THE GOODSYARD

Transport Assessment

September 2019 - Part 1 of 3

ballymore.

Hammerson

CONTENTS

Quality Management

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1.0 PREFACE

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1.1.1 This is a Transport Assessment prepared by WSP.

1.1.2 It is submitted in relation to amendments (“Proposed Amendments”) that are being made to the planning applications and applications for listed building consent (the "Applications") for the redevelopment of Bishopsgate Goodsyard. The Applications as amended by the Proposed Amendments form the "Revised Scheme".

1.1.3 On 21st July 2014 Bishopsgate Goodsyard Regeneration Limited (the "Applicant") submitted the Applications to the London Borough of Hackney and the London Borough of Tower Hamlets (the "Boroughs").

1.1.4 On 23rd September 2015 the then Mayor of London directed that he would act as local planning authority for the purposes of determining the Applications.

1.1.5 On 12th April 2016 the then Mayor deferred the determination of the Applications to allow the Applicant to address the issues raised in the Stage III Report.

1.1.6 The Applicant has carefully reviewed the issues raised in the Stage III Report and has liaised closely with the Mayor of London, the Boroughs and other stakeholders and consultees and is now submitting amendments to the Applications to address their feedback.

1.1.7 In broad terms, the Applicant is making the following Proposed Amendments to the Applications:

Plot 1 (Formerly Plots A and B)

1.1.8 The Proposed Amendments maintain the height of the building and the type of uses, as currently proposed and retains the bridging over the East London Line box. The building massing is proposed to be revised to include setbacks at the upper levels as a result of feedback from the GLA and the Boroughs to address the relationship with adjacent buildings.

Plot 2 (Formerly Plots F and G)

1.1.9 The Proposed Amendments replace the two tallest residential buildings with a commercial building with retail at the ground floor. The building would extend up to 17 - 29 storeys and would be the tallest building proposed. This building is being submitted with all matters in detail.

1.1.10 The reduction in height of Plot 2 means that no part of the scheme is now visible in views from the South Bastion of Tower Bridge.

Plot 3 (Formerly Plot K)

1.1.11 The Proposed Amendments maintain the height and footprint of the building and the type of uses, as currently proposed. The Proposed Amendments address design comments in respect of the treatment to Phoenix Street and the listed Oriel Wall along Commercial Street.

Plot 4 (Formerly Plot C)

1.1.12 The Proposed Amendments maintain the uses within this building and comprise retail at ground floor with residential above. The height of the building is proposed to be reduced to 19 storeys.

Plot 5 (Formerly Plot D)

1.1.13 The Proposed Amendments maintain the uses within this building and comprise retail at ground floor with residential above. The height of the building is proposed to be reduced to between 6 -13 storeys.

Plot 6 (Formerly Plot E)

1.1.14 The Proposed Amendments change the use of this building to a cultural type use with retail use. The height of the building is proposed to be reduced to up to 5 storeys in order to address comments raised by the GLA in respect of daylight and sunlight impacts along Sclater Street and the massing in the north-east part of the site.

Plots 7, (Formerly Plots H, I, J), 8A, 8B, 8C, 10 and 11 (the Pavilion)

1.1.15 The Proposed Amendments maintain the mix of retail uses within the Oriel as well as the potential for Class D1/D2 uses within the Braithwaite arches with public open space above, as currently proposed (Plot 7). Plot 8 introduces hotel and residential uses with access at ground floor level within a 25 storey building to the west of Braithwaite Street, plus 4 storey buildings on top of the existing arches. The Proposed Amendments introduce residential within Plot 10 with retail at ground floor. The Proposed Amendments introduce retail use within a single storey building in Plot 11.

Public Open Space

1.1.16 The overall amount of public space as part of the Proposed Amendments would increase at platform level, including an area of consolidated open space at the eastern end of the platform.

1.1.17 The Proposed Amendments, and the rationale for them, are explained fully in the Planning Statement prepared by DP9 Ltd.

1.1.18 The Proposed Amendments to the Applications have required some changes to be made to the Transport Assessment and other documentation originally submitted with the Applications.

1.1.19 Rather than issuing tracked changed documents, the Applicant has issued this revised Transport Assessment which replaces in its entirety that submitted previously.

2.0 INTRODUCTION

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2.1 BACKGROUND

2.1.1 Bishopsgate Goodsyard Regeneration Limited ("the Applicant") submitted identical planning applications for the Proposed Development on the 21st July 2014 to both LB Hackney ("LBH") and LB Tower Hamlets ("LBTH") for determination.

2.1.2 Following further consultation with LBH and LBTH, amendments to the planning applications were submitted in August 2015 ("the 2015 Amended Scheme").

2.1.3 On 15th September 2015 the former Mayor received a request to become the local planning authority for the purpose of determining the two planning applications at the Bishopsgate Goodsyard site. On 23rd September 2015, having considered a report on the case, the former Mayor notified LBH and LBTH that he would act as the local planning authority for the purposes of determining the planning applications. The Stage 3 report was published on 8th April 2016 and a public representation hearing was due to be held in April 2016 for the former Mayor to determine the applications. However, following a request from the Applicant to defer the representation hearing in order to work with GLA officers to satisfactorily address the concerns raised, the former Mayor decided to defer the representation hearing for that purpose.

2.1.4 Since that time, the Applicant has been working with the officers at the GLA, LBTH and LBH with regard to the submission of amendments to the current planning applications for determination by the current Mayor.

2.2 DESCRIPTION OF THE 'APPLICATIONS'

2.2.1 It should be noted that references in this document to 'application' should be taken to read 'applications' reflecting the fact that two identical planning applications were originally submitted – one to the LBH and one to the LBTH with each borough tasked with determining consent for the extent of the Proposed Development that fell within each respective area. Therefore, references to 'planning permission; should be taken to read 'planning permissions' given that two planning permissions will be required for the Proposed Amendments to proceed in its entirety.

2.3 SITE DESCRIPTION

2.3.1 The site is approximately 4.4 ha and is centred at Ordnance Survey (OS) National Grid Reference (NGR) TQ 33618 82233. The site has been in a derelict state since a fire in December 1964 and demolition of buildings on-site in 2004. In 2010 the Shoreditch High Street Rail Station opened in the centre of the site, serving the East London Line (London Overground) between Highbury & Islington and several stations south of the River Thames.

2.3.2 The site is bounded by transportation infrastructure in the form of road and rail. The site is bounded by the A1209 Bethnal Green Road and Sclater Street to the north, Brick Lane to the east and the A10 Shoreditch High Street to the west. The Great Eastern Main Line and West Anglia Main Line railways from Liverpool Street station form most of the southern boundary of the site, with the A1202 Commercial Street to the southwest. Wheeler Street / Braithwaite Street run north/south through the centre of the site. Aside from the Shoreditch High Street Rail Station building and associated elevated London Overground rail line, there are currently no other permanent buildings on the site. As of December 2011, there are several temporary 'recycled metal shipping containers' used as a pop-up retail mall known as the 'Boxpark'.

2.3.3 Through the centre of the site in a west/east orientation are multiple games pitches, including eight 'five-a-side' football pitches operated by Powerleague Fives Ltd. The southern section of the site including the listed arches and viaduct is vacant and overgrown with scrub-like vegetation and several low value trees.

2.4 DESCRIPTION OF THE PLANNING APPLICATION

2.4.1 The 2015 Amended Scheme proposed the comprehensive mixed use redevelopment of the site comprising of up to 1,356 residential units (Class C3), up to 65,859 m2 Gross Internal Area (GIA), retail (Class A1, A2, A3 and A5) up to 17,499 m^2 GIA, assorted uses (Class D1, D2, sui generis) and 22,642 m^2 of new public open space and landscaping.

2.4.2 Following further consultation with the GLA, LBTH and LBH, the Applicant now submits the Proposed Amendments which consist of: a comprehensive redevelopment of the site which will include the provision of up to 139,023 m^2 Gross External Area (GEA) of commercial floorspace (B1 use), up to 19,547 m^2 GEA of retail floorspace (A1, A2, A3 and A5 use) the provision of up to 500 residential homes and the provision for up to a 150 room hotel and public realm.

2.5 PLANNING DEVELOPMENT DESCRIPTION (BY LOCAL AUTHORITY)

LB Hackney Description of Development

2.5.1 An OUTLINE application for the comprehensive mixed use redevelopment of the site comprising:

- Residential (Class C3) comprising up to 500 residential units;
- Business Use (Class B1) – up to 130,940 m² (GIA);
- Hotel (Class C1) – up to 11,013 m² (GIA)
- Retail, financial and professional services, restaurants and cafes and hot food takeaways (Class A1, A2, A3 and A5) – up to 18,390 m² (GIA) of which only 3,678 m² (GIA) can be used as Class A5;

- Non-residential Institutions (Class D1) / Assembly and Leisure (Class D2) – up to 6,363 m² (GIA);
- Public conveniences (sui generis) – up to 298 m² (GIA);
- Basement, ancillary and plant space – up to 21,216 m² (GIA);
- Formation of new pedestrian and vehicular access; means of access and circulation and car parking within the site; and
- Provision of new public open space and landscaping.

2.5.2 The application proposes a total of 10 buildings that range in height, with the highest being 142.4m AOD and the lowest being 19.0m AOD.

2.5.3 With all matters reserved save that FULL DETAILS for Plot 2 are submitted for alterations to, and the partial removal of, existing structures on the site and the erection of a building for office (Class B1) and retail use (Class A1, A2, A3, A5) comprising a part 17 / part 29 storey building; and Plot 7 A, B, C and D comprising the use of the ground level of the Braithwaite Viaduct for retail and food and drink uses (A1, A2, A3, A5) and works to and use of the Oriel and adjoining structures for retail and food and drink uses (A1, A2, A3, A5).

2.5.4 For that part of the site within LB Hackney, the proposed development comprises the following mix of uses:

- Up to 109,599 m² (GIA) of Business Use (Class B1);
- Up to 4,509 m² (GIA) of Retail Use (Class A1, A2, A3 and A5), of which only 902 m² (GIA) can be used for hot food takeaways (Class A5);
- Up to 2,254 m² (GIA) of Class D1 / D2 use;
- Up to 12,752 m² (GIA) of ancillary and plant space.

LB Tower Hamlets Description of Development

- "Residential (Class C3) comprising up to 500 residential units;
- Business Use (Class B1) – up to 130,940 m² (GIA);
- Hotel (Class C1) – up to 11,013 m² (GIA)
- Retail, financial and professional services, restaurants and cafes and hot food takeaways (Class A1, A2, A3 and A5) – up to 18,390 m² (GIA) of which only 3,678 m² (GIA) can be used as Class A5;
- Non-residential Institutions (Class D1) / Assembly and Leisure (Class D2) – up to 6,363 m² (GIA);
- Public conveniences (sui generis) – up to 298 m² (GIA);
- Basement, ancillary and plant space – up to 21,216 m² (GIA);
- Formation of new pedestrian and vehicular access; means of access and circulation and car parking within the site; and
- Provision of new public open space and landscaping.

2.5.5 The application proposes a total of 10 buildings that range in height, with the highest being 142.4m AOD and the lowest being 19.0m AOD.

2.5.6 With all matters reserved save that FULL DETAILS for Plot 2 are submitted for alterations to, and the partial removal of, existing structures on the site and the erection of a building for office (Class B1) and retail use (Class A1, A2, A3, A5) comprising a part 17 / part 29 storey building; and Plot 7 A B, C and D comprising the use of the ground level of the Braithwaite Viaduct for retail and food and drink uses (A1, A2, A3, A5) and works to and use of the Oriel and adjoining structures for retail and food and drink uses (A1, A2, A3, A5).

2.5.7 For that part of the site within LB Tower Hamlets, the proposed development comprises the following mix of uses:

- Up to 44,067 m^2 (GIA) of residential use (Class C3);
- Up to 21,341 m^2 (GIA) of Business Use (Class B1);
- Up to 11,013 m^2 (GIA) of Hotel Use (Class C1);
- Up to 13,881 m^2 (GIA) of Retail Use (Class A1, A2, A3, A5) of which only 2,776 m^2 (GIA) can be used for hot food takeaways (Class A5);
- Non-residential Institutions (Class D1) / Assembly and Leisure (Class D2) – up to 4,109 m^2 (GIA);
- Up to 298 m^2 (GIA) of sui generis use;
- Up to 8,464 m^2 (GIA) of ancillary and plant space.

2.5.8 The Revised Scheme also includes works which require listed building consent and therefore revised applications under the Planning (Listed Building and Conservation Areas) Act 1990 for listed building consent, have been submitted for the following:

Listed Building Consent Application (Plot 7 A)

2.5.9 "Restoration and repair of the existing Grade II listed oriel and gates and adjoining historic structures to provide a principal western pedestrian gateway into the scheme and to accommodate proposed Class A1/A2/A3/A5/ use into a number of the existing arches at ground floor. Part removal of a section of adjoining structures proposed to provide improved public realm and pedestrian access into the site."

Listed Building Consent Application (Plot 7 B, C, D)

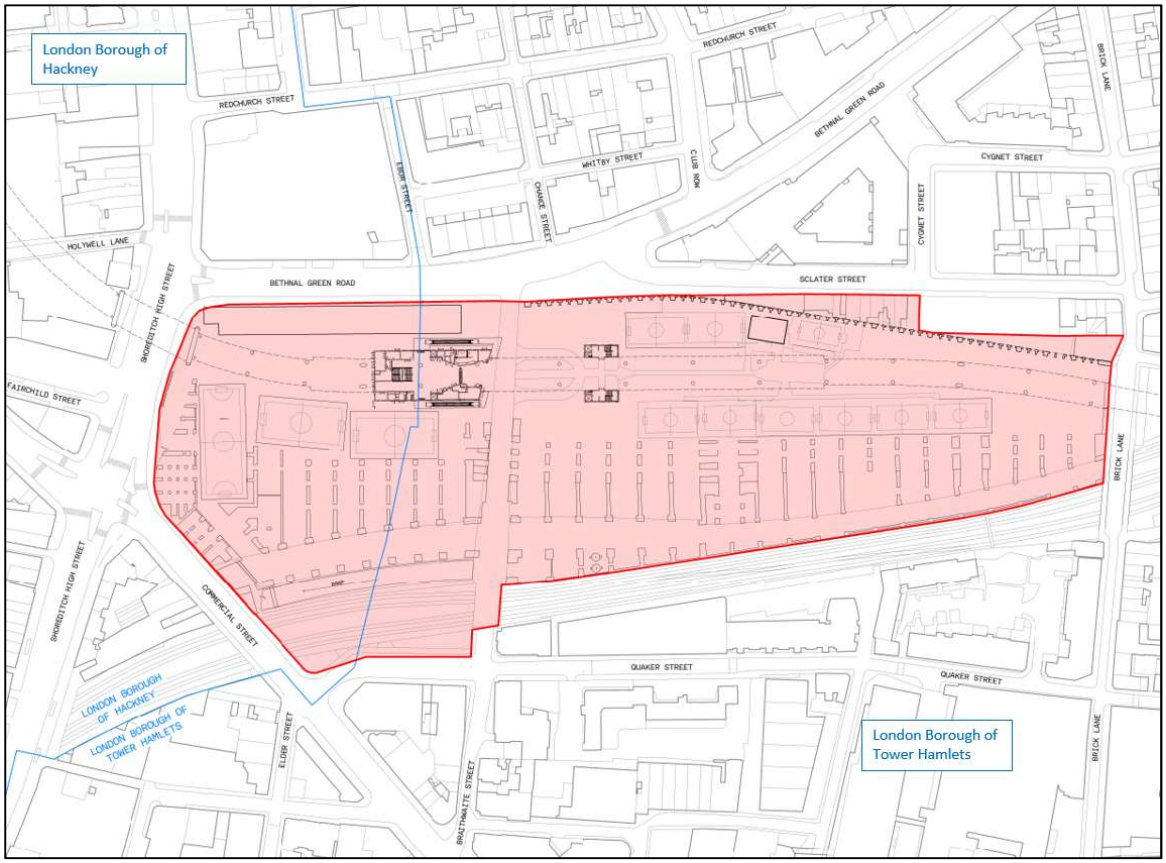
2.5.10 "Restoration and repair of the existing Grade II listed Braithwaite Viaduct and adjoining structures for proposed Class A1/A2/A3/A5/D1/D2 and sui generis use at ground level. Structural interventions proposed to stabilise London Road structure, removal of sections of London Road roof to create openings over proposed new public squares; formation of new shopfront openings, installation of new means of public access up to park level. Part removal of adjoining unlisted wall on Brick Lane to provide improved public realm and pedestrian access into the site."

2.6 SITE LOCATION

2.6.1 This Transport Assessment (TA) deals with matters of highway and transport planning relating to the revised redevelopment proposals at The Goodsyard site, also known as Bishopsgate Goods Yard (BGY) ("the site"), which is located on land surrounding Shoreditch High Street station in London.

2.6.2 The site location is shown in Figure 13.1, showing the location of the site on the borough boundary line between LBH and LBTH. The proposed redevelopment of the site is referred to in this document as "the Proposed Development".

