walking and the enhancement of public transport.

2.4 Policy 6.3 of the London Plan discusses transport capacity. It states that the DSP should be secured in line with the London Freight Plan and should be co-ordinated with travel plans.

The Mayor's Transport Strategy (2010)

2.5 This document sets out the Mayor's new transport strategy for London for the period up to 2031. Freight and servicing is considered throughout the transport strategy and the direct mention in a separate list demonstrates the importance of freight, including road, rail, water ('The Blue Ribbon' network), bicycles and air.

2.6 The document highlights the importance of the London Freight Plan, Delivery and Servicing Plans (DSPs), Construction Logistics Plans (CLPs) and FORS to encourage improved efficiency and provide a framework for incentivisation and regulation.

2.7 In particular, Proposal 99 states that "the Mayor, through TfL and working with the London Boroughs, road freight operators and other stakeholders, will:

- *Adopt planning conditions that specify Delivery Servicing Plans for major developments (by spring 2011);*
- *Aim for 50% of HGVs and vans serving London to be member of the Freight Operator Recognition Scheme by 2016;*
- *Encourage, and where appropriate specify, improved freight movement efficiency through, for example, greater consolidation, more off-peak freight movement and greater use of water and rail-based transport; and*
- *Support freight industry land requirements for locally focussed consolidation and/or break-bulk facilities and access to waterways and railways".*

2.8 Proposal 117 acknowledges the incorporation of DSPs, CLPs and the FOR scheme:

- *"The Mayor, through TfL, and working with the London boroughs, and other stakeholders in the public and private sectors, will improve the efficiency and effectiveness of freight operations through the promotion of 'delivery and servicing plans', 'construction logistics plans', the Freight Operator Recognition Scheme and other efficiency measures, across London".*

2.9 The MTS sets out the importance of the London freight information portal which "will help London's public authorities (the GLA and boroughs, for example) and freight operators exchange information about:

- Improving operational efficiency of freight and servicing in London
- Encouraging better driver behaviour, the use of alternative fuels and the uptake of low carbon vehicles
- Reducing freight operators' administrative costs
- Enhancing freight journey planning".

2.10 Proposal 118 states that "the Mayor, through TfL, and working with the London boroughs, the freight industry, and other stakeholders, will develop the London freight information portal to exchange information and share knowledge to ultimately improve the performance of freight operators, boroughs and TfL".

London Freight Plan (2007)

2.11 The London Freight Plan sets out the steps that need to be taken over the next five to ten years to help address the challenges of delivering freight sustainably in the Capital.

2.12 The vision for sustainable freight distribution in London is for:

"…the safe, reliable and efficient movement of freight and servicing trips to, from, within and, where appropriate, through London to support London's economy, in balance with the needs of other transport users, the environment and Londoners' quality of life".

2.13 The Plan identifies four key projects for delivering freight in London more sustainably including:

Table 2.1: Key Projects within the London Freight Plan

Key Projects	Key Workstreams
Freight Operator Recognition Scheme (FORS)	Partnership development
Delivery and Servicing Plans (DSPs)	Major Freight Projects
Construction Logistics Plans (CLPs)	Freight data, modelling and best practice
Freight Information Panel (FIP)	

Freight Operator Recognition Scheme (FORS)

2.14 FORS is a unique, industry-led, free membership (bronze, silver, gold) scheme to help van and lorry operators in the Capital become safer, more efficient and more environmentally-friendly.

2.15 For bronze level membership a number of requirements under the following headings need to be met:

- Drivers and vehicle management;
- Vehicle maintenance and fleet management;
- Transport operations; and
- Assessing the performance of company policies.

2.16 For silver and gold level, members need to provide data to enable benchmarked values to be produced per million kilometres for each type of vehicle for:

- Fuel use;
- CO_2 and emissions;
- Vehicle incidents; and
- Penalty Charge Notices and fines.

Managing Freight Effectively: Delivery and Servicing Plans (DSPs)

2.17 DSPs provide a framework to better manage all types of freight vehicle movement to and from individual buildings. A DSP is essentially the equivalent of a workplace travel plan for freight.

2.18 DSPs will improve the safety, efficiency and reliability of deliveries and increase building operational efficiency by reducing delivery and servicing impacts to premises, specifically CO2 emissions, congestion and collisions.

2.19 DSPs aim to reduce delivery trips (particularly during peak periods) and increase availability and use of safe and legal loading facilities, using a range of approaches including consolidation and out-of-hours deliveries. DSPs will also identify unnecessary journeys and deliveries that could be made by more sustainable modes to help reduce congestion and minimise the environmental impact of freight activity.

2.20 The document identifies the benefits of DSPs to local authorities and residents, building developers and businesses and freight operators, including:

Local authorities and residents

- Less congestion on local roads;
- Reduced emissions, and use of more sustainable modes where possible, to contribute towards CO_2 reduction targets;
- Fewer goods vehicle journeys lowering the risk of collisions;
- Opportunity to reduce parking enforcement activity costs – more deliveries will use legal loading facilities so less traffic and parking infringements should occur; and
- Improved quality-of-life for local residents through reduced noise and intrusion and lower risk of accidents.

Building developers and businesses

- Reduced delivery costs and improved security;
- More reliable deliveries resulting in less disruption to normal business practices;
- Time-savings by identifying unnecessary deliveries;
- Less noise and intrusion; and
- Opportunity to feed into a CSR programme and ensure operations comply with health and safety legislation.

Freight operators

- Legal loading areas will mean less risk of receiving penalty charge notices;
- Fuel savings through reduced, re timed or consolidated deliveries;
- More certainty over delivery times; and
- Fewer journeys will reduce the risk of collisions.

Delivery and Servicing Plans: Making freight work for you

2.21 This is a guidance document for organisations and provides additional information in conjunction with the above document and sets out how DSPs can help organisations to:

- Proactively manage deliveries to reduce the number of delivery and servicing trips, particularly in the morning peak;
- Identify and promote areas where safe and legal loading can take place; and
- Select delivery companies who can demonstrate their commitment to following best practice, for example, the Freight Operator Recognition Scheme (FORS).

2.22 This is in order to give organisations a framework to make sure that freight vehicle activity to and from the building is working effectively.

Camden Development Policies 2010-2025

2.23 This document forms part of Camden's Local Development Framework (LDF), and sets out detailed planning policies that the council will use when determining applications for planning permission.

2.24 Policy DP20 – Movement of goods and materials. This states In order to minimise the movement of goods and materials by road the Council will:

a) expect development that would generate significant movement of goods or materials both during construction and in operation to minimise the movement of goods and materials by road, and consider the use of more sustainable alternatives such as rail and canal links;

b) promote the development and use of freight consolidation facilities and other initiatives with potential to reduce the impact of goods vehicles, and encourage the use of cycle courier services for local deliveries;

c) seek to promote and protect facilities for the movement of goods by rail and water, including facilities for transfer between road, rail and canal;

d) be located close to the Transport for London Road Network or other Major Roads;

e) avoid any additional need for movement of vehicles over 7.5 tonnes in predominantly residential areas;

f) accommodate goods vehicles on site; and

g) seek opportunities to minimise disruption for local communities through effective management, including through the optimisation of collection and delivery timings and the use of low emission vehicles for deliveries.

2.25 Policy DP21 – Development connecting to the highway network. This states that development must have regard to Camden's road hierarchy and must not cause harm to the management of the road network. This includes avoiding direct vehicular access to the Transport for London Road Network (TLRN) and other major roads; ensuring adequate sightlines for vehicles leaving the site; and addressing the needs of people with mobility difficulties and vulnerable users.

Camden Planning Guidance 1 – Design

2.26 Camden Planning Guidance is a Supplementary Planning Document (SPD), which is consistent with the Local Development Framework (LDF), and is a material consideration in planning decision. The design document provides guidance on design issues in order to create high quality buildings and spaces.

2.27 Chapter 10: Recycling and Waste Storage provides design guidance on waste generation, storage and collection. Residential waste generation volumes are identified in the table shown in section 10.11 of the document. The relevant details from this table are reproduced in Table 2.2.

Table 2.2: Camden residential waste generation standards

Size of household	Projected weekly waste per household
Studio / one bedroom	100 litres
Two bedroom	170 litres
Three bedroom	240 litres

2.28 For developments with more than six households, the guidance recommends the use of bulk bins. Bins are available in 1,100L and 1,280L Eurobins. Provision of bins should be split equally between refuse and recycling. Additional storage should be provided for food waste.

2.29 For commercial uses, the guidance states that one cubic metre of storage space is required for every approximately 300-500 sqm of commercial space. This includes both recyclable and non-recyclable waste and these waste streams must be stored separately.

Camden Planning Guidance 7 – Transport

2.30 Camden Planning Guidance is a Supplementary Planning Document (SPD), which is consistent with the Local Development Framework (LDF), and is a material consideration in planning decision. The transport document provides guidance on transport issues including transport capacity, Travel Plans, Delivery and Servicing Management Plans, car free developments, car parking, and cycling facilities.