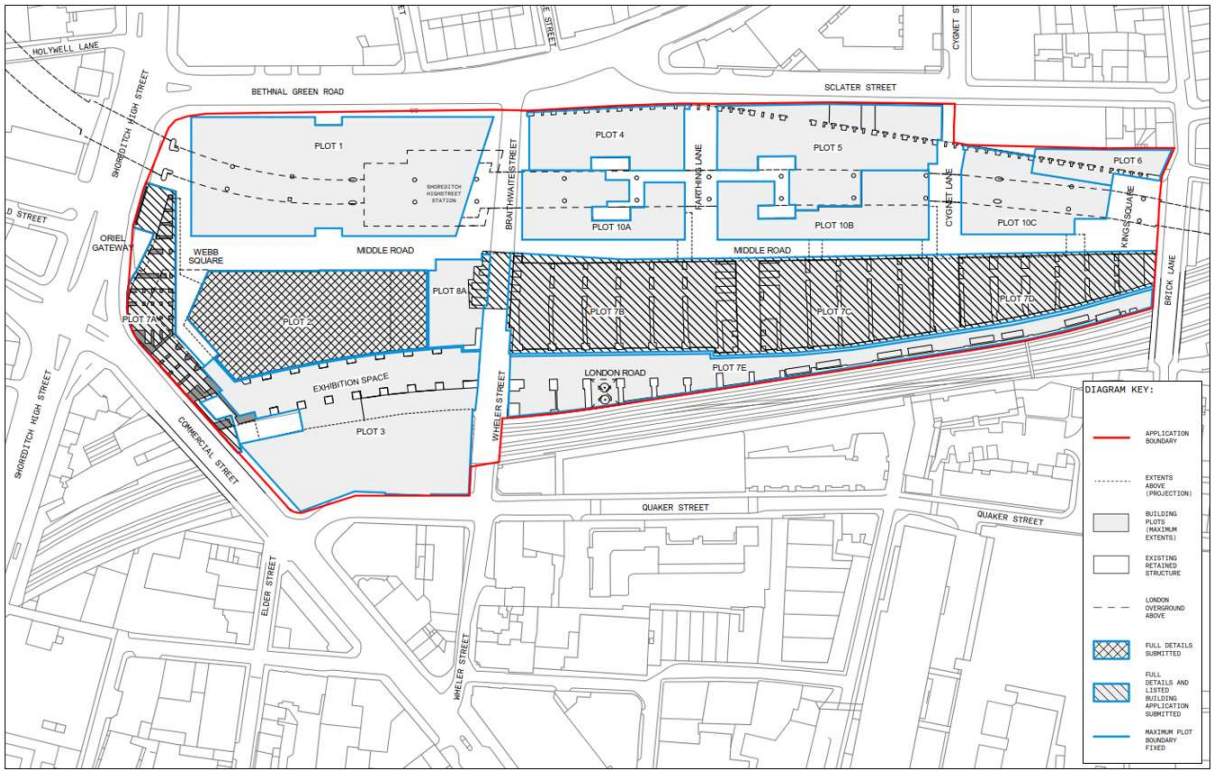
Figure 13.1: Site Location Plan



2.7 PLANNING APPLICATIONS

2.7.1 The plans submitted as part of the planning application show the site divided into Plots, within which the buildings will be developed. The layout of the Plots is shown in Figure 2.2.

Figure 13.2 Division of the Site into Plots



2.7.2 The planning application includes a detailed application for Plot 2, and listed building applications for Plots A, B, C and D. The remainder of the Plots form the outline application.

2.7.3 The outline planning application will seek approval for the quantum of development, with a maximum and minimum quantum for each use and Plot.

2.7.4 The full schedule of development is provided later within the report. Where the range in the quantum of development is provided, the Transport Assessment will consider the Maximum Scenario only to provide a robust assessment.

2.7.5 The Transport Assessment will also consider a 'Limited Development Scenario, which will review the maximum quantum of development that sits wholly within the LBTH.

2.7.6 The proposed development would be constructed in phases, with Plots 2 and 7, which form the detailed application, being the initial phase of development. The details of the development phasing are provided later within the report.

2.8 REPORT STRUCTURE

2.8.1 The remainder of this report is set out as follows.

- Chapter 3 - outlines relevant transport policy at a national, regional and local level and how these will be delivered as part of the development proposals;
- Chapter 4 - describes the site location, surrounding area and existing site uses;
- Chapter 5 - considers the accessibility of the site on foot;
- Chapter 6 - considers the accessibility of the site by cycle;
- Chapter 7 - considers the accessibility of the site by public transport;
- Chapter 8 - details existing conditions on the surrounding highway network;
- Chapter 9 - provides details of the proposed development in terms of land use, access, parking and servicing arrangements, identifying how design supports policy considerations;
- Chapter 10 – details assumptions in respect to trip generation of the existing site uses;
- Chapter 11 – details relevant committed and planned developments and associated trip generation;
- Chapter 12 - assesses the trip attracting potential of the proposals (for Maximum Build Out, Detailed Scheme Components and the Limited Development Scenario);
- Chapter 13 - considers the effect of development on the local pedestrian infrastructure;
- Chapter 14 - considers the effect of development on the local cycle network;
- Chapter 15 - considers the effect of development on the local public transport network;

- Chapter 16 - considers the effect of development on the local highway network;
- Chapter 17 – provides an outline Construction Logistics Plan;
- Chapter 18 – provides a draft Delivery and Servicing Plan;
- Chapter 19 – provides Draft Travel Plans; and
- Chapter 20 - sets out our summary and conclusions.

3.0 POLICY CONTEXT

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3.1 Introduction

3.1.1 The development proposals seek to respond to strategic transport policies, by increasing the proportion of trips made by walking, cycling and public transport. The development site is well located for access to public transport facilities, with a Public Transport Accessibility Level (PTAL) of 6b, showing excellent public transport accessibility; and has excellent connections to existing walking and cycling routes.

3.1.2 The key parts of the development proposals which illustrate how strategic transport policies will be delivered include:

- The development proposals are car-free with only disabled parking provided;
- Provision of a new routes through the site to increase permeability and improve the street density;
- Within the site, space is designed for pedestrian use, with servicing vehicle access managed accordingly;
- Provision of long-stay and short-stay cycle parking, well located, accessible and of an appropriate type and quantity;
- Proposed pedestrian crossing on Bethnal Green Road;
- Widening of footways surrounding the site, including on Shoreditch High Street and Commercial Street;
- Creating of new pedestrian and landscaped area at podium level; and
- Delivery and servicing facilities are provided on-site.

3.1.3 The remainder of this chapter sets out the relevant transport policy documents against which the proposed development will be considered at a national, regional and local level. Specifically, an overview of the following documents is provided.

- NPPF (February 2019);
- National Planning Practice Guidance (March 2018);
- The London Plan (March 2016);
- Draft New London Plan showing Minor Suggested Changes (August 2018);
- The Mayor's Transport Strategy (March 2018);
- Transport for London, Walking Action Plan (July 2018)
- LBH Local Development Framework Core Strategy (November 2010-2025);
- LBH Local Development Framework Development Management Local Plan (July 2015);

- LBH Sustainable Transport Strategy Supplementary Planning Document (SPD) (2015-2025)
- LBH Local Development Framework South Shoreditch Supplementary Planning Document (February 2006);
- LBTH Local Plan Core Strategy (September 2010);
- LBTH Local Plan Managing Development Document (April 2013); and
- Bishopsgate Goods Yard Interim Planning Guidance (2010).

3.2 NATIONAL POLICY

National Planning Policy Framework (February 2019)

3.2.1 The purpose of the planning system is to contribute to the achievement of sustainable development. Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways, (so that opportunities can be taken to secure net gains across each of the different objectives):

- An economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
- A social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- An environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

3.2.2 Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- The potential impacts of development on transport networks can be addressed;
- Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- Opportunities to promote walking, cycling and public transport use are identified and pursued;
- The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities

for avoiding and mitigating any adverse effects, and for net environmental gains; and

- Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

3.3 REGIONAL POLICY

The London Plan (March 2016)

3.3.1 The London Plan was initially published in July 2011 with subsequent alterations since adopted; Revised Early Minor Alterations to the London Plan in October 2013, Further Alterations to the London Plan (FALP) in March 2015 and Minor Alterations to the London Plan in March 2016 with a fix version in January 2017. The London Plan aims to ensure that London's transport is easy, safe and convenient for everyone and actively encourages more walking and cycling and makes better use of the Thames.

3.3.2 The London Plan recognises that transport plays a fundamental role in addressing the whole range of spatial planning, environmental, economic and social policy priorities. It is critical to the efficient functioning and quality of life of London and its inhabitants, having major effects on places, especially around interchanges and in town centres and on the environment, both within the city itself and more widely.

3.3.3 Policy 6.1 states the importance of closer integration of transport and development and hopes to encourage this by (inter alia):

"Encouraging patterns of development that reduce the need to travel, especially by car;

- Seeking to improve the capacity and accessibility of public transport, walking and cycling, particularly in areas of greatest demand;
- Supporting development that generates high levels of trips only at locations with high levels of public transport accessibility, either currently or via committed, funded improvements;
- Improving interchange between different forms of transport, particularly around major rail and underground stations, especially where this will enhance connectivity in outer London;
- Facilitating the efficient distribution of freight whilst minimising its impacts on the transport network;
- Supporting measures that encourage shifts to more sustainable modes and appropriate demand management;

- Promoting greater use of low carbon technology so that CO2 and other contributors to global warming are reduced;
- Promoting walking by ensuring an improved urban realm; and
- Seeking to ensure that all parts of the public transport network can be used safely, easily and with dignity by all Londoners, including by securing step-free access where this is appropriate and practicable."

3.3.4 Policy 6.3, regarding the effects of development on transport capacity, states that new developments which will give rise to significant numbers of new trips should be located either where there is already good public transport provision with capacity adequate to support the additional demand, or where such high-quality provision is being introduced. Phasing development, the use of Travel Plans and addressing freight issues may all help reduce the impact of the development.

3.3.5 Policy 6.10, relating to walking, states that "development proposals should ensure high quality pedestrian environments and emphasise the quality of the pedestrian and street space."

3.3.6 Cycle parking standards relevant to this planning application, as set out within the Draft New London Plan, provided in the following section.

Draft New London Plan showing Minor Suggested Changes (August 2018)

3.3.7 The Draft New London Plan was issued for consultation in November 2017 and is set to be adopted in autumn 2019. The document aims to ensure that London's transport is easy, safe and convenient for everyone, and encourages the use of cycling, walking and public transport. The Mayor's key target, as set out in Policy T1 is that 80% of all trips in London are to be made by foot, cycle or public transport by 2041.

3.3.8 The Draft New London Plan recognises that London's challenges of guaranteeing its status as an efficient, well-functioning globally-competitive city are intertwined with the obstacles and opportunities that transport brings. It states that the integration of land use and transport is essential in realising and maximising growth and ensuring that different parts of the city are connected in a sustainable and efficient way.

3.3.9 In order to achieve this, the Draft New London Plan acknowledges that a strategic shift is needed to reduce Londoners' dependency on the car, creating a healthy, pleasant and sustainable street environment in which people can walk, cycle and use public transport.

3.3.10 'Policy T2 Healthy Streets' outlines that development proposals should:

- Demonstrate how they will deliver improvements that support the ten Healthy Streets Indicators in line with Transport for London Guidance;
- Reduce the dominance of vehicles on London's streets whether stationary or moving; and
- Be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.

3.3.11 'Policy T4 Assessing and mitigating transport impacts' states that development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity. It is acknowledged that transport assessments should be submitted with development proposals where appropriate and 'focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development.'

3.3.12 The residential car parking standards for outer London Opportunity Areas allow for a maximum provision of up to 0.5 spaces per unit. Blue badge provision should be provided for 3% of dwellings.

3.3.13 In total 20% of all spaces must have active charging provision for electric vehicles with the remaining bays all providing passive charging facilities.

3.3.14 For residential development, the London Plan requires that adequate parking spaces for disabled users must be provided preferably on-site and refers to Housing Supplementary Planning Guidance (Nov 2012) and Accessible London (Oct 2014).

3.3.15 Cycle parking standards relevant to the proposed development are summarised in Table 3.1.

Table 3.1: New Draft London Plan – Minimum Cycle Parking Standards

Land Use Class	Draft New London Plan - Minor Suggested Changes (August 2018)	
	Long Stay	Short Stay
A1 Retail (food)	from a threshold of 100 sqm: 1 space per 175 sqm gross external area (GEA)	from a threshold of 100 sqm: first 750 sqm: 1 space per 20 sqm; thereafter: 1 space per 150 sqm (GEA)
A1 Retail (non-food)	from a threshold of 100 sqm: first 1000 sqm: 1 space per 250 sqm thereafter: 1 space per 1000 sqm (GEA)	from a threshold of 100 sqm: first 1000 sqm: 1 space per 60 sqm; thereafter: 1 space per 500 sqm (GEA)
A2-A5 Restaurants / Cafes	from a threshold of 100 sqm: 1 space per 175 sqm (GEA)	from a threshold of 100 sqm: 1 space per 20 sqm (GEA)
B1 Office	1 space per 75 sqm	first 5,000 sqm: 1 space per 500 sqm thereafter: 1 space per 5,000 sqm (GEA)
C1 Hotels	1 space per 20 bedrooms	1 space per 50 bedrooms
C3-C4	1 space per studio or 1 person 1 bedroom dwelling 1.5 spaces per 2 person 1 bedroom unit dwelling 2 spaces per all other dwellings	5 to 40 dwellings: 2 spaces Thereafter: 1 space per 40 units dwellings
D1	1 space per 8 FTE staff	1 space per 100 sqm (GEA)
D2	1 space per 8 FTE staff	1 space per 100 sqm (GEA)

The Mayor's Transport Strategy (2018)

3.3.16 The Mayor's Transport Strategy 2018 focuses on the Healthy Streets Approach, aimed at improving London's Streets in terms of the following:

- Active, inclusive and safe travel;
- Making more efficient use of the street network; and

- Improve air quality and the environment.

3.3.17 The Healthy Streets Approach focuses on reducing car dependency by creating a better and healthier approach to street design. The Healthy Streets Approach provides the framework for putting human health and experience at the heart of planning the city.

Transport for London, Walking Action Plan (July 2018)

3.3.18 The Walking Plan for London was published by the Mayor in July 2018, supporting the vision of the Mayor's Transport Strategy. The plan provides "…specific proposals for walking, using the framework set out in the Mayor's Transport Strategy. All the proposals will be in principle in line with the Healthy Street Approach and better walking environment design philosophy.

3.4 LOCAL POLICY

LBH Local Development Framework Core Strategy (November 2010-2025)

3.4.1 The core strategy is the primary and strategic document in the LBH Local Development Framework (LDF). It sets out a long term spatial vision and strategic objectives for future development in the area up to 2025. Policy 33 focuses on promoting sustainable transport and states:

"Hackney is committed to prioritising sustainable transport, walking and cycling over private car use, and providing safe and convenient access to rail and bus travel. The need to travel will be reduced through the efficient spatial arrangement of activities and land use throughout the borough. Significant trip generating development should be located in areas with high PTAL scores (5 or above), such as Town Centres or identified Growth Areas.

Travel plans will be required for all development over a certain size. To minimise noise and disturbance, operations that require heavy movement of goods should be located close to the higher level road network as defined by Transport for London.

Car parking will be controlled in line with regional policy and the local parking standards in the emerging Sustainable Transport SPD. Where appropriate car-free developments, car club bays and electric vehicle charging provision will be required."

LBH Local Development Framework Development Management Local Plan Publication Version (July 2015)

3.4.2 LBH's Development Management Local Plan (Publication Version) was published in July 2015. This document sets out the proposed planning policies which the Borough uses to assess planning applications. Chapter 8 of the Development Management Local Plan focuses on Transport and confirms the Councils desire to seek to improve the attractiveness and transport capacity through its development management policies.

3.4.3 Policy DM44 prioritises certain travel modes, following a hierarchy from pedestrians at the top, through to cyclists and public transport users down to road freight and car users. In line with this, new developments "will be required to promote walking and cycling permeability and ensure that linkages and publicly-accessible through routes are created to successfully integrate the development into the wider street network."

3.4.4 Policy DM45 requires development proposals to take account of their potential impacts on public transport capacity at major growth points (including Shoreditch), as well as ensuring that the development is accessible to pedestrians/cyclists and to vehicles associated with the development.

3.4.5 In line with the aim of reducing the demand for car trips, LBH expects car-free and car-capped development proposals, particularly in areas with a Public Transport Accessibility Level (PTAL) of 4 or greater, known parking stress or a location which could generate large amounts of traffic. Paragraph 8.4.3 states:

"Maximum parking standards will be provided in future Council supplementary guidance. However, as a general guide, the Council will encourage lower parking provision than the current London Plan standards."