2.31 Chapter 4 details how Delivery and Servicing Management Plans can be used to manage and mitigate the potential impacts of deliveries and servicing on the amenity of occupiers and neighbours. The following table details the guidelines for delivery and servicing for developments:

Swept paths	Applicants should provide evidence of swept paths on submitted drawings.
Turning areas	Normally, all vehicles must be able to enter and leave the site in a forward facing direction. If in exceptional cases this is not possible, the service area must be designed to enable vehicles to reverse off the highway rather than onto it.
Demarcation	Servicing bays and turning areas should be clearly marked out, for example, by the use of different colours and materials, to discourage their misuse for car parking and storage.
Pedestrians	Care must be taken to provide safe segregated routes for use by pedestrians. Where access roads for service vehicles represent the most direct or visible route for pedestrians, a segregated footway at least 1.8 m in width should be provided with direct links to each pedestrian entrance of each building on site.
Access roads	A minimum carriageway-width of 6.0 m is required where an internal access is designed for two-way use by service vehicles. Where a footway is not provided to each side, a safety margin with a minimum width of 0.5m must be provided wherever there is no footway.
Headroom	A vertical clearance of 3.5m must be provided for light and medium goods vehicles.

3 Servicing and Delivery Vehicle Trips

3.1 A servicing and waste management strategy has been developed based on a centralised operation for all deliveries and waste collection.

Trip Generation Methodology

3.2 Steer Davies Gleave holds a substantial database of servicing and delivery information from a range of office, residential and retail developments across London. The number of service vehicle trips associated with the floor areas proposed has been estimated using this servicing database which combines survey information from developments in Canary Wharf, Westminster and the City of London.

3.3 For both the existing and proposed situations we have assumed 50% general retail and 50% food and drink.

3.4 The net floor areas for the existing and proposed land uses at the site is provided in Table 3.1.

Table 3.1: Existing and Proposed Floor Areas (NIA)

Floor Area (NIA)	C3 Residential (m^2)	B1 Office (m^2)	A1-A3 Retail (m^2)	Total (m^2)
Existing Use	127	7,150	2,589	**8,518**
Proposed Use	862	10,622	1,353	**12,837**

3.5 By applying these trip rates to the proposed NIA floor areas for 150 Holborn the anticipated number of servicing vehicles has been estimated. The servicing model is also used to calculate the size of loadings bays required based on a worst case scenario.

3.6 A breakdown of the number of service vehicle trips is provided in Table 3.2.

Table 3.2: 150 Holborn Service Vehicle Trips Estimates (Existing vs. Proposed)

Land-Use	Daily Trip Rate (per 100m^2 NIA)	Average Daily Trips (Existing Use)	Average Daily Trips (Proposed Use)
Office	0.21	16	23
Residential	0.10	1	1
Retail (Shops)	0.59	8	4
Retail (Food & Drinks)	2.00	26	14
TOTAL		**51**	**42**

3.7 The proposals at the site would result in a net reduction in vehicle trips at the site due to the reduction in the retail floorspace.

3.8 Based on the surveys undertaken by Steer Davies Gleave, the average dwell time for cars and small vans is around 10 minutes, and medium goods vehicles 25 minutes.

3.9 By applying these dwell times to the estimated servicing trips, two loading bay spaces would be required. The proposed 150 Holborn development complies with this by providing 2 x 8m long service bays. This number of servicing bays provides sufficient capacity to deal with the predicted servicing trips.

3.10 All service vehicles using the bay facilities at the proposed development will be managed by the operators of the building.

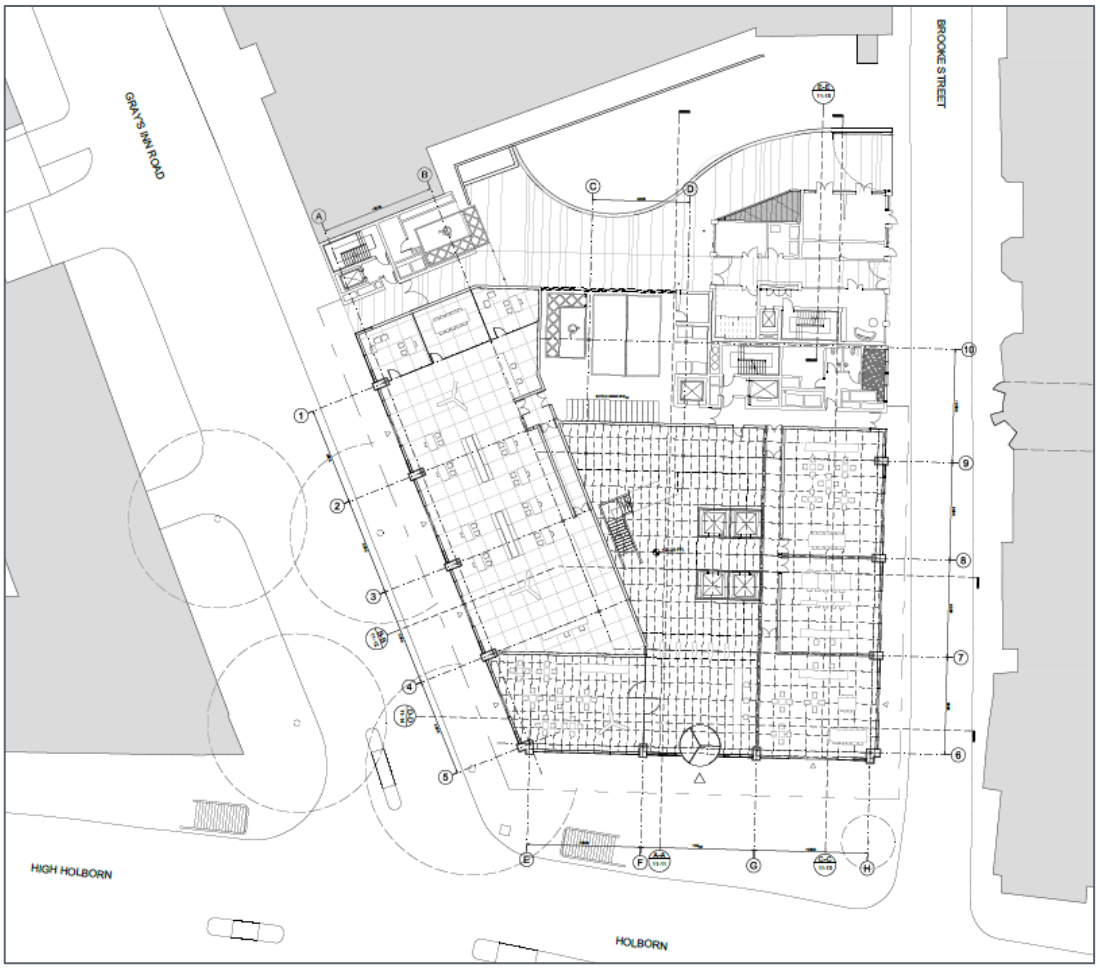
4 Servicing and Waste Arrangements

Servicing Arrangements

4.1 The delivery area to the rear of the site will be reconfigured but will remain unchanged in providing two x 8m delivery bays as per the existing situation.

4.2 The full proposed site layout plan is provided at Figure 4.1.

Figure 4.1: Proposed Site Layout Plan



4.3 The proposed waste management facilities at the site are provided in Appendix A.

4.4 A pedestrian passageway is provided to link Gray's Inn Road with Brooke Street. This was requested by LB Camden during pre-application discussions and is shown on the drawings included at Appendix A.

4.5 A set of bollards has been provided at either end of the proposed pedestrian passageway through the servicing / parking area. The bollard lines will provide a safe area for pedestrians to wait, with excellent visibility of the whole area. This will allow them to view whether it is safe to cross the servicing area. Signage would be provided to ensure that drivers are aware that pedestrians may be present in the loading area and therefore to take extra care during manoeuvres.

4.6 Servicing within the service yard at the site would be undertaken by vehicles up to 8m in length. Deliveries by larger vehicles will take place from Brooke Street. The DSP would encourage all deliveries to be undertaken by 7.5T box vans or smaller.

4.7 Swept path analysis of a 7.5t box van accessing the site shows that the vehicle would have sufficient space to enter the site in a forward gear; reverse into the space to make it's deliveries; and exit the site in a forward gear. See Appendix B for the swept path drawings.

4.8 The delivery area is located close to the service core/building service routes to minimise the distance over which deliveries have to be transported.

4.9 Use of the delivery area, including the receiving of deliveries and waste being taken away, will be coordinated through a centrally managed system. All tenants will be expected to manage their servicing requirements, to ensure that demand for the service area and loading bays is managed efficiently.

Waste Management

4.10 There are separate bin stores for the residential and commercial land uses adjacent to the delivery area. Appendix A shows the proposed ground floor layout and the location of the bin stores.

4.11 The waste and storage requirements at the site has been based on Section 10 of the Camden Policy Guidance 1 (CPG1: Design) (2015).