3.4.6 Policy DM46 'Walking and Cycling' states:

- 'Take full account of the needs of pedestrians, cyclists and other users including those with disabilities;
- Provide for generous levels of secure cycle parking (as per London Plan Standards' and sufficient provision of changing and shower facilities for cyclists in employment sites;
- Contribute financially to publicly-accessible cycle parking located in the public realm within the vicinity of the Site;
- Promote walking and cycling safety, through providing high quality street environment and well lit, signed and well maintained thorough fares and safe facilities for crossing roads, junctions and at transport interchanges;
- Ensure new roads are designed for reduced traffic speeds;
- Ensure accessibility for pedestrians and cyclists is maintained at all times with presumption in favour of maximum permeability for cycling; and
- Consider 'desire lines' to key local facilities including shops and schools, including safer routes to schools and public transport links.

LBH Sustainable Transport Strategy Supplementary Planning Document (SPD) (2015-2025)

3.4.7 The general purpose of Hackney's Transport Strategy 2015 – 2025 is to encourage more walking, cycling and use of public transport for those who live, work and visit the borough. The document plans out the vision for Hackney leading up to 2025, with further mode-specific plan detailed in other supplementary documents. The SPD sets out how new development will be expected to contribute to achieving this objective. Below is a summary of some of the key policies that are deemed pertinent to this development.

3.4.8 The overarching vision is:

'By 2025 Hackney's transport system will be an exemplar for sustainable urban living in London. It will be fair, safe, accessible, equitable, sustainable and responsive to the needs of its residents, visitors and businesses, facilitating the highest quality of life standards for a borough in the Capital and leading London in its approach to tackling its urban transport challenges of the 21st Century'.

3.4.9 The vision focuses on prioritising the needs of pedestrians and cyclists above motor traffic, stating that:

"New development will be expected to contribute to the creation of an attractive, safe, and well-maintained public realm that facilitates high levels of walking and cycling".

3.4.10 Chapter 10 and 11 of the Sustainable Transport Strategy focuses on parking and states:

'The effective management of parking spaces is a key determinant of transport mode choice and an important tool for tackling congestion and local pollution in the Borough.'

3.4.11 Permitted off-street parking requires:

'1 in 5 residential parking spaces to have electric charging points'

3.4.12 Appendix 1 sets out the Car Parking Standards for a PTAL of 3-4 (Maximum standard), which is detailed in Table 3.2.

Table 3.2: Hackney's Car Parking Standards

Land Use	Car Parking Standards
A1 Retail (Food)	Up to 1,000sqm: No off-street parking provision (PTAL 3 and 4)
A1 Retail (Non-food)	

A3 Retail	No off-street parking provision (PTAL 3 and 4)
B1 Office	No off-street parking provision (PTAL 3 and 4) with exception of demonstrated operational need and provision for staff with disabilities
C3	PTAL 4 – No off-street parking provision with the exception of 2 wheelchair accessible spaces.
	PTAL 2 – Maximum of 0.35 spaces per dwelling and a minimum of 10% of proposed provision or minimum of 2 spaces to be wheelchair accessible spaces (whichever is greater).
D1 (School) & D2 (Leisure)	Each site to be looked at individually through the Transport Assessment and Travel Plan. Considerations to include location, availability of alternative parking areas and the nature of the operation. No employment parking will be considered unless a site falls outside of a CPZ, in which case levels will be based on a comprehensive assessment of demand, impact and broad policy consideration.
Disabled Parking – Minimum 10% of proposed provision or minimum 2 spaces to be wheelchair accessible spaces. In accordance with the LP Housing SPG each accessible unit is required to have access to its own dedicated Blue Badge Space. The only exception to this approach will be to ensure that developments are accessible for disabled people in line with London Plan Policy 3C.23	

3.4.13 The minimum cycle parking standards for new developments are shown in Table 3.3.

Table 3.3: Hackney's Minimum Cycle Parking Standards

Land Use	Standards
A1 Retail (Food)	1 Space per 75sqm for staff with minimum of 2 spaces. 1 space per 1 100sqm for visitors with minimum of 2 spaces
A1 Retail (Non-food)	
A3 Retail (Cafes and Restaurants)	
B1 Office	1 space per 50sqm staff with minimum of 2 spaces 1 space per 500sqm for visitors with minimum of 2 spaces
C3 – C4 Dwellings, (All)	1 space per dwelling up to 45 sq. m 1 space per dwelling above 45sqm Plus 1 space per 25 units for visitors (minimum 2 spaces)

D1 Schools (primary and secondary)	1 space per dwelling up to 45 sq. m 1 space per dwelling above 45sqm Plus 1 space per 25 units for visitors (minimum 2 spaces)
D2 Sports	1 space per 3 staff 1 space per 3 peak time visitors
Land Use	**Standards**
A1 Retail (Food)	1 Space per 75sqm for staff with minimum of 2 spaces. 1 space per 1 100sqm for visitors with minimum of 2 spaces
A1 Retail (Non-food)	
A3 Retail (Cafes and Restaurants)	
B1 Office	1 space per 50sqm staff with minimum of 2 spaces 1 space per 500sqm for visitors with minimum of 2 spaces
C3 – C4 Dwellings, (All)	1 space per dwelling up to 45 sq. m 1 space per dwelling above 45sqm Plus 1 space per 25 units for visitors (minimum 2 spaces)
D1 Schools (primary and secondary)	1 space per dwelling up to 45 sq. m 1 space per dwelling above 45sqm Plus 1 space per 25 units for visitors (minimum 2 spaces)
D2 Sports	1 space per 3 staff 1 space per 3 peak time visitors

LBH Local Development Framework South Shoreditch Supplementary Planning Document (SPD) (February 2006)

3.4.14 The South Shoreditch SPD contains additional policies which aim to safeguard the historic character and identity of this area of Hackney through the promotion of appropriate development in line with the district's characteristics. Whilst there are some references to now-superseded UDP policies, the document is nonetheless relevant to the site, which is located on the eastern edge of South Shoreditch.

3.4.15 Paragraph 5.5.1, covering the legibility of streets and spaces, makes specific reference to the site when stating that … "Bishopsgate Goods Yard will be a future landmark and development node, which will impact significantly on the area." For this reason, it is important that due consideration is given to the site's accessibility and legibility both within the development and for journeys on cross-site desire lines.

3.4.16 The London Overground line has been built as described in paragraph 5.6.6 of the SPD, together with Shoreditch High Street station which is accessed via the ticket hall at ground level towards the centre of Bishopsgate Goods Yard.

3.4.17 It is acknowledged that bus services have improved since the SPD was published in 2006, with hourly departures increasing from the 60 stated in paragraph 5.6.7 of the SPD to over 90.

LBTH Local Plan Core Strategy (September 2010)

3.4.18 The LBTH Core Strategy sets out the LBTH's spatial visions for development for the next 15 years. It is one of a series of documents forming part of the Local Development Framework. Five spatial themes form the focus of the Core Strategy:

- Refocusing on town centres;
- Strengthening neighbourhood well-being;
- Enabling prosperous communities;
- Designing a high-quality city; and
- Delivering place making (page 10).

3.4.19 Borough-wide Strategic Objective (SO) 12 states LBTH's commitment to creating 'a high-quality, well-connected and sustainable natural environment of green and blue spaces' which inter-connect to form a grid. This has the aim of promoting active lifestyles through the encouragement of physical movement.

3.4.20 This is linked to SO 20 which covers the aim of delivering an attractive, well-signed and well-designed network of streets and spaces that facilitate movement on foot and by bicycle.

LBTH Local Plan Managing Development Document (MDD) (April 2013)

3.4.21 LBTH MDD provides planning policies and site allocations required to meet the SOs set out in the Core Strategy. It aims to support the delivery of key infrastructure required within LBTH, including:

- Affordable and family housing;
- Jobs;
- Parks; and
- Schools.

3.4.22 Policy DM9 'Improving Air Quality' states that LBTH will expect proposed developments to consider a range of measures designed to improve air quality, including reducing vehicle movements and enhancing the public realm.

3.4.23 Policy DM10 'Delivering Public Space' aims to protect and enhance existing open space, create new open spaces and improve connectivity between spaces, in accordance with the LBTH's Green Grid Strategy and Open Space Strategy. For the purposes of this policy, open space does not include private amenity space inaccessible to the public.

3.4.24 Policy DM20 'Supporting a Sustainable Transport Network' states that developments will need to demonstrate that they will not impact negatively on the capacity and safety of the transport network's operation, or on any planned improvements or amendments to it. Developments having a significant impact on the transport network will be required to produce a Transport Assessment, to be accompanied by a Travel Plan in cases where the Transport Assessment identifies significant transport impacts.

3.4.25 Paragraph 20.5 notes that a Transport Assessment should cover the anticipated movements to, from and within the site, together with measures designed to achieve the highest connectivity by sustainable travel modes. Capacity of the highway and public transport networks should also be considered, together with requirements for capacity enhancement where existing provision will be insufficient to handle the projected demand increases.

3.4.26 Paragraph 20.7 notes that Travel Plans should contain a package of measures designed to meet long-term sustainable transport objectives for the site, including ways of encouraging use of sustainable travel modes and minimising the number of car trips. Details should be provided in relation to the targets and timescales established, together with the plans to implement, fund and monitor the measures described.

3.4.27 Policy DM22 'Parking' states that developments which are to be located in areas of good public transport accessibility and/or areas of existing parking stress will be required to be permit-free, in addition to complying with the parking standard guidelines applicable to all developments. Parking for car club and electric vehicles will be prioritised.

3.4.28 Policy DM23 ‘Streets and the Public Realm’ aims to ensure developments’ good connectivity with the surrounding area by:

- Improving permeability and legibility;
- Ensuring that public realm design is integral to development proposals and takes into account existing public realm designs in the vicinity of the site;
- Focusing on the human scale when designing public realm;
- Providing adequate definition and enclosure to the public realm;
- Rendering the design inclusive; and
- Ensuring the public realm is comfortable and useable.

3.4.29 Safety and security are important considerations in public realm design. Inclusiveness and good design should be ensured by:

- Locating entrances in safe, visible and accessible locations;
- Facilitating natural surveillance;
- Avoiding the creation of concealment points;
- Ensuring clear distinctions are made between public, semi-public and private space; and
- Maintaining clear sightlines to enhance visibility of the surrounding area.

3.4.30 Ensuring good connectivity, permeability and legibility is a priority. Connectivity refers to the number, integration, layout and relationship of routes to one another, and the impact that this has on being able to get from one point to another. Permeability refers to the variety and capacity of routes through an area, while legibility is the degree to which way finding is facilitated.

3.4.31 Specifically, the MDD guidance indicates a mixed-use development for the Bishopsgate Goods Yard site including up to 2000 homes, up to 150,000m2 of employment, retail and community uses and 1.8ha of publicly accessible open space. Public realm improvements shall include enhanced pedestrian and cycle route provision to integrate into the existing urban grain and the Green Grid along Quaker Street and Brick Lane, together with new public squares to the east and south of Shoreditch High Street station.

3.4.32 Appendix 2 of the adopted MDD sets out LBTH’s parking standards. Parking standards relevant to the proposals are summarised in Table 3.4.

Table 3.4: LBTH Parking Standards

Use Class	Maximum Car* and Motorcycle Parking**	Minimum Cycle Parking (minimum 2 spaces)	Other Parking
A1 Non Food	No car parking	1 space per 125m2	n/a
A1 Smaller foodstore (up to 500m2 GFA*)	No car parking	1 space per 125m2	n/a
A1 Food supermarket (over 50m2)	No car parking unless a Transport Assessment can demonstrate that walking, cycling, public transport and home delivery cannot cater for demand, that there are not unacceptable impacts on the highway network and a Travel Plan can be secured	1 space per 125m2	Service parking is required above 1,000m2 and a servicing agreement must be agreed as part of the Travel Plan
B1a Business offices	1 space per 600-1,000m2	1 space per 120m2	Service parking is required above 1,250m2 and a servicing agreement is secured as part of a Travel Plan
C1 Hotels	In locations with a PTAL of 4-6,on-site provision should be limited to operational needs, parking for disabled people and that required for taxis, coaches and deliveries/servicing. In locations with a PTAL of 1-3,provision should be consistent with objectives to reduce congestion and traffic levels and to avoid undermining walking, cycling or public transport.	1/10 staff 1/15 residents	1 coach space per 50 rooms.
C3 Residential	For locations of PTAL 5-6: 0.1 spaces per unit for units with less than 3-bedrooms, and 0.2 spaces per unit for units with 3-bedroom plus	1 space per 1 or 2-bedroom unit, and 2 spaces per 3 or more bedroom unit	No additional provision for visitor parking, which will be on-street pay and display, or by qualifying for resident visitor temporary permits. Developers will be encouraged to provide on-site car club bays where appropriate in place of individual car parking spaces
D1	Spaces will be considered provided they are supported by a TA and a Travel Plan can be secured.	1/30 staff 1/5 staff or visitors	TA is required to justify the need of other parking, i.e service vehicles
D2	No parking	1/10 staff + 1/30 seats for visitors	Coach/minibus parking
Sui Generis Uses			

Parking provision for uses considered to be Sui Generis will be considered on a case by case basis.
* 20% active provision plus 20% passive provision for electric vehicle charging facilities must be provided in accordance with the London Plan.
** The Council welcomes motorcycle parking as a substitute for car parking. Motorcycle parking maybe provided within the space allowed by the maximum standards, at a guideline rate of 5 motorcycle spaces in place of each permitted car parking space. Where no car parking provision is allowed, motorcycle parking spaces will only be considered if supported and justified by a Transport Assessment.

3.4.33 LBTH requires a minimum of 2 spaces or 10% of the total parking (whichever is greater) in respect to disabled parking for developments with off-street car parking. For developments without off-street car parking, a minimum of 1 space is to be provided on-site.

LBH and LBTH Bishopsgate Goods Yard Interim Planning Guidance (2010)

3.4.34 This document has been prepared jointly by LBH and LBTH alongside the GLA with the aim of providing a framework for planning the redevelopment of the site.

3.4.35 The site is surrounded by several historic structures, including the listed Braithwaite Viaduct to the south as well as the existing mainline and suburban railways. The legacy of structures present across the site means that it currently acts as a barrier to movement through the area. It is noted that the opening of Shoreditch High Street station has since improved north to south permeability through the site, but east to west desire lines remain poor.

3.4.36 Policy BG1 summarises the design principles envisaged for the site's redevelopment, including improved permeability, enhanced open space provision, retention of local character and a good level of sustainability, including in transport terms.

3.4.37 In order to ensure that the site becomes a focal point for sustainable travel modes, Policy BG5 contains several items to be included as part of the development. Shoreditch High Street station is central to the site's redevelopment, and it should remain clearly visible and accessible from both Shoreditch High Street and Bethnal Green Road. Interchange between modes is a priority, and this will be encouraged through enhancements to public space, the relocation of bus stops where appropriate, provision of cycle hire docking facilities as well as other cycle parking provision. Drop-off facilities for people with disabilities, together with taxi access and servicing arrangements should also be provided.

4.0 BASELINE SITE CONTEXT

4.0 BASELINE SITE CONTEXT

4.1 Introduction

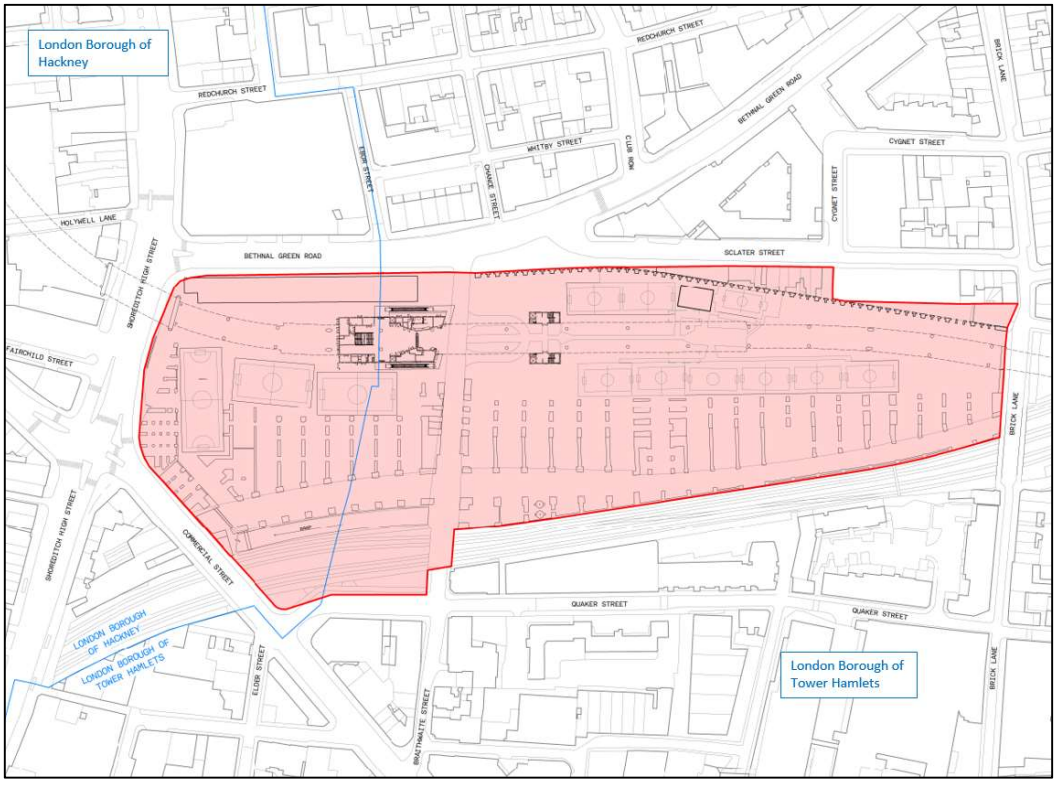
4.1.1 As explained in the Climate Change Adaptation Sub-Committee Progress Report 2014, increased flood risk is the greatest threat to the UK from climate change. Models of the climate system suggest floods of the type experienced in England and Wales in autumn 2000, and between December 2013 and February 2014, have become more likely as a consequence of increased concentrations of greenhouse gases in the atmosphere.