Residential

4.12 The communal storage requirements for the residential units in the development are set out in Table 4.1 below.

Table 4.1: Total Weekly Residential Waste Arising (Litres)

Size of Household	Number in Development	Projected Weekly Waste per Household	Total Weekly Waste All Households
Studio/one-bed	6	100	600
Two bedroom	5	170	850
Three/four bedroom	3	240	480
Total Weekly Waste Arising	**13**	-	**1,930**

4.13 The LB Camden Guidance states that the provision of bins should be split equally between refuse and recycling, plus provision for food waste. The development will provide 1 x 1,100 litre bin for refuse, 1 x 1,100 litre bin for recycling, plus 1 x 360 litre bin for food waste in a dedicated waste store.

Commercial

4.14 Commercial waste will be collected by a private contractor.

4.15 The LB Camden Guidance states that approximately one cubic metre of storage space is required for every 300-500m^2 of commercial floorspace (this includes both recyclable and non-recyclable waste and assumes weekly collection). Waste requirements at the site are set out in Table 4.2.

Table 4.2: Commercial Waste Storage Requirement (no compaction and 1x weekly collection)

Land Use	Area (NIA sqm)	Waste Stream	Storage Required (m^3)	Eurobins Required (1,100L)
B1 Office	10,622	General Waste	10.6	9.7
		Recyclables	10.6	9.7
A1-A3 Retail	1,353	General Waste	1.4	1.2
		Recyclables	1.4	1.2
Total	**11,975**		**24.0**	**21.8**

* We have assumed a total waste generation of one cubic metre per 500m^2 for all land uses at the site

4.16 Table 4.2 shows that the commercial land uses would require 22 x 1,100 litre Eurobins if there is no waste compaction and collections occur 1 x per week. Table 4.3 shows the number of Eurobins required if waste is compacted and collections take place daily.

Table 4.3: Commercial Waste Storage Requirement (with compaction and daily collection)

Waste Stream	Storage required without compaction and 1 x weekly collection (m3)	Compaction Ratio	Collection Frequency	Storage Required updated (m3)	Eurobins Required (1,100L)
General waste	12.0	3:1	7 x weekly	0.56	1
Recyclables	12.0	2:1	7 x weekly	0.86	1

4.17 Table 4.3 shows that with compaction and daily collections, 1 x 1,100 litre Eurobin is required for general waste and 1 x 1,100 litre Eurobin is required for recycling. In addition, 1x 360 litre Eurobin for food waste will be provided for the commercial use on site.

4.18 Swept path analysis for waste collection vehicle movements within the delivery area s are provided at Appendix C**.**

4.19 The swept path analysis shows that delivery and refuse vehicles can successfully enter the site in a forward gear, undertake their deliveries and/or refuse collection and exit the site in a forward gear.

5 Encouraging Sustainable Deliveries

DSP Measures

5.1 Table 5.1 below details the DSP measures, the benefits they offer, the timescale for their implementation and responsibility to take them forward. The measures aim to achieve the DSP sub-objectives and minimise the impact of the servicing and deliveries forecast for the proposed development.

5.2 The DSP measures for the proposed development need to be developed once the needs of the 150 Holborn occupiers have been identified through the servicing/delivery surveys. However, at this stage it is expected that during its development the DSP will consider a combination of the measures (but not exclusively) within Table 5.1.

Table 5.1: DSP Measures

Measure	Description	Benefit	Timescale for Implementation	Responsibility
Management of the DSP				
Adoption of the DSP	'Buy in' from the tenants will be vital to ensure that the DSP is an active, living document.	The involvement of the tenant will mean that more policies could be implemented and better results could be delivered.	Prior to occupation.	The Applicant
Assign Responsibility of DSP to Travel Plan Co-ordinator	To be responsible for managing the ongoing development, delivery and promotion of the DSP.	This will ensure that the DSP is taken forward and results are delivered.	Prior to occupation.	The Applicant
Travel Surveys	Servicing and Delivery surveys.	This will inform the future development of the DSP and inform progress reports for occupiers.	Within 6 months of occupation and 3rd and 5th years.	Travel Plan Coordinator
Raise awareness and promote DSP initiatives	Site information, website, steering group and/or meetings.	To encourage sustainable freight to and from the site.	Upon to occupation and on-going.	Travel Plan Coordinator
Service Vehicle Access				
Access routes for servicing and deliveries	Provide sufficient space and clear and uncongested routes for servicing and waste vehicles.	Minimise localised congestion and ensure that there are no access issues.	This will be implemented when the proposed development is built.	The Applicant
Reducing Servicing and Delivery Trips				
Couriers	A smart courier policy could reduce the number of motorised vehicle trips to, from and around the site.	Using cycle couriers where appropriate could reduce the number of motorised vehicle trips to, from and around the site, cut congestion and reduce pollution and carbon emissions.	Within first year of occupation.	Travel Plan Coordinator
Use of local sources/suppliers	Encourage tenant to source items locally, or from the same supplier.	To reduce the number of deliveries required.	Within first year of occupation.	Travel Plan Coordinator