4.2 SITE LOCATION

4.2.1 The site is approximately 4.4 hectares and forms an important and strategic site in Shoreditch. The site is located on land bounded by Bethnal Green Road and Sclater Street to the north, Brick Lane to the east, Liverpool Street to Bethnal Green railway line to the south and Commercial Street and Shoreditch High Street (A10) to the west. Braithwaite Street runs in a north to south alignment through the site. The London Overground viaduct passes over the site, with Shoreditch High Street station situated towards the centre of the site.

4.2.2 The site has been identified in existing planning documents as a major development opportunity that will help to regenerate surrounding areas. Figure 4.1 shows the redline boundary of the site.

Figure 4.1: Redline Boundary of Site



4.3 EXISTING SITE USES

4.3.1 The site was formerly Bishopsgate Goods Yard; a passenger rail station from 1840 to 1875, then a freight terminal until destroyed by fire in 1964. The site is currently, in part, occupied by Powerleague and Box Park who use the site on a temporary basis, providing leisure and retail uses. The site is also partly occupied by Shoreditch High Street Overground Station. The remaining part of the site is currently vacant.

4.3.2 The existing vehicle access arrangement for the site are as follows:

- Braithwaite Street/Wheler Street – the access road through the site connects with Bethnal Green Road to the north and Quaker Street to the south. Vehicles are permitted to enter/exit Braithwaite Street from the north and Wheler Street to the south, and a barrier is in place towards the centre of the access road. Therefore, vehicles are not currently permitted to travel through the site via Braithwaite Street/Wheler Street;
- Shoreditch High Street – a vehicle crossover is provided on Shoreditch High Street, however is currently closed with hoarding prohibiting access; and
- Brick Lane – a vehicle crossover is provided on Brick Lane, however is currently closed with hoarding prohibiting access.

4.4 SURROUNDING AREA

4.4.1 The site lies between the neighbourhoods of Shoreditch, Spitalfields and Banglatown, close to the northern edge of the City of London. Mixed use classes including office, retail, residential, hotel, educational facilities and leisure are located in the adjacent and wider area.

4.4.2 Specifically, the area immediately to the north of the site comprises a mix of former warehouses, small scale industrial estates, shops and the Rich Mix centre (an arts and cultural venue). Further north lays an extensive residential area developed in 1900s with wide residential streets centred on a green space at Arnold Circus. The eastern area of the site is defined by residential use, shops, bars and restaurants. The area to the south of the site contains a mix of residential, commercial and retail uses, extending south towards Spitalfields Market. Aldgate East station is located approximately 1 kilometre to the south of the site. The area to the west of the site contains a mix of residential, commercial and retail uses. Liverpool Street station is located approximately 950 metres to the southwest, whilst Old Street station is situated approximately 1 kilometre to the northwest.

5.0 BASELINE PEDESTRIAN CONDITIONS

5.0 BASELINE PEDESTRAIN CONDITIONS

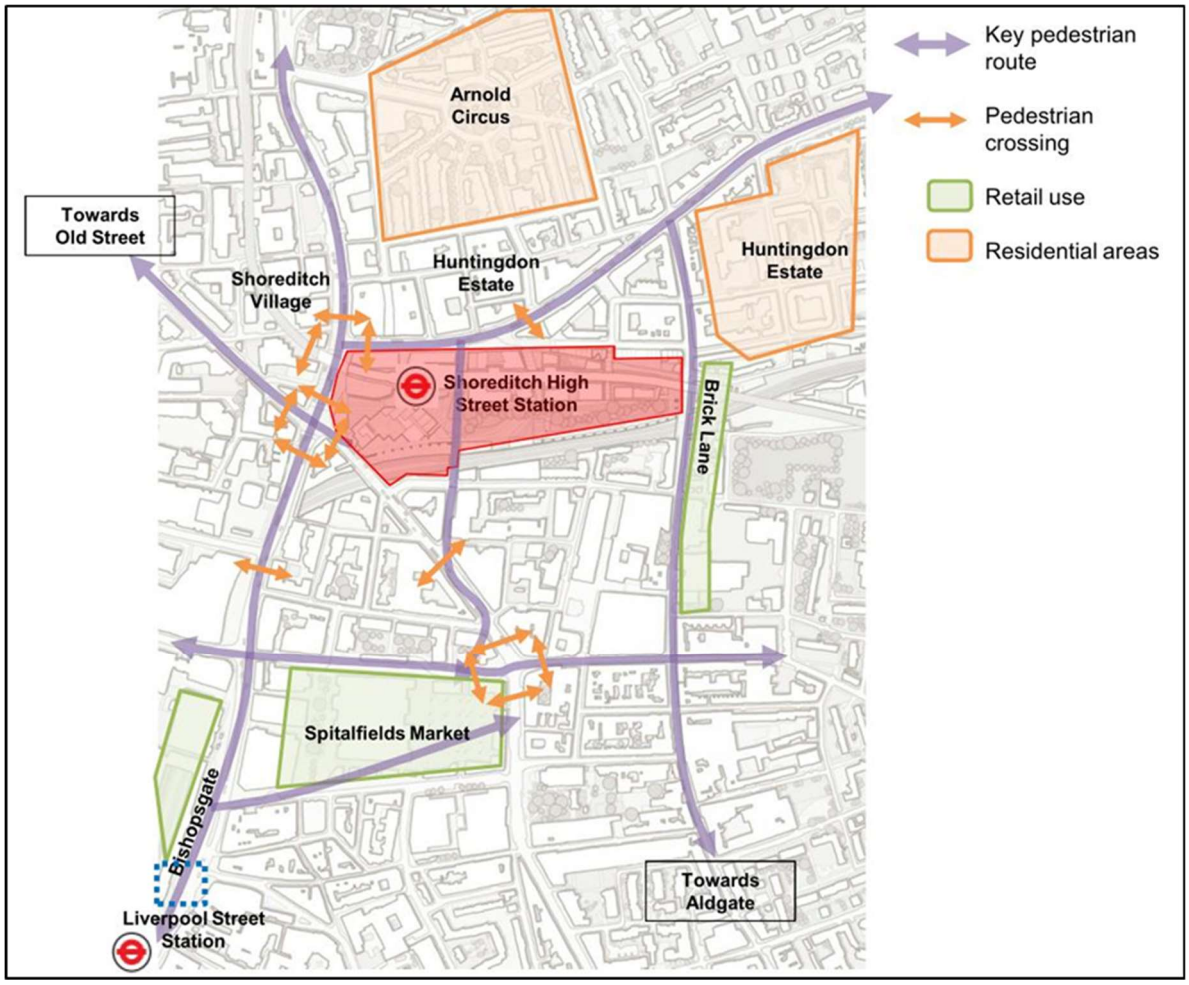
5.1 Introduction

5.1.1 This section provides a review of the accessibility of the site on foot. It presents an assessment of Pedestrian Comfort Levels (PCLs) along local footways with reference to TfL's 'Pedestrian Comfort Guidance for London' Document.

5.2 PEDESTRIAN ACCESSIBILITY

5.2.1 A baseline accessibility plan is provided as Figure 5.1 which shows existing key pedestrian routes and facilities adjacent to the site.

Figure 5.1: Baseline Pedestrian Accessibility Plan



5.2.2 In terms of the internal layout, there are two main routes across the site, Braithwaite Street and an east-west pedestrian route. Braithwaite Street intersects the site adjacent to the Shoreditch High Street station frontage, connecting with Bethnal Green Road to the north and Quaker Street to the south. Footways are provided on both sides of Braithwaite Street, providing access for pedestrians through the centre of the site. In addition, London Road runs at an east-west alignment towards the southern boundary of the site; however, this route does not currently provide a public through route across the site.

5.2.3 Footways are provided adjacent to the site along Bethnal Green Road, Sclater Street, Brick Lane, Commercial Street and Shoreditch High Street. It is acknowledged that the hoarded site access provided on Shoreditch High Street presents a lengthy crossover for pedestrians and will benefit from being reinstated with the provision of footway.

5.2.4 Pedestrian crossing facilities are provided at the signal controlled junction between Shoreditch High Street/Bethnal Green Road/Holywell Lane and the signal controlled junction between Shoreditch High Street/Commercial Street/Great Eastern Street, located at the northwest and southwest corners of the site respectively. It is acknowledged that for a pedestrian to negotiate the crossing facility from the eastern side of Shoreditch High Street to the southern side of Commercial Street, the pedestrian needs to do so in three stages, stopping on two pedestrian islands along the crossing route. Improvements to this arrangement are proposed as part of a TfL scheme to change junction layout and have been considered and discussed with TfL, as detailed at a later in the report.

5.2.5 A pedestrian crossing facility is also provided on Bethnal Green Road, to the east of its junction with Sclater Street. It is acknowledged that this crossing is not located on the desire line for travel on foot from Shoreditch High Street Overground Station to the bus stop located towards the western end of Bethnal Green Road on the northern side of the carriageway. This has been considered as part of this planning application, which offers a new crossing on Bethnal Green Road as described at a later section of this report.

5.2.6 Traffic calming measures in the form of speed humps are present on Quaker Street. A series of controlled crossings are located on Shoreditch High Street and Commercial Street, providing access from the site towards Liverpool Street and Aldgate East stations.

5.2.7 To enable an assessment of the viability of walking as a realistic mode for trips to and from the site, it is appropriate to establish maximum distances that people are prepared to walk and the destinations that exist within these distances. The Institution of Highways and Transportation (IHT) 'Guidelines for Providing Journeys on Foot' (2000) suggests acceptable, desirable and preferred maximum walking distances (acceptable walking distances vary between individuals). Table 5.1 contains suggested walking distances for pedestrians without mobility impairment for some common trip purposes.

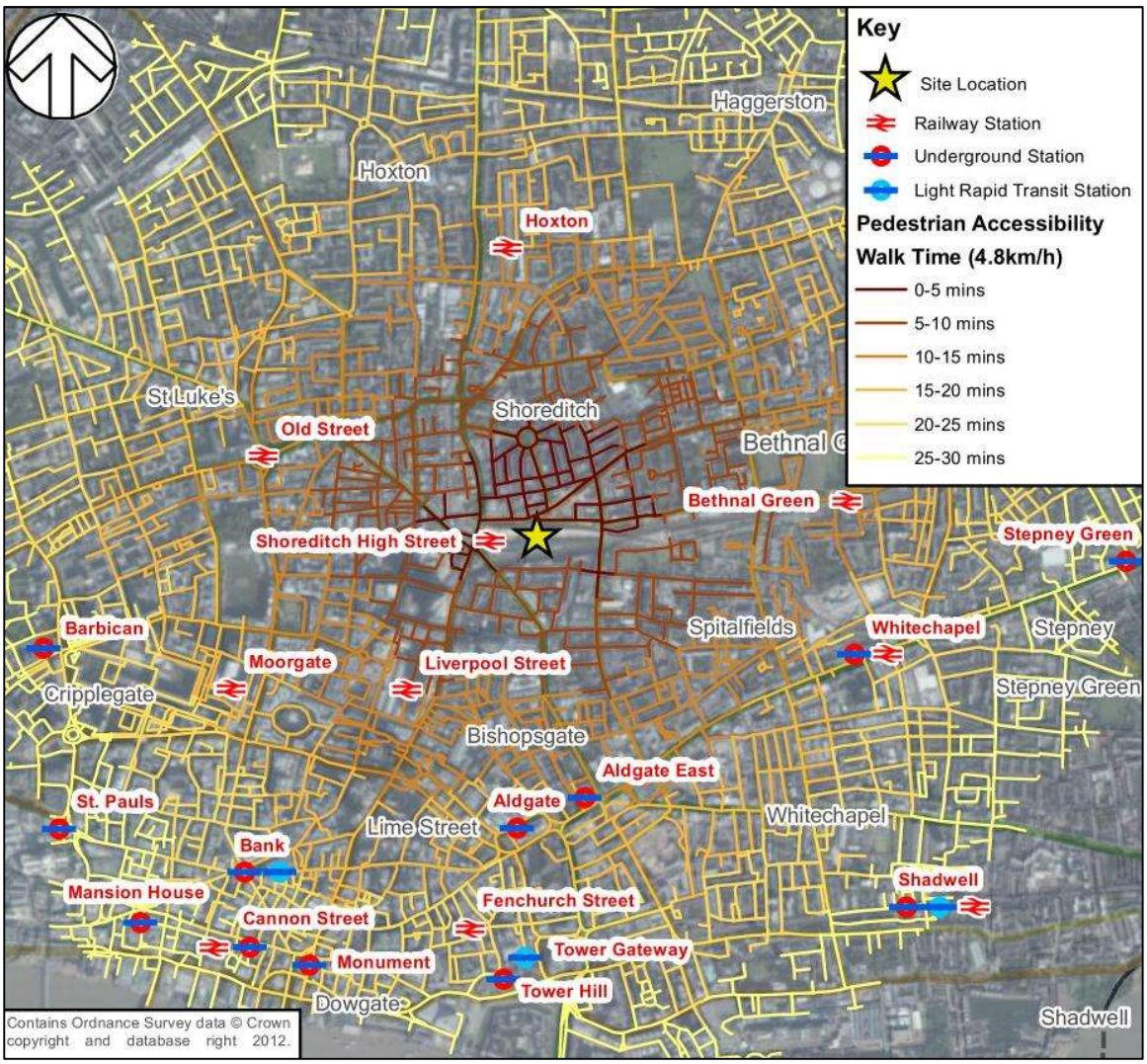
Table 5.1: Suggested Acceptable Walking Distances

Definition	Walking Distances (metres)		
	Town Centres	Commuting / Schools	Elsewhere
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

Source: 'Providing for Journeys on Foot', IHT, 2000

5.2.8 PPG13, which has now been superseded by NPPF, noted in paragraph 75 that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres (2 kilometres is equivalent to a 25 minute walk). This statement remains relevant and has been traditionally accepted for many years. Existing walking isochrones, measured from the site centre, for the immediate vicinity of the site are shown in Figure 5.2.

Figure 5.2: Walking Isochrones



5.2.9 It is considered that the site is located within an established area for residential, office and commercial/retail use classes. The location of the site also benefits from being within recommended walking distance to local amenities including foodstores, cafes and restaurants, numerous employment opportunities, educational establishments, as well as leisure and health facilities. Table 5.2 summaries key amenities and associated approximate walking distances.

Table 5.2: Key Amenities and Associated Approximate Walking Distances

Local Amenity	Location	Approximate Walking Distance from Centre of Site (metres)
Foodstore	Shoreditch High Street	350
Liverpool Street Station	Liverpool Street	950
Old Street Station	Old Street	1,000
Health Centre	Cheshire Street	600
Leisure Centre	Bateman's Row	500
Shopping Destination	Spitalfields Market	400
Primary School	Bacon Street	400
Secondary School	Old Bethnal Green Road	900

5.3 HEALTHY STREETS ASSESSMENT

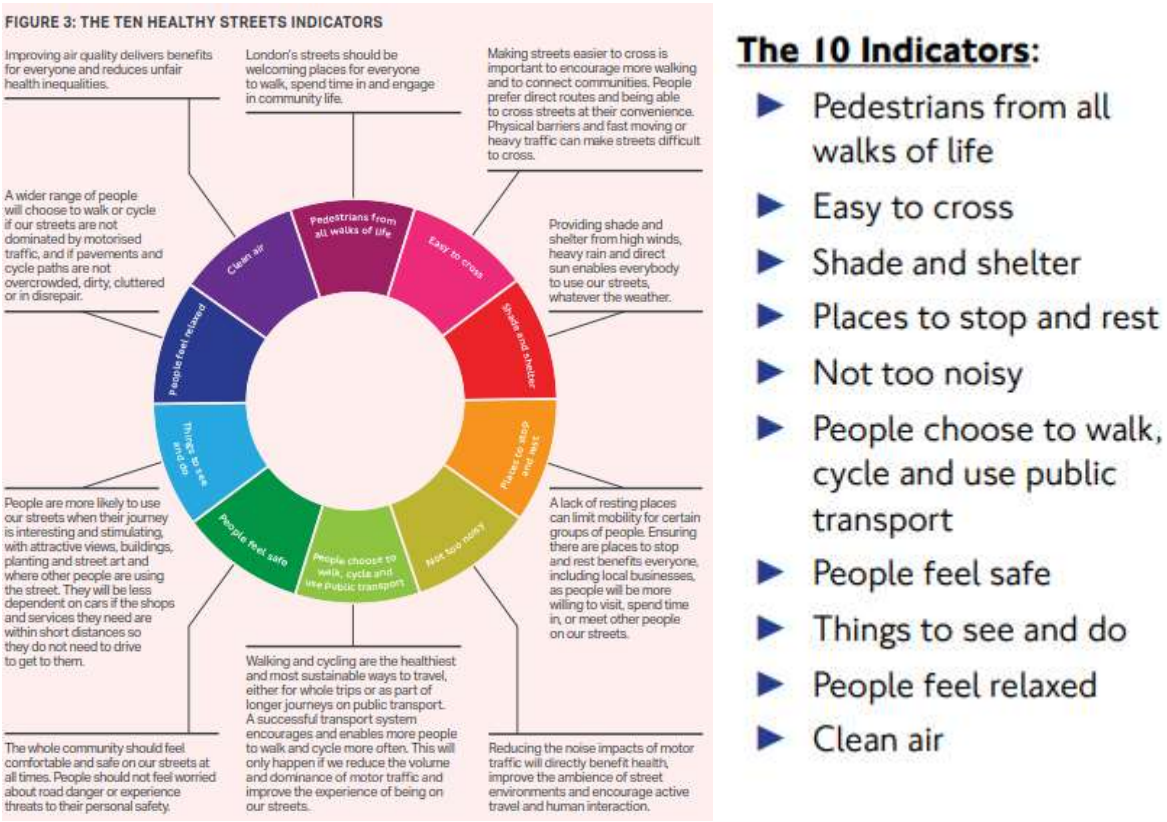
5.3.1 A Healthy Streets Assessment has been undertaken in accordance with TfL's guidelines.

5.3.2 The purpose of the Healthy Streets Assessment is to evaluate any proposed changes to the way streets are laid out result in improvements when assessed against the 10 Healthy Streets Indicators

5.3.3 The full Healthy Streets Assessment is provided in Appendix A.

5.3.4 The purpose of the Healthy Streets Assessment is to evaluate any proposed changes to the way streets are laid out result in improvements when assessed against the ten Healthy Streets Indicators. Figure 5.3 shows these indicators as defined by TfL.

Figure 5.3: Healthy Streets Indicators (source: TfL)

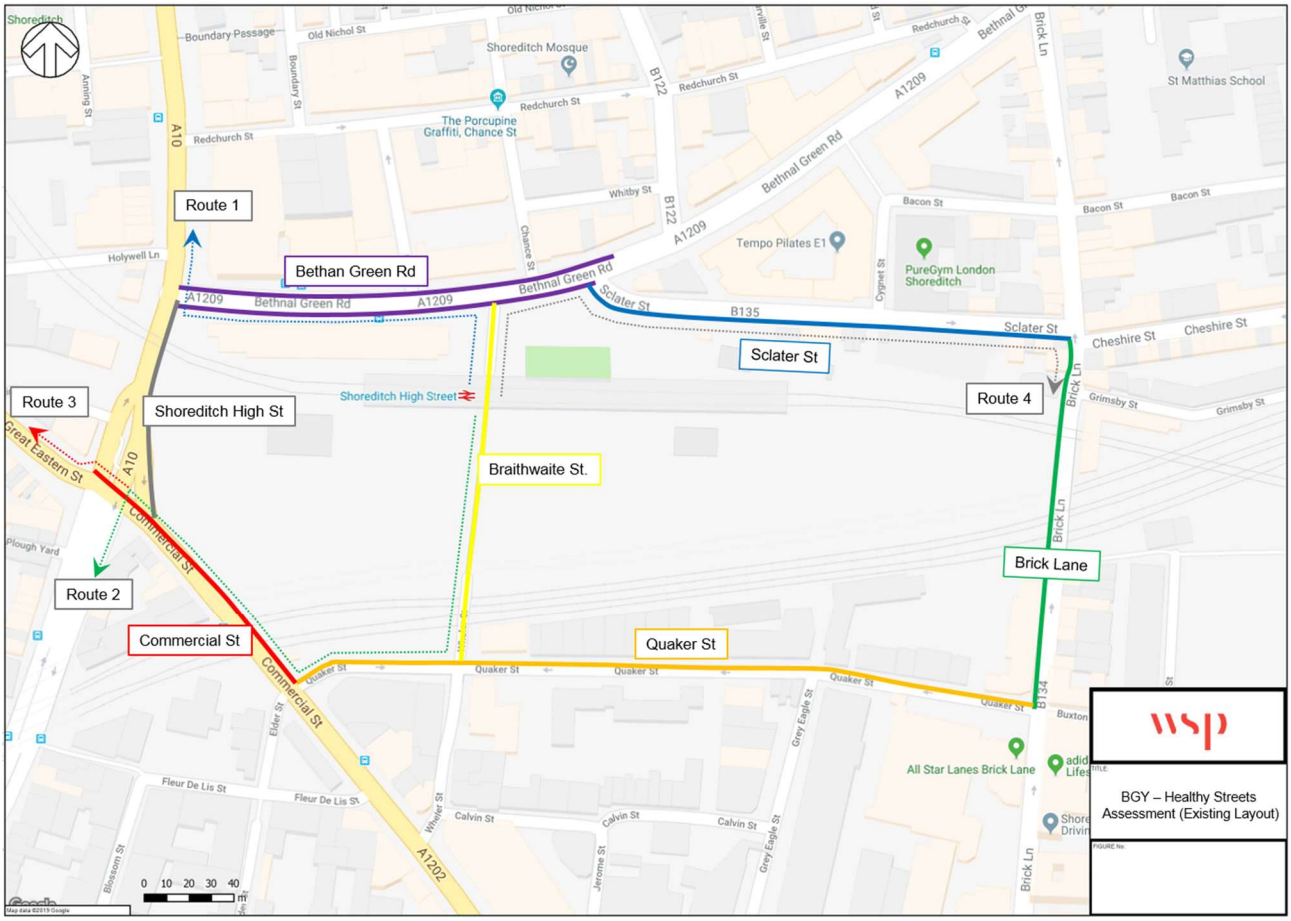


5.3.5 The scope of the audit comprises:

- Bethnal Green Road;
- Sclater Street;
- Brick Lane;
- Braithwaite Street;
- Quaker Street,
- Commercial Street; and
- Shoreditch High Street.

5.3.6 The six links above are assessed using the Healthy Streets Check for Designers spreadsheet while a qualitative review of three typical routes from the Shoreditch High Street Station towards Old Street, Liverpool Street and Hoxton will be undertaken. Figure 5.4 illustrates the proposed study area associated with the existing layout.

Figure 5.4: Healthy Streets Assessment Study Area - Existing Layout



5.3.7 The assessment results for each link identified above are presented in turn in the following sections.

Bethnal Green Road (north side)

5.3.8 The Healthy Streets audit for Bethnal Green Road (north) baseline arrangement received a score of 62, scoring well on effective footway widths, lighting, surveillance. No metrics scored zero but the link achieved lower scores in relation to noise and clean air.

Bethnal Green Road (south side)

5.3.9 Similar to above, the Healthy Streets audit for Bethnal Green Road (south) baseline arrangement adjacent to the site received a score of 64, scoring well on effective footway widths, lighting, surveillance, kerbside activity and bus facilities. No metrics scored zero but the link achieved lower scores in relation to noise and clean air

Sclater Street

5.3.10 The Healthy Streets audit for Sclater Street baseline arrangement received a score of 52, scoring well on effective footway widths, lighting and pedestrian comfort. No metrics scored zero but the link achieved lower scores in relation air quality (NO2 levels), landscaping and surveillance.

Brick Lane

5.3.11 The Healthy Streets audit for Brick Lane baseline arrangement received a score of 55, scoring well on effective footway widths, pedestrian comfort and light traffic levels. No metrics scored zero but the link achieved lower scores in relation air quality (NO2 levels), landscaping and surveillance.

Braithwaite Street

5.3.12 The Healthy Streets audit for Braithwaite Street baseline arrangement received a score of 72, scoring well due to its proximity to public transport services and pedestrian dominant nature being a lightly trafficked street due to the vehicular restrictions imposed. No metrics scored zero but the link achieved lower scores in relation air quality (NO2 levels) and lack of greenery.

Quaker Street

5.3.13 The Healthy Streets audit for Quaker Street baseline arrangement received a score of 49, scoring well due to its lightly trafficked nature due to the one-way restricts present on street. No metrics scored zero but the link achieved lower scores in relation air quality (NO2 levels) and lack of greenery.

Commercial Street

5.3.14 The Healthy Streets audit for Commercial Street baseline arrangement received a score of 53, scoring well due to its proximity to public transport services, footway provision, controlled crossing facilities and nature surveillance. One metric scored zero due to the level of peak hour vehicles mixing with cycles, however, there are measures in place to aid cyclists where possible including advanced stop lines, cycle lanes, vehicular restrictions and shared use of bus lanes.

Shoreditch High Street

5.3.15 The Healthy Streets audit for Shoreditch High Street baseline arrangement received a score of 54, scoring well on effective footway widths, lighting, natural surveillance and connection to public transport services. Similar to above, one metric scored zero in relation to the number of peak hour vehicles mixed with cyclists, however as previously described there are measures in place to aid cyclists where possible. The full Healthy Streets Assessment, including the comparison with the future scenario as part of the Proposed Development, is contained in Appendix A.

5.4 PEDESTRIAN COMFORT LEVEL (PCL) AUDIT

5.4.1 A Pedestrian Comfort Level (PCL) Audit has been undertaken on key links within the local area based on thresholds set by TfL's 'Pedestrian Comfort Guidance for London' document. This audit was used to inform the scheme design development.

5.4.2 The guidance sets out pedestrian levels of service relating to the densities of pedestrian movements, with scores ranging from 'A+' (highest possible score and representative of comfortable performance) to 'F-' (lowest possible score and representative of uncomfortable performance). For office and retail uses PCL ratings of C+ and above are generally considered acceptable, according to the TfL PCL guidance. For residential use PCL ratings of B- and above are generally considered acceptable. A copy of TfL's PCL criterion by land use classes is provided at Appendix B.

Pedestrian Survey Data

5.4.3 For the purpose of this assessment, directional pedestrian flow surveys were undertaken in June 2018 (outside of the school holiday period) by an independent survey company.

5.4.4 A previous study undertaken by Space Syntax Limited showed that during the weekend, there is a major shift of pedestrian demand from the south and west to the east with a higher concentration of pedestrians using Brick Lane. On this basis, it was not considered necessary to undertake surveys on Quaker Street, Commercial Street and Bishopsgate for weekend periods.

5.4.5 Specifically, the pedestrian surveys were undertaken during the following time periods:

- Weekday 0730-0930, 1200-1400 and 1700-2000 (all locations);
- Friday 1200 until Saturday 0600 (locations 2, 3, 4, 5, 6, 8 and 9); and
- Saturday 1200 until Sunday 0600 (locations 2, 3, 4, 5, 6, 8 and 9); and
- Sunday 1200-1500 (locations 1, 2, 3, 4 and 5).

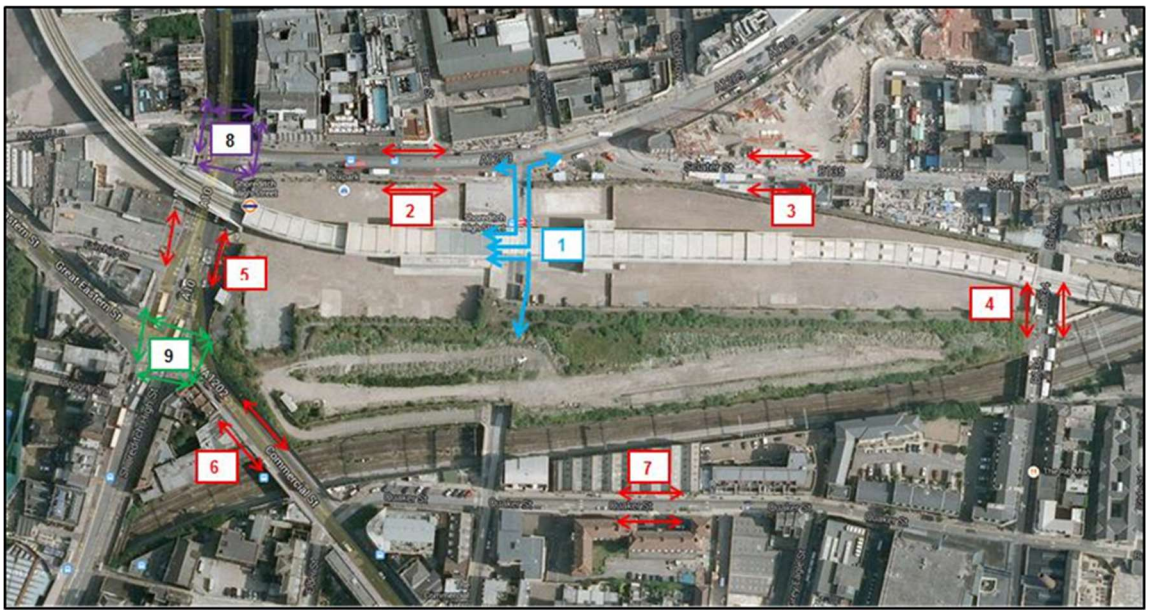
5.4.6 A copy of the survey data is provided at Appendix C.

5.4.7 Pedestrian flow diagrams provided at Appendix D show two-way baseline pedestrian movements recorded on key links in context with the site location during the following identified peak hour periods:

- Weekday AM Peak Hour (0830-0930);
- Weekday Lunchtime Peak Hour (1230-1330);
- Weekday PM Peak Hour (1745-1845);
- Saturday Lunchtime Peak Hour (1300-1400); and
- Sunday Lunchtime Peak Hour (1300-1400).

5.4.8 A plan to show the pedestrian survey locations is provided as Figure 5.5.

Figure 5.5: Pedestrian Flow Survey Locations



5.4.9 In addition to the above area, pedestrian flow surveys by direction were also undertaken on the upper and lower walkways of Bishopsgate to the north of Liverpool Street Station as shown in Figure 5.6. These locations were identified as being the most constrained sections of footway with high peak flows for the nearby Principal Place office development scheme on Worship Street.

Figure 5.6: Pedestrian Flow Survey Locations Continued

5.4.10 Table 5.3 shows the results of the 2018 weekday baseline PCL audit.The use of open water features such as ponds as a design feature is considered to be impractical given the small amount of external area at lower ground, relative to building envelope areas.

Table 5.3: 2018 Baseline PCL Audit – Weekday

Link		Baseline width (m)	Weekday AM Peak	Weekday Lunchtime Peak	Weekday PM Peak
1a	Bethnal Green Road (north side)	3.6	A-	A-	B+
1b	Bethnal Green Road (south side)	4	A-	A	B-
2a	Sclater Street (north side)	2.3	A+	A+	A
2b	Sclater Street (south side)	2.2	A	A	A-
3a	Brick Lane (east side)	2	A	A	B
3b	Brick Lane (west side)	2.1	A	A-	B
4a	Quaker Street (north side)	2	A	A+	A-
4b	Quaker Street (south side)	2.3	A+	A+	A+
5a	Commercial Street (north side)	2.2	A	A	A-
5b	Commercial Street (south side)	2.7	A+	A+	A
6a	Shoreditch High Street (east side)	3.5	A-	A-	B-

6b	Shoreditch High Street (west side)	3	A	A	B+
8a	Braithwaite Street (North of Middle Road)	8	A	A+	A
8b	Braithwaite Street (South of Middle Road)	10	A+	A+	A+
9a	Bishopsgate West side (lower walkway)	5	C+	B-	C-
9b	Bishopsgate West side (upper walkway)	4.5	A	A	A

5.4.11 Table 5.4 shows the results of the 2018 weekend baseline PCL audit.

Table 5.4: 2018 Baseline PCL Audit – Weekend

Link		Baseline width (m)	Saturday Peak	Sunday Peak
1a	Bethnal Green Road (north side)	3.6	A	A
1b	Bethnal Green Road (south side)	4	A-	B+
2a	Sclater Street (north side)*	2.3	A	A
2b	Sclater Street (south side)*	2.2	A	A-
3a	Brick Lane (east side)*	2	B	A-
3b	Brick Lane (west side)*	2.1	B+	A-
6a	Shoreditch High Street (east side)	3.5	A-	A-
6b	Shoreditch High Street (west side)	3	A	A

* Market stalls present on Sclater Street and Brick Lane on Sundays with road closures to traffic, thereby increasing effective width for use by pedestrians

5.4.12 Overall, existing PCLs on pedestrian links in the vicinity of the site range from A+ to C+, within the range which TfL considers acceptable for residential, office or retail developments. It is noted that these are the land uses which predominantly characterise the areas in the vicinity and to the south of the site. The upper walkway along the western side of Bishopsgate is less popular than the lower walkway which is used by the majority of pedestrians due to its directness.