Measure	Description	Benefit	Timescale for Implementation	Responsibility
Servicing and Delivery Operations				
Site information	Publish details of servicing/delivery facilities and procedures to tenants and residents indicating: • best times for deliveries; • delivery locations; • best practice' supplies/couriers.	Encourage deliveries out of busy (peak) times and use 'best practice' companies. To ensure waste collections/deliveries are efficient and spend a minimal amount of time at the site to ensure minimal impact on traffic operations.	Upon occupation.	Travel Plan Coordinator
Central Area for Waste Collections and Deliveries	Use central areas for waste collections and deliveries.	To minimise service and delivery vehicle movements.	This will be implemented when the proposed development is built.	The Applicant
FORS	Use of companies who are FORS members and encourage companies to sign-up to FORS scheme.	FORS offers incentives to members to increase the sustainability of freight movements including training/vehicle maintenance and fleet management to improve safety/fuel efficiency and reducing CO2 emissions.	Within 6 months of occupation and on-going.	Travel Plan Coordinator
Vehicle Booking and Management System	Produce a delivery and servicing schedule to set out how and when vehicles can best access the site for each purpose. It will encourage off-peak servicing and the consolidation of servicing and deliveries. Deliveries by vehicles larger than a 7.5T box van will also be discouraged.	Implementing a delivery and servicing schedule will ensure that access routes, delivery and waiting areas are used efficiently and congestion is minimised.	Within first year of occupation.	Travel Plan Coordinator

DSP Targets

5.3 As the occupiers of the site are unconfirmed it is difficult to develop specific targets. Once the tenants are known and servicing and delivery surveys have been undertaken, Targets can be developed in the full DSP, within 6 months of occupation. Examples of targets that could be developed include:

- A specific percentage, of servicing and delivery trips to be undertaken during the AM and PM peak hours;
- A minimum number of servicing and deliveries to be undertaken during the night-time (midnight-6am);
- A specific number of servicing and deliveries to encourage the consolidation of trips to the site;
- All, or a specific proportion, of servicing and delivery companies used to be a member of FORS; and
- Specific percentage of the proposed development servicing and delivery vehicles to be 'green' vehicles.

6 DSP Strategy

Management of the DSP

6.1 The DSP will be implemented upon first occupation of the site and will be developed into a full DSP within 7 months of occupation, after the baseline surveys (within 6 months of occupation).

6.2 The applicant will work with the management companies to ensure the DSP is implemented and developed over time.

6.3 The Travel Plan and DSP documents are interlinked and it is proposed that the management of the DSP will be the responsibility of the tenant Travel Plan Co-ordinator.

6.4 The DSP will then be managed via a steering group, which will be established for the Travel Plan. This will help ensure that the DSP is taken forward effectively and will feed back to Senior Management of the site to ensure continued support and resources for the DSP.

Raising Awareness

6.5 It will be important to inform the occupiers about this DSP including:

- What is a DSP?
- The importance of DSPs and freight movements and their impacts; and
- What the tenants can do to help encourage the use of sustainable freight to and from the site.

6.6 This will help to bring the tenants on board and be supportive of the DSP.

6.7 To increase awareness of the DSP, relevant staff and most importantly suppliers will be given information on the DSP and encouraged to use sustainable freight to and from the site.

6.8 It is essential that relevant employees working at the site and suppliers are involved in the implementation and development of the DSP. The servicing/delivery surveys will contribute to raising awareness at the outset. It will also allow staff and suppliers to have an input into the on-going development of the DSP.

Review and Monitoring

6.9 It is proposed that the Review and Monitoring of the DSP is similar to that of the Travel Plan.

6.10 The first stage of the monitoring and review programme will be to undertake comprehensive servicing/delivery surveys. The surveys are expected to be undertaken within six months of site occupation.

6.11 The DSP will have a five-year timescale. The document will be regularly monitored and reviewed to ensure that the document reflects the changing requirements of the development and is up-to-date with servicing/delivery options available.

6.12 The DSP development will be the responsibility of the tenant Travel Plan Co-ordinator, who will be identified prior to occupation.

6.13 Funds will be made available for the development of the full DSP and the on-going monitoring and review.

6.14 Table 6.1 below sets out programme for monitoring and review of the DSP.

Table 6.1: Programme of Monitoring and Review

Action	Timescale
Baseline employee and visitor and delivery travel surveys	Within 6 months of occupation or at 75% occupancy
Produce a full DSP	Within 7 months of occupancy
Future servicing and delivery surveys	3rd and 5th Year
Feedback to the tenants	Quarterly – following meetings
Undertake comprehensive strategic review of all aspects of the DSP (including the objectives, targets, the action plan and the monitoring programme)	6 months, 3rd and 5th Year

7 Conclusions

7.1 This report has presented the proposed servicing and delivery strategy for the 150 Holborn development. The future servicing demands of the site have been estimated and the report demonstrates these can be met.

7.2 A toolkit of measures are proposed to be taken forward as the DSP evolves over time in order to encourage sustainable freight movements to 150 Holborn and to reduce unnecessary servicing and delivery trips, particularly during peak times.

7.3 Targets will be developed following occupation. The Targets will ensure future monitoring and progress of the DSP.

7.4 The report sets out how the DSP will be managed, reviewed and monitored, ensuring future commitment to the development of this document. This report is therefore considered to be a living document as it will evolve over time.

7.5 The report demonstrates the commitment by the applicant to encourage sustainable modes of freight travel to and from the proposed development in the future.

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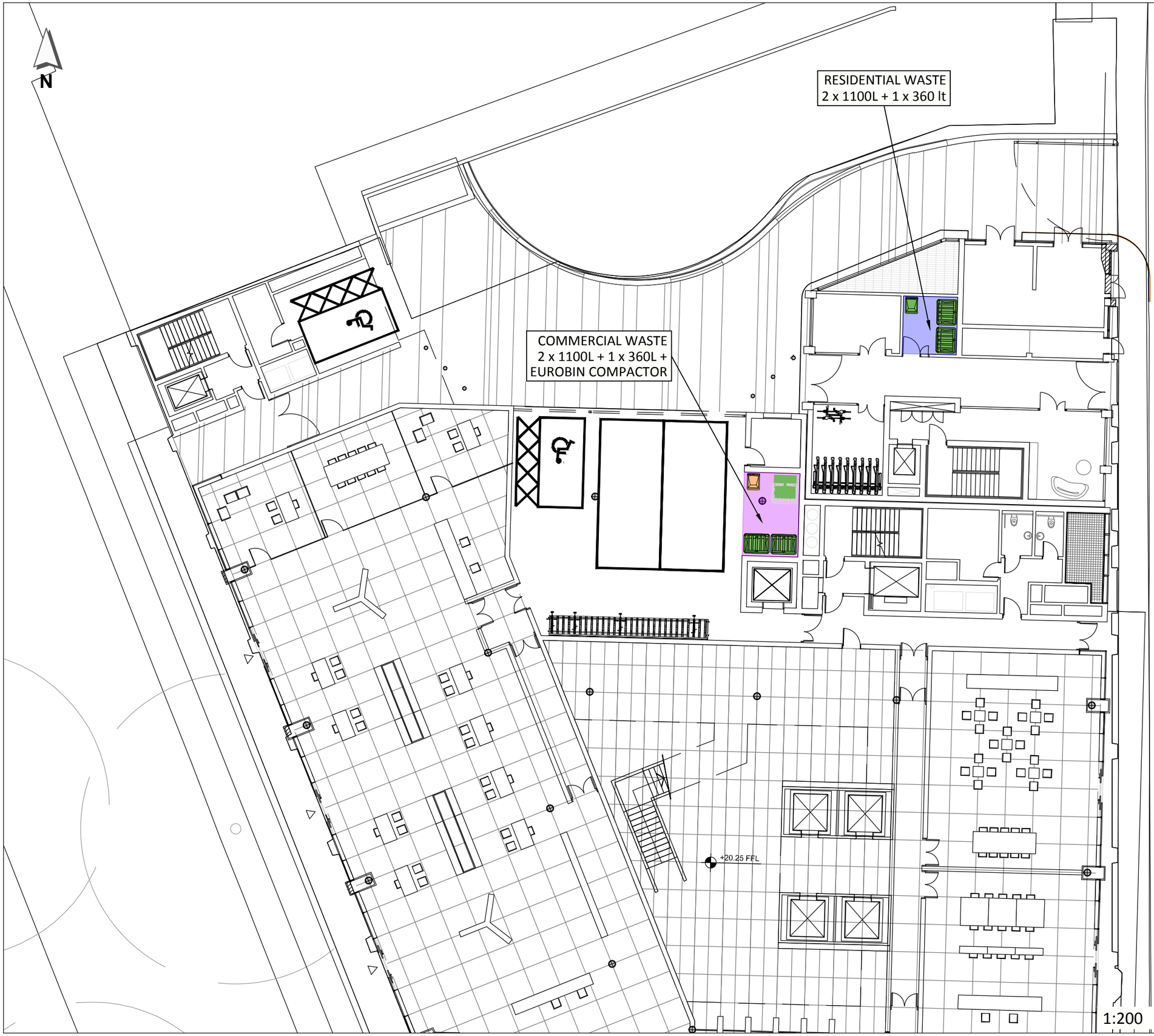
Appendices