5.4.13 The results of the PCL assessment are provided as Appendix E.

5.5 PEDESTRIAN ENVIRONMENT REVIEW SYSTEM (PERS) AUDIT

5.5.1 A Pedestrian Environment Review System (PERS) Audit has been prepared as a separate document and forms part of this planning application (a copy of which is provided at Appendix F). The PERS audit provides a detailed review of the existing local pedestrian infrastructure, including footway/crossing surfacing, condition, suitability, as well as a review of local public transport waiting and interchange areas.

5.6 PLANNED BOROUGH PROVISION

5.6.1 As set out within LBH's Core Policy (2010), new and improved pedestrian routes will be focused along Whitechapel Road, Commercial Road, Brick Lane and Banglatown. The objective is to facilitate better connectivity throughout the City Fringe.

5.6.2 As noted in LBH's LDF 'South Shoreditch' (February 2006)… 'Significant improvements have been made to the pedestrian environment at Shoreditch Triangle, as part of the TfL scheme'. Specific sub district guidance for Shoreditch is set out in the LDF document in Chapter 10.

5.6.3 As set out within LTBH's Core Strategy Development Plan Document 2025 (September 2010), to enhance the streetscape of Commercial Street improvements will be made to reinforce its role as a main thoroughfare for pedestrians. The quality, cleanliness and management of the public realm will be upgraded by providing local infrastructure and signage. In order to protect residential amenity in the area, the night-time environment, safety, licensing and planning management (particularly in and around Brick Lane) will be enhanced.

5.6.4 It is understood a possible pedestrian crossing point could be provided on Commercial Street, part of the TLRN, within the vicinity of the site. The location of the proposed pedestrian crossing point on Commercial Street and the status of the proposal are both unknown at this stage with further details to follow when available.

6.0 BASELINE CYCLE CONDITIONS

6.0 BASELINE CYCLE CONDITIONS

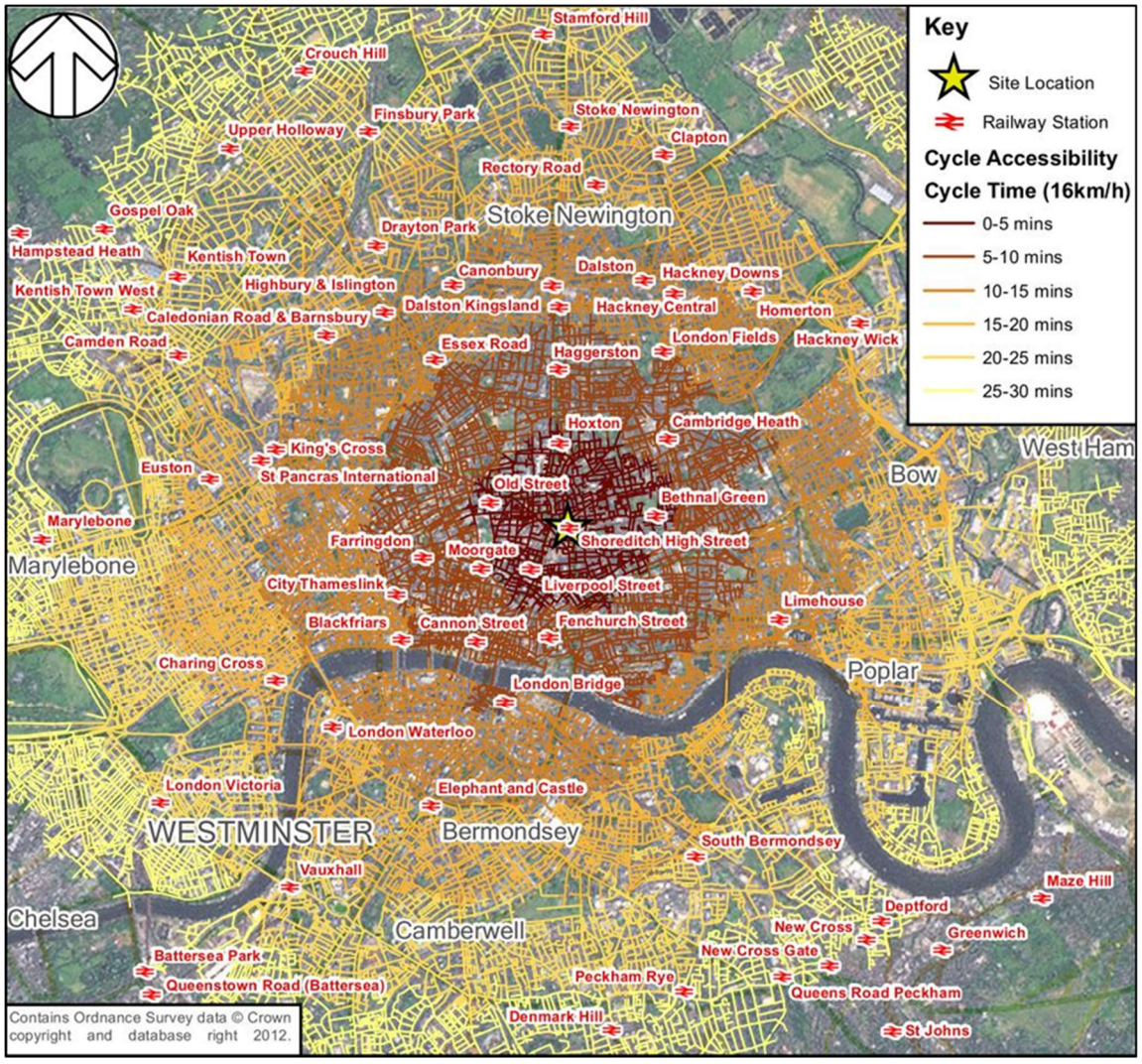
6.1 INTRODUCTION

6.1.1 This section provides a review of the accessibility of the site by cycle.

6.2 CYCLE ACCESSIBILITY

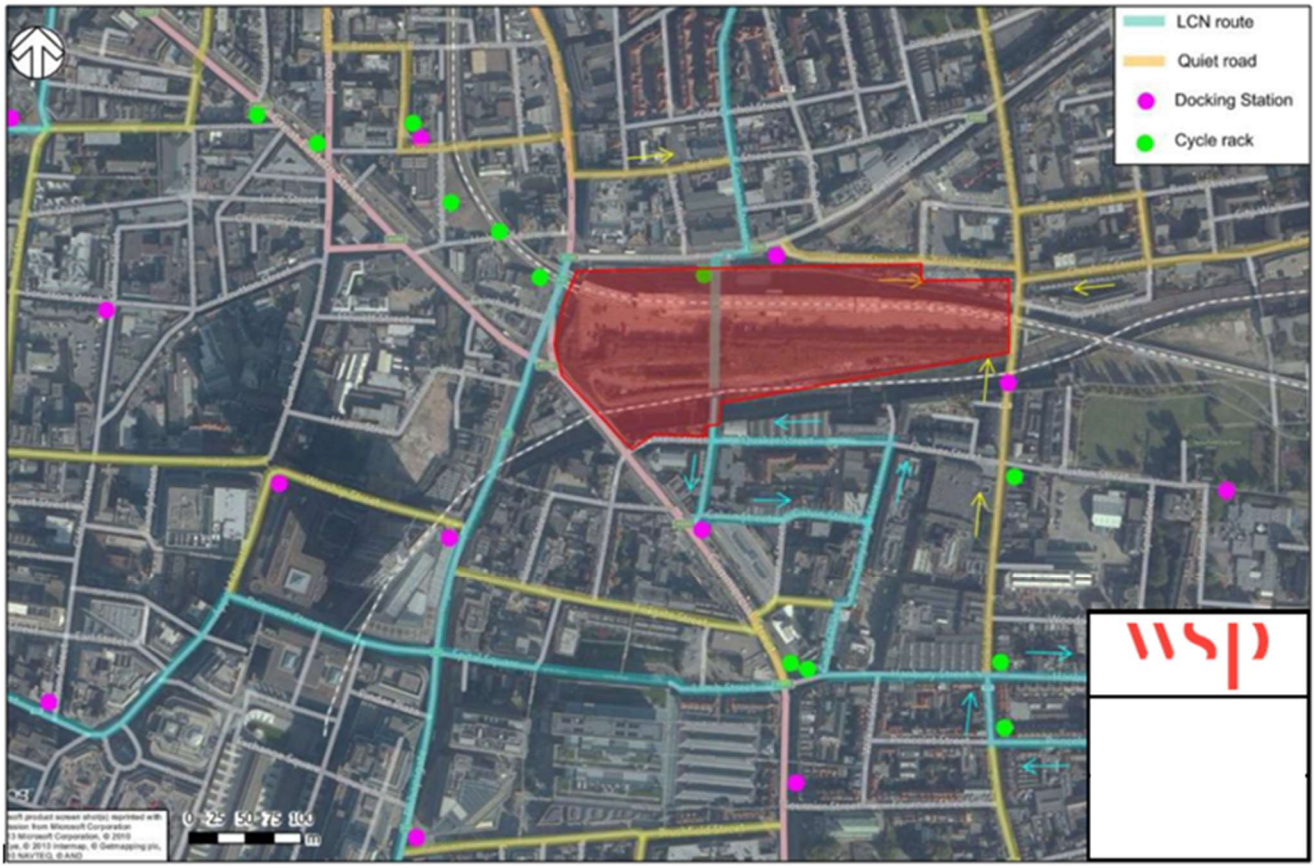
6.2.1 It is traditionally considered that cycling has the potential to substitute for short car trips, particularly those under five kilometres. This makes cycling to and from the site particularly attractive given its location on the edge of the City of London, within Inner London. Cycling isochrones for the site are shown on the plan provided below. Figure 6.1 shows that much of central London is accessible within a 15-minute journey from the centre of the site.

Figure 6.1: Cycle Isochrones



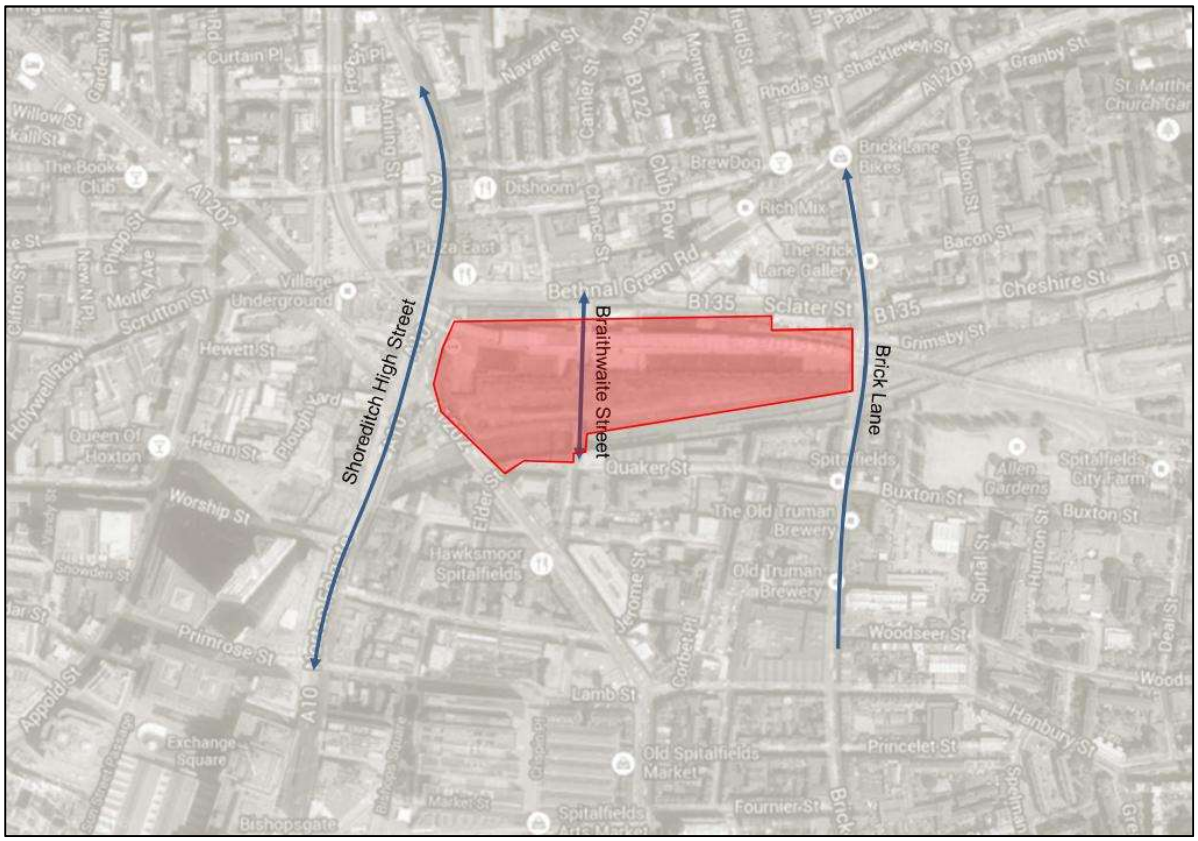
6.2.2 TfL's Local Cycling Guide for central London shows that a number of cycle routes are located adjacent and in close proximity to the site, providing access for cyclists travelling northbound, southbound, eastbound and westbound in and around the site. Figure 6.2 shows a summary of the local cycle routes, together with Santander Cycle Hire docking stations and other public cycle parking facilities, in context with the site.

Figure 6.2: Local Cycle Route Connections



6.2.3 Figure 6.3 shows the northbound and southbound cycle route connections next to the site.

Figure 6.3: Northbound and Southbound Cycle Route Connections



6.2.4 There is a TfL recommended quiet cycle route (blue lines) along Sclater Street (which is subject to eastbound travel only at its eastern end); connecting Bethnal Green Road with access towards Bethnal Green (the reverse westbound connection is facilitated by Bacon Street and Cygnet Street). A further quiet cycle route recommended by cyclists for eastbound travel only is located on a section of Redchurch Street, approximately 150 metres to the north of the site. This cycle route connects with Chance Street to the east and Shoreditch High Street to the west. Therefore, Shoreditch High Street/Redchurch Street/Chance Street/Sclater Street, together, provides a west to east route directly north of the site. Connections between cycle routes are shown by the blue dotted lines.

6.2.5 A signed route for cyclists is located immediately to the south of the site on Quaker Street, facilitating westbound travel for cyclists. Quaker Street connects Brick Lane to the east with Commercial Street to the west. Eastbound travel for cyclist to the south of the site can be achieved along Calvin Street via a signed cycle route.

6.2.6 A two-way 'quieter' cycle route recommended by cyclists is provided on Folgate Street approximately 250 metres to the south of the site. In addition, a two-way signed route for cyclists is located on Hanbury Street and Lamb Street, approximately 300 metres to the south of the site.

6.3 CYCLE PARKING FACILITIES

6.3.1 Figure 6.2 shows the location of public cycle parking facilities and Santander Cycle Hire docking stations in the vicinity of the Proposed Development.

6.3.2 Cycle parking is provided next to Shoreditch High Street station, accessed via Braithwaite Street, in the form of 20 Sheffield stands, providing cycle parking for 40 cycles. In addition, eight Sheffield stands (16 cycle parking spaces) are located on the western side of Shoreditch High Street directly opposite the site. Sheffield stands are also provided on Brick Lane, just to the south of its junction with Buxton Street, approximately 150 metres to the south of the site.

6.3.3 Several cycle hire docking stations are located in close proximity to the site. Specifically, there is a cycle hire station with 37 docking points located adjacent to the north of the site on Bethnal Green Road, and a cycle hire station with 22 docking points located to the west of the site on Brick Lane. A further docking station with 16 docking points is located on Commercial Street, a short distance to the south of the site in proximity to its junction with Wheler Street.

6.4 PLANNED AND POTENTIAL FUTURE PROVISION

6.4.1 TfL are currently investigating cycle and pedestrian improvements to the Shoreditch High Street / Great Eastern Street / Commercial Street junction. The proposed design would include improved facilities for cyclists in the form of a southbound cycle lane on Shoreditch High Street and turning movements reserved for cyclists.

6.4.2 A copy of the proposed TfL scheme design is included in Appendix G. It is noted that the design is a work in progress and the drawing is therefore provided for information only

7.0 BASELINE PUBLIC TRANSPORT CONDITIONS

7.0 BASELINE PUBLIC TRANSPORT CONDITIONS

7.1 INTRODUCTION

7.1.1 This section provides a review of the accessibility of the site by public transport, identifying how people of all abilities will access the site.

7.2 PUBLIC TRANSPORT ACCESSIBILITY LEVEL

7.2.1 The Public Transport Accessibility Level (PTAL) methodology has been adopted by the Greater London Authority and TfL as a means of quantifying and comparing accessibility by public transport for a given site.

7.2.2 The PTAL methodology takes into account the time taken to access the public transport network, including:

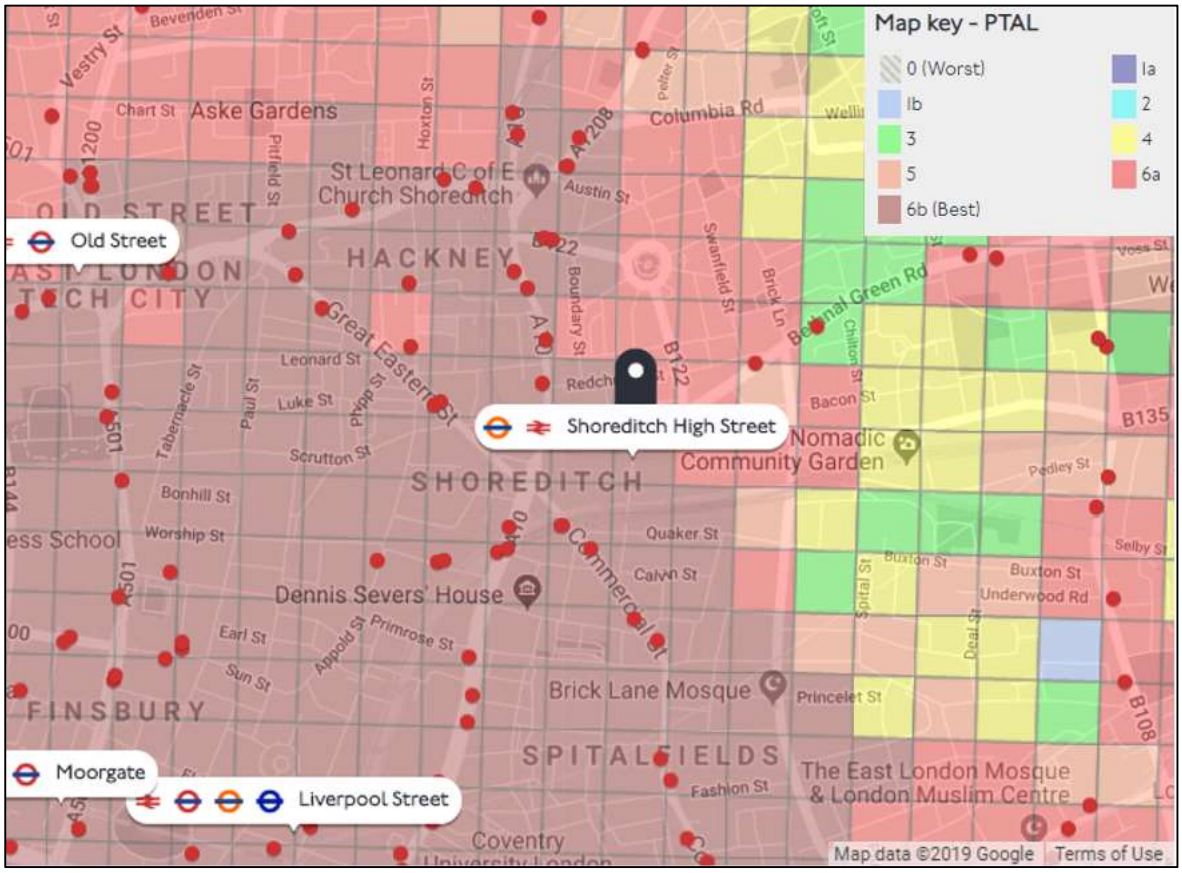
- The walk time to various public transport services;
- The average waiting time for each service; and
- The reliability of each service.

7.2.3 The methodology is based on a walk speed of 4.8km/h and considers rail stations within a 12-minute walk (960m) of the site and bus stops within eight minutes' walk (640m), with the PTAL assessment being undertaken using the AM peak hour operating patterns of existing public transport services,

7.2.4 An Equivalent Doorstep Frequency (EDF) is calculated for each of the public transport services accessible from the site based on the criteria described above. These individual EDF values are weighted to provide an accessibility index (AI) value for each service accessible from the site. The sum of the AI's for each mode are aggregated to provide a single measure of accessibility for the site.

7.2.5 Site specific PTAL calculations have been undertaken by TfL based on the current public transport service frequencies. The centre and western area of the site has a PTAL of 6b – Excellent. The eastern area of the site, towards Brick Lane, has a PTAL of 5 – Very Good. The PTAL output from TfL WebCAT is provided as Figure 7.1.

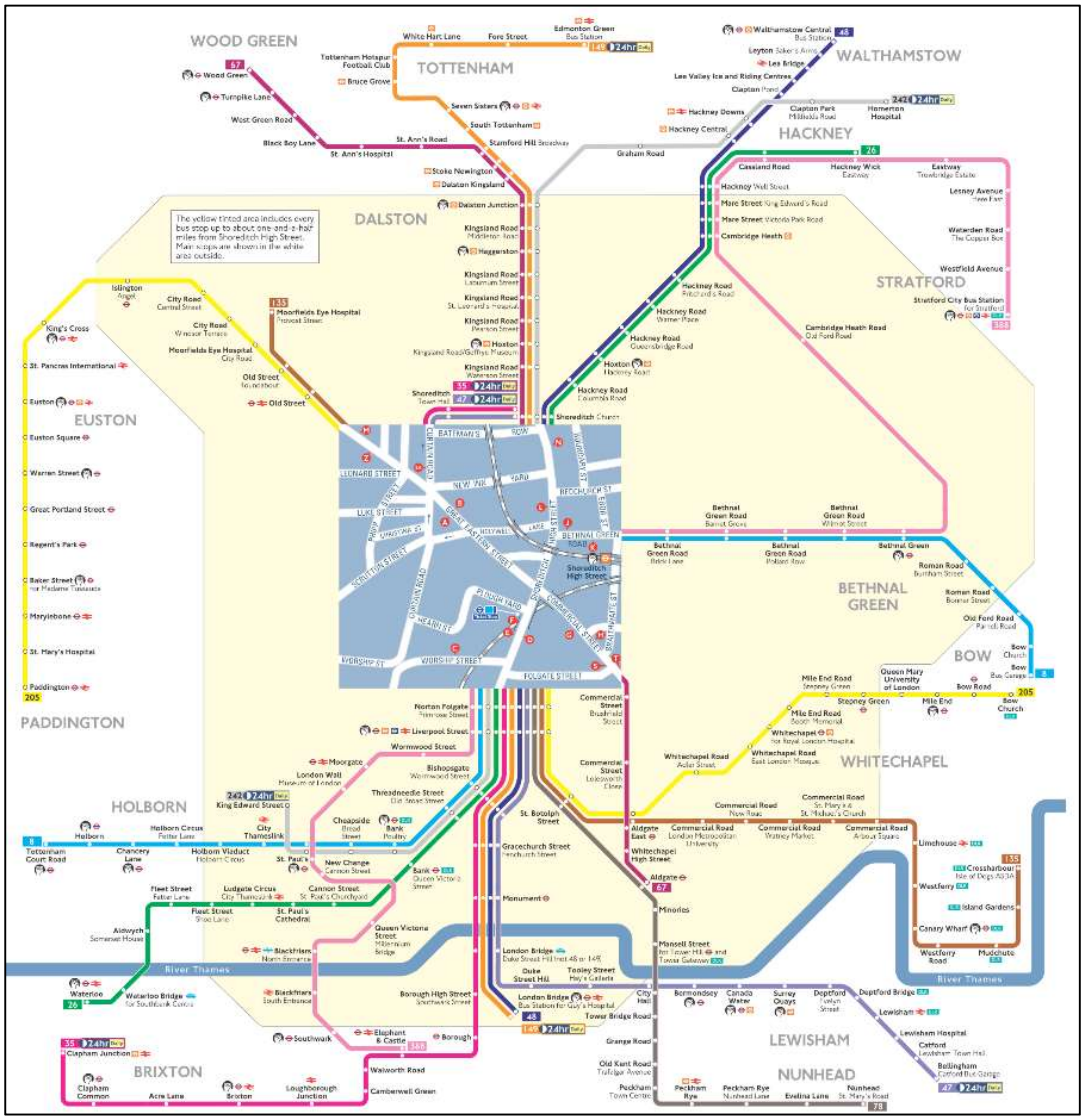
Figure 7.1: Public Transport Accessibility Level



Bus

7.2.6 Figure 7.2 below shows the bus stops and routes serving the site.

Figure 7.2: Local Bus Routes



7.2.7 The nearest bus stops serving the site are located on Bethnal Green Road and Commercial Street. The bus stops on Bethnal Green Road provide access to bus routes 8, 388 and N8. The bus stop on the north side of Bethnal Green Road, bus stop J, does provide a bus shelter and seating. The bus stop on the south side of Bethnal Green Road, bus stop K, does not provide seating or a bus shelter, presumably due to the footway width available and the high footfall

7.2.8 A bus stop is also located on the northern side of Commercial Street, bus stop H, providing access to southbound services for bus route 67. Bus stop H has a shelter and seating for bus passengers. A bus stop for northbound services is located on the southern side of Commercial Street, bus stop G, which also has a bus shelter and seating.

7.2.9 There are also bus stops on Shoreditch High Street, approximately 100 metres to the north and south of the site, providing access to numerous additional services for bus routes 8, 26, 35, 42, 47, 48, 78, 135, 149, 205, 242, 388, N8 N26, N35 and N205.

7.2.10 Existing local daytime bus services and frequencies are summarised in Table 7.1, which also gives details of routes with multiple stops convenient for different plots of the Proposed Development.

Table 7.1: Bus Services and Frequencies

Stop	Route	Direction	AM Peak Frequency (buses per hour)	PM Peak Frequency (buses per hour)
Shoreditch High Street Station (Stop K) - W-bound	8	Tottenham Court Road	11	10
Bethnal Grn Rd Shoreditch High St (Stop J) - E-bound	8	Bow	11	10
Commercial Street Worship St (Stop D) - S-bound	8	Tottenham Court Road	11	10
Shoreditch High St Bethnal Green Road (Stop L) - N-bound	26	Hackney Wick	6	6
Commercial Street Worship St (Stop D) - S-bound	26	Waterloo	6	6
Shoreditch High Street Station (Stop E) - N-bound	26	Hackney Wick	6	6
Commercial Street Worship St (Stop D) - S-bound	35	Clapham Junction	6	6
Commercial Street Worship St (Stop D) - S-bound	47	Bellingham	5	5
Shoreditch High St Bethnal Green Road (Stop L) - N-bound	48	Walthamstow	6	5
Commercial Street Worship St (Stop D) - S-bound	48	London Bridge	6	7
Shoreditch High Street Station (Stop E) - N-bound	48	Walthamstow	6	6
Elder Street (Stop H) - S-bound	67	Aldgate	6	6
Elder Street (Stop G) - N-bound	67	Wood Green	6	6
Shoreditch High St Bethnal Green Road (Stop L) - N-bound	67	Wood Green	6	6
Shoreditch High Street Station (Stop S) - N-bound	67	Wood Green	6	6
Folgate Street (Stop T) - S-bound	67	Aldgate	6	6

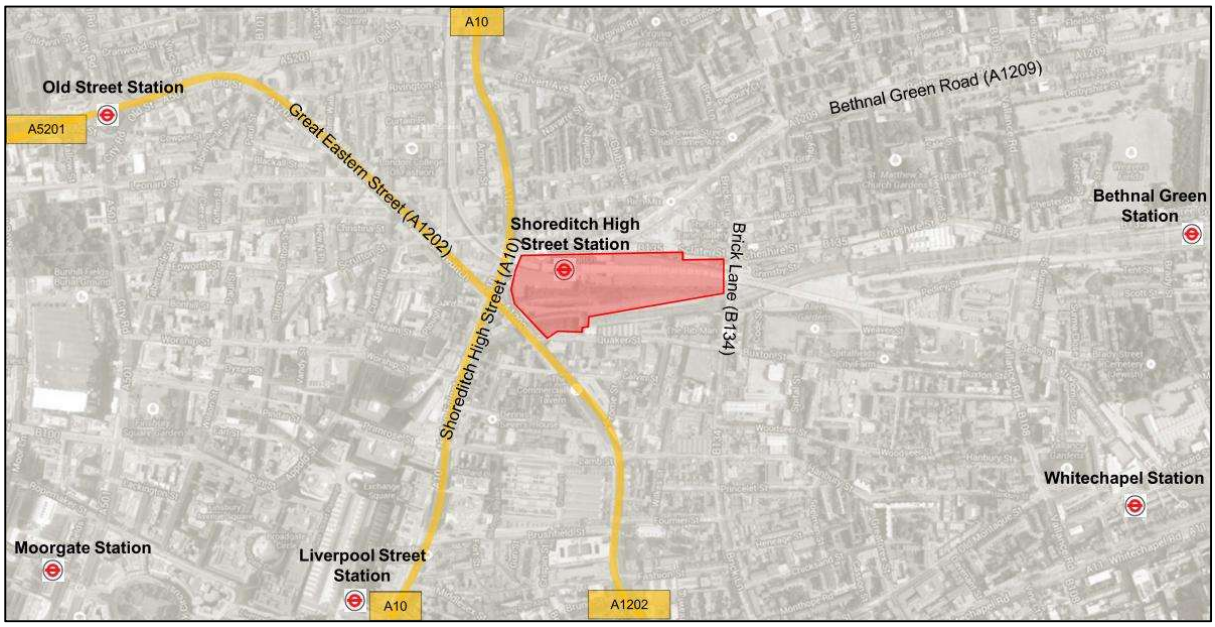
Shoreditch High Street Station (Stop F) - N-bound	78	Shoreditch	6	6
Commercial Street Worship St (Stop D) - S-bound	78	Nunhead	6	6
Commercial Street Worship St (Stop D) - S-bound	135	Cubitt Town	6	6
Shoreditch High Street Station (Stop E) - N-bound	135	Old Street	5	6
Shoreditch High St Bethnal Green Road (Stop L) - N-bound	149	Lower Edmonton	13	12
Commercial Street Worship St (Stop D) - S-bound	149	London Bridge	13	11
Shoreditch High Street Station (Stop E) - N-bound	149	Lower Edmonton	13	11
Commercial Street Worship St (Stop D) - S-bound	205	Bow	8	8
Shoreditch High Street Station (Stop E) - N-bound	205	Paddington	7	7
Shoreditch High St Bethnal Green Road (Stop L) - N-bound	242	Homerton	8	8
Commercial Street Worship St (Stop D) - S-bound	242	City of London	8	8
Shoreditch High Street Station (Stop E) - N-bound	242	Homerton	8	8
Shoreditch High Street Station (Stop K) - W-bound	388	Elephant & Castle, London	5	5
Bethnal Grn Rd Shoreditch High St (Stop J) - E-bound	388	Stratford New Town, Stratford	5	5
Commercial Street Worship St (Stop D) - S-bound	388	Elephant & Castle, London	5	5
Shoreditch High Street Station (Stop K) - W-bound	A8	St Pancras, London	2	2
Bethnal Grn Rd Shoreditch High St (Stop J) - E-bound	A8	Stansted Airport	1	2

7.2.11 Table 7.1 shows that the site is well served by buses in all directions during a weekday and at weekends. The site location therefore benefits from convenient access to a comprehensive network of bus services, with connections to the north, east, south and west, as well as areas of central London.

London Overground

7.2.12 Figure 7.3 shows the location of nearby London Overground, London Underground and mainline rail stations in context with the site.

Figure 7.3: London Overground, London Underground and Mainline Rail Stations



7.2.13 The ticket hall of Shoreditch High Street Overground Station is situated within the centre of the site at ground level. Shoreditch High Street station is situated on the core route between Dalston Junction and Surrey Quays, and is served by up to 16 trains per hour in each direction. Table 7.2 contains details of train frequencies during peak hour periods.

Table 7.2: London Overground Services and Frequencies from Shoreditch High Street Station

Destinations	Weekday AM and PM Peak, and Weekend Peak Frequency (approximate trains per hour)
Highbury & Islington - Canonbury	8
Dalston Junction - Hoxton (core section)	16
Whitechapel - Canada Water - Surrey Quays (core section)	16
New Cross	4
Peckham Rye - Clapham High Street - Clapham Junction	4
New Cross Gate - Sydenham - Crystal Palace	4
New Cross Gate - Sydenham - West Croydon	4

7.2.14 Table 7.2 shows that Shoreditch High Street station is served by a combined frequency of 16 trains per hour to Dalston Junction, Whitechapel and Canada Water during peak periods. Approximately eight trains per hour continue to Highbury and Islington to the north, whilst to the south there are approximately four trains per hour to New Cross and eight trains per hour on the common section to New Cross Gate and Sydenham.

7.2.15 There are numerous London Underground and mainline rail interchange opportunities available along the London Overground network, as shown in Table 7.3.