A Waste Management Facilities



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□E□:

- COMMERCIAL WASTE STORAGE
- RESIDENTIAL WASTE STORAGE
- 360L WHEELED BIN
- 1100L EUROBIN
- EUROBIN COMPACTOR

Rev.	Date	Comments	Des	Chk	App
A	04/03/16	REVISED FOR PLANNING ISSUE	MSB	JZC	DMZ
-	02/03/16	ORIGINAL ISSUE	MSB	JZC	DMZ

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Client :

DAH REAL ESTATE SARL

Title:

150 HOLBORN

GROUND FLOOR
WASTE MANAGEMENT FACILITIES

Drawing No.	Sheet No.	Rev.
22888501-GF-WAS-01	01 OF 02	A

1:200 @ A3

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DATE: 04/03/2016

B Swept Path Analysis – 7.5T Box Van

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7.5t Box Van

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7.5t Box Van

1:200 @ A3

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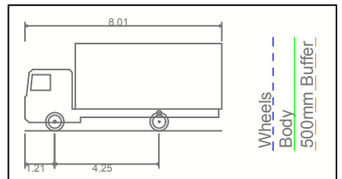
SERVICING AREA x 2 SPACES

DISABLED PARKING BAY x 2 SPACES



7.5T Box Van

Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	7.400m

Rev.	Date	Comments	Des	Chk	App
-	02/03/16	ORIGINAL ISSUE	MSB	JZC	DMZ

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Client :

DAH REAL ESTATE SARL

Title:

150 HOLBORN

GROUND FLOOR
SERVICING AREA AND CAR PARKING
SWEPT PATH ANALYSIS

Drawing No.	Sheet No.	Rev.
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DATE: 03/03/2016

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7.5T Box Van

7.5T Box Van

NOTES:

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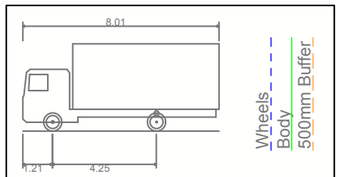
SERVICING AREA x 2 SPACES

DISABLED PARKING BAY x 2 SPACES



7.5T Box Van

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-	02/03/16	ORIGINAL ISSUE	MSB	JZC	DMZ

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Client :

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Title:

150 HOLBORN

GROUND FLOOR
SERVICING AREA AND CAR PARKING
SWEPT PATH ANALYSIS

Drawing No.	Sheet No.	Rev.
22888501-GF-SER-01	03 OF 04	-

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DATE: 03/03/2016

C Swept Path Analysis – Refuse Lorry

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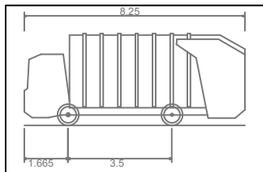
4. CLEAR HEAD HEIGHT OF 4.5m REQUIRED FOR BIN UPLIFT



Small Refuse Vehicle (2 axle)

Overall Length	8.250m
Overall Width	2.500m
Overall Body Height	3.205m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	8.750m

Rev.	Date	Comments	Des	Chk	App
A	04/03/16	REVISED FOR PLANNING ISSUE	MSB	JZC	DMZ
-	02/03/16	ORIGINAL ISSUE	MSB	JZC	DMZ

steer davies gleave

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Client :

DAH REAL ESTATE SARL

Title:

150 HOLBORN

GROUND FLOOR
WASTE MANAGEMENT FACILITIES

Drawing No.	Sheet No.	Rev.
22888501-GF-WAS-01	02 OF 02	A

1:200 @ A3

CAD REFERENCE: U:\London\Projects\228\8\85\01\CAD\Drawings\22888501-GF-WAS-01 - 02

DATE: 04/03/2016