Table 7.3: Available Interchange Opportunities on the Overground Network

Interchange Station	Interchange Line	Destinations
Highbury & Islington	Overground	Richmond - Willesden Junction - West Hampstead - Camden Road
	Victoria Line	Walthamstow Central - Brixton
Canonbury	Overground	Hackney Central - Stratford
Whitechapel	District Line	Ealing Broadway / Richmond / Wimbledon - Earls Court - Victoria - Monument West Ham - Plaistow - Barking - Upminster
	Hammersmith and City Line	Liverpool Street - King's Cross St Pancras - Paddington - Hammersmith West Ham - Plaistow - Barking
Canada Water	Jubilee Line	Stanmore - Baker Street - Westminster - Waterloo - London Bridge North Greenwich - Stratford
West Croydon	London Trams	Wimbledon - East Croydon Beckenham Junction / Elmers End / New Addington

7.2.16 Many of these interchanges involve short walking distances as a result of perpendicular platform design (for example at Whitechapel and Canada Water) or cross-platform interchange (such as at West Croydon). It is considered that the combined journey times available when using London Overground to or from Shoreditch High Street are competitive.

London Underground

7.2.17 The nearest London Underground station to the site is Liverpool Street which lies approximately 950 metres to the southwest of the site. Liverpool Street is served by the Central, Circle, Hammersmith and City and Metropolitan lines. Table 7.4 outlines key destinations from the station, as well as service frequencies during weekday and weekend peak hours.

Table 7.4: London Underground Services from Liverpool Street Station

Line	Destinations	Approximate Frequent (trains per hour)				
		Weekday AM	Weekday Inter-Peak	Weekday PM	Saturday Peak	Sunday Peak
Central	Bank - Holborn - Oxford Circus - Notting Hill Gate - White City	30	24	27	27	22
Central	Mile End - Stratford - Leytonstone	27	24	29	25	22
Circle, H&C, Metropolitan	Farringdon - Kings Cross St Pancras - Baker Street	19	14	21	14	14
Circle	Tower Hill - Victoria - South Kensington	6	6	6	6	6
H&C	Mile End - West Ham - Barking	6	6	6	6	6

7.2.18 Old Street station is located within approximately 1 kilometre to the northwest of the site, and is served by the Bank branch of the Northern line. Services run northbound towards Edgware, High Barnet and Mill Hill East, and southbound towards Morden. Table 7.5 shows the frequency of London Underground services from Old Street station.

Table 7.5: London Underground Services from Old Street Station

Line	Destinations	Approximate Frequent (trains per hour)				
		Weekday AM	Weekday Inter-Peak	Weekday PM	Saturday Peak	Sunday Peak
Northern (northbound)	Kings Cross – Euston – Camden Town	21	15	20	16	16
Northern (southbound)	Bank – London Bridge – Stockwell – Morden	20	15	20	16	16

Mainline Rail

7.2.19 The nearest mainline rail station to the site is Liverpool Street station, which is managed by Network Rail. Table 7.6 provides a summary of the rail services operating from Liverpool Street station.

Table 7.6: Mainline Rail Services Operating from London Liverpool Street Station

Destinations	Weekday AM	Weekday Inter-Peak	Weekday PM	Saturday Peak	Sunday Peak
Southend Victoria	3	3	6	3	2
Southminster	-	-	2	-	-
Stansted Airport	4	4	4	4	4
Cambridge	3	2	4	2	1
Hertford East	2	2	2	2	2
Cheshunt	3	2	4	2	2
Enfield Town	3	2	4	2	2
Chingford	4	4	4	4	4
Norwich	2	2	4	2	1
Clacton-on-Sea	1	1	2	1	1
Colchester	5	5	8	6	3
Braintree	1	1	1	1	-
Gidea Park	6	6	15	6	6

7.2.20 In addition to London Underground services, Old Street station is also served by First Capital Connect trains to a number of destinations north of the site including Finsbury Park, Hertford North and Welwyn Garden City. Table 7.7 below provides a summary of the frequency of National Rail services operating from Old Street station.

Table 7. 7: Mainline Rail Services Operating from Old Street

Destinations	Weekday AM	Weekday Inter-Peak	Weekday PM	Saturday Peak	Sunday Peak
Finsbury Park	9	6	12	4	4
Hertford North	3	3	6	2	2
Welwyn Garden City	3	3	4	2	2

7.3 PLANNED RAIL PROVISION

7.3.1 Crossrail will connect the City, Canary Wharf and the West End to commuter areas east and west of London. Crossrail will extend from Maidenhead in Berkshire with a spur to Heathrow to the west and separate branches to Shenfield and Abbey Wood to the east. The principal objective of the scheme is to relieve congestion and overcrowding on the existing mainline rail and London Underground networks and improve direct accessibility to central London.

7.3.2 An interchange opportunity for Crossrail will be provided at Liverpool Street station, including a ticket hall on Moorgate.

8.0 BASELINE HIGHWAY CONDITIONS

8.0 BASELINE HIGHWAY CONDITIONS

8.1 INTRODUCTION

8.1.1 This section provides a description of baseline highway conditions in the vicinity of the site, including a description of the local road network and prevailing road safety conditions through a review of Personal Injury Accident (PIA) data.

8.2 LOCAL ROAD NETWORK

8.2.1 Shoreditch High Street is a two-way carriageway with a north to south alignment adjacent to the west edge of the site. Shoreditch High Street forms part of the TfL Road Network (TLRN). At the northwest corner of the site, it forms a signal controlled junction with Bethnal Green Road. North of this junction, vehicular traffic flow (with the exception of taxis and buses) is southbound only. At the southwest corner of the site, Shoreditch High Street forms a signal controlled junction with Commercial Street. The existing junction arrangement permits two-way traffic flow through the junction.

8.2.2 Commercial Street is a two-way single lane carriageway within the vicinity of the site. Commercial Street is a bus route and provides footways on both sides of the carriageway. Commercial Street forms part of the TfL Road Network (TLRN).

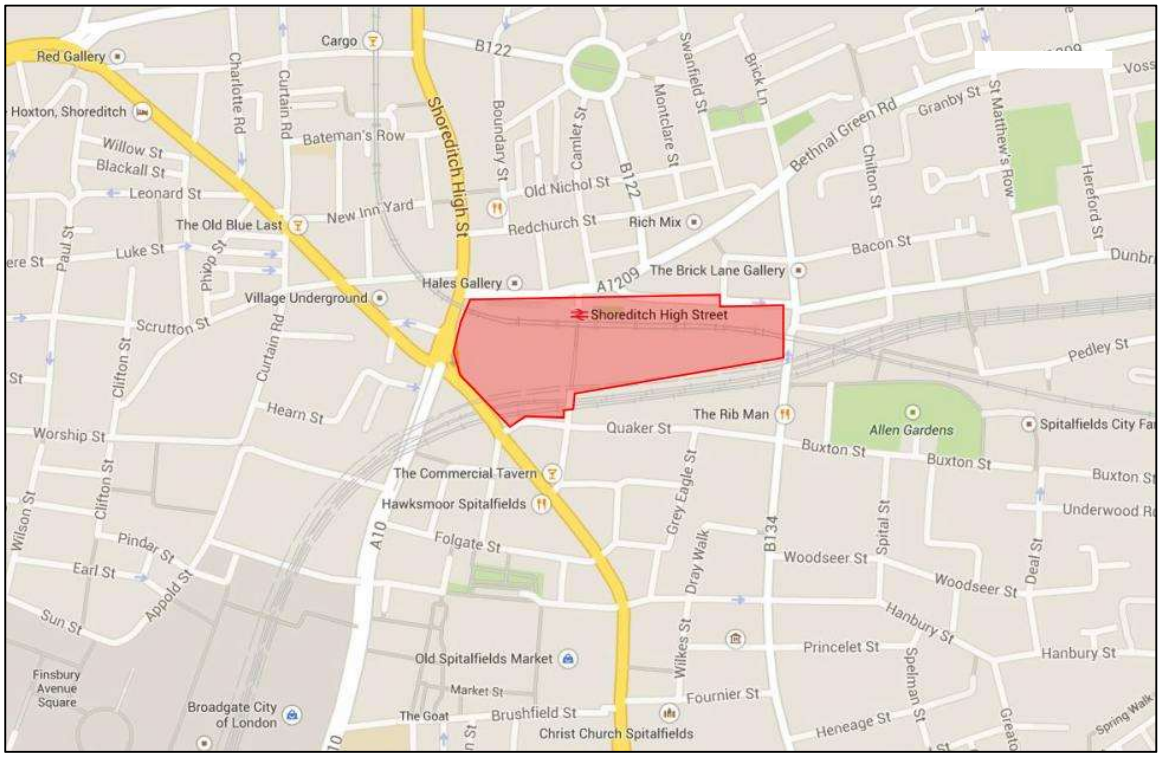
8.2.3 Quaker Street is one-way eastbound between the junction with Commercial Street and Wheler Street; and one-way westbound between the junction with Brick Lane and Wheler Street. There is on-street parking on both sides of the carriageway on Quaker Street, west of the junction with Wheler Street.

8.2.4 Wheler Street, which adjoins Braithwaite Street to the north, is one-way southbound only, south of the junction with Quaker Street, with no entry at the junction with Commercial Street.

8.2.5 Brick Lane is one-way northbound and is closed to traffic on Sundays between 8am and 4pm on Sundays for the Brick Lane market. Similarly, Sclater Street is also closed to traffic for the same period for the market.

8.2.6 Figure 8.1 shows the local highway arrangement in context with the site location.

Figure 8.1: Road Network Adjacent to the Site



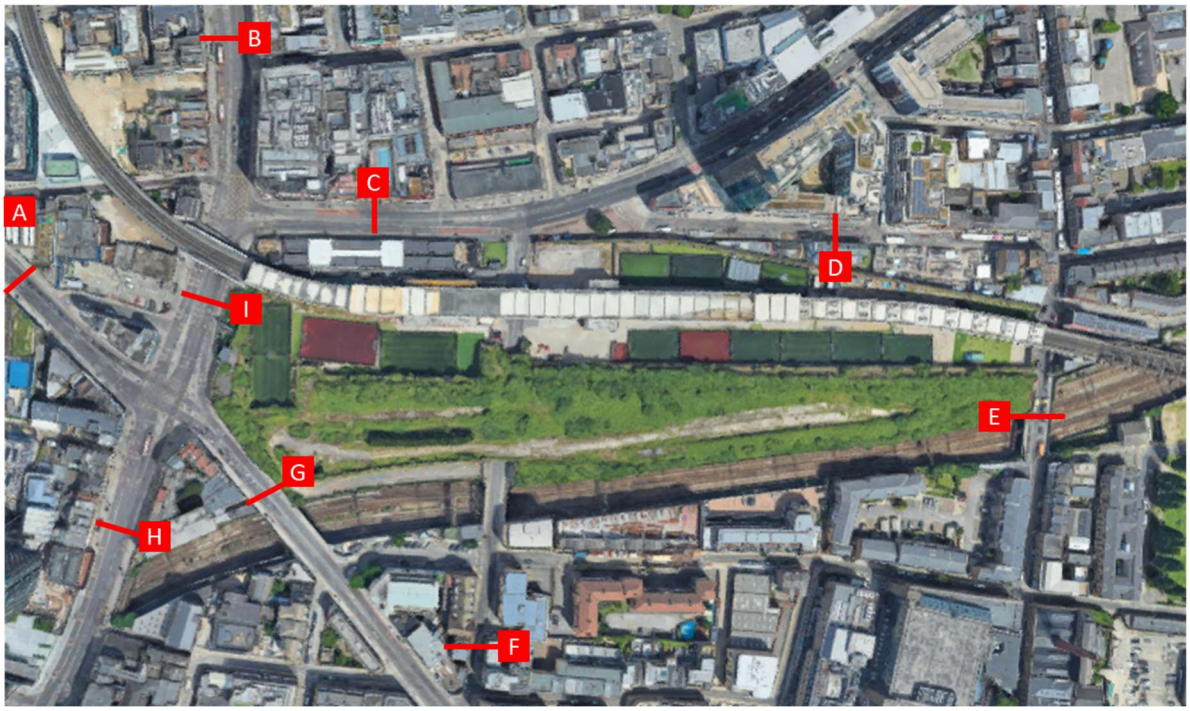
Traffic Survey Data

8.2.7 Traffic count data was required at the following locations in the vicinity of the site, replicating the locations surveyed in 2013:

- A – Great Eastern Street west of Holywell Lane;
- B – Shoreditch High Street north of Redchurch Street;
- C – Bethnal Green Road east of Shoreditch High Street;
- D – Sclater Street between Bethnal Green Road and Cygnet Street;
- E – Brick Lane between Grimsby Street and Quaker Street;
- F – Wheler Street between Quaker Street and Commercial Street;
- G – Commercial Street between Quaker Street and Shoreditch High Street;
- H – Shoreditch High Street between Commercial Street and Folgate Street; and
- I – Shoreditch High Street between Bethnal Green Road and Commercial Street.

8.2.8 In 2013 Automatic Traffic Counters (ATCs) had been installed at the locations shown in Figure 8.2.

Figure 8.2: Traffic Count Locations



8.2.9 Due to TfL restrictions on installing ATCs on the TLRN which came into force after 2013, it was not possible to install equipment at the following locations when surveys were undertaken in 2018:

- A – Great Eastern Street west of Holywell Lane;
- B – Shoreditch High Street north of Redchurch Street;
- G – Commercial Street between Quaker Street and Shoreditch High Street;
- H – Shoreditch High Street between Commercial Street and Folgate Street; and
- I – Shoreditch High Street between Bethnal Green Road and Commercial Street.

8.2.10 Consequently, Manual Classified Counts (MCCs) were undertaken on Thursday 21st, Saturday 23rd and Sunday 24th June at the following junctions:

- Shoreditch High Street / Bethnal Green Road / Holywell Lane;
- Shoreditch High Street / Great Eastern Street / Commercial Street;
- Great Eastern Street / Holywell Lane.

8.2.11 The surveys were undertaken between the hours of 06:00 and 22:00 each day. Scaling factors from ATCs on nearby roads were then used to extrapolate the data to provide 18 hour and 24 hour flows.

8.2.12 The MCC data was also used to calculate the turning proportions of vehicles at junctions. Network flow diagrams for 2018 baseline traffic flows during weekday AM and PM peak hours, and Saturday and Sunday peak hours, for the study area are provided at Appendix H.

8.3 PERSONAL INJURY ACCIDENT (PIA) DATA

8.3.1 Personal injury accident (PIA) records for the area surrounding the site have been obtained from the most recent period available at that time (three years up until the end of June 2018). A copy of the full PIA data, including a plot of the accident locations, is provided at Appendix I. The PIAs recorded at junctions within the study area are summarised in Table 8.1.

Table 8.1: Summary of PIA Data at Junctions

Junction	Motor Vehicles			Pedestrians			Cyclists			Total
	Slight	Serious	Fatal	Slight	Serious	Fatal	Slight	Serious	Fatal	
Shoreditch High Street / Commercial Street / Great Eastern Street	10	0	0	6	3	0	6	1	0	26
Shoreditch High Street / Bethnal Green Road / Holywell Lane	0	0	0	1	2	0	5	1	0	9
Bethnal Green Road / Sclater Street	1	0	0	1	0	0	1	0	0	3
Commercial Street / Quaker Street / Elder Street	4	0	0	1	0	0	2	0	0	7

Shoreditch High Street/Commercial Street/Great Eastern Street junction

8.3.2 A total of 26 PIAs were recorded at the above junction, including ten vehicular accidents, nine pedestrian accidents and seven cycling accidents. Of the above PIAs, four accidents were defined as serious, with the remaining 22 PIAs resulting in slight injuries.

8.3.3 Of the four serious accidents recorded, one was attributed to a vehicle hitting the pedestrian phase of the pedestrian crossing. The PIA records do not provide any information on how the remaining serious PIAs occurred, citing “not known how collision occurred

8.3.4 Of the 22 slight PIAs across all modes, there were:

- 3 records where a pedestrian stepped into the road into vehicles path;
- 2 records which were attributed to sharp braking;
- 7 records which were attributed to turning collisions, undertaking, overtaking or cutting across the adjacent vehicle path;
- 10 records where the cause of the collision was not established.

Shoreditch High Street/Bethnal Green Road/Holywell Lane junction

8.3.5 A total of 9 PIAs occurred at the above junction, including 6 cyclist and 3 pedestrian accidents. Of the above PIAs, three were defined as serious and the remaining three as slight in severity

8.3.6 Of the three serious accidents, one was as a result of a vehicle colliding with a pedestrian and then failing to stop, while the causes of the other two are not known

8.3.7 Of the six accidents of slight severity, one involved a pedestrian who ran out onto the road into the path of an oncoming vehicle, and one was the result of a red light being ignored, involving a cyclist. Another accident occurred due to an overtaking vehicle leaving too little room alongside a cyclist. The causes of the other three slight accidents, all involving cyclists, are not known.

Bethnal Green Road / Sclater Street junction

8.3.8 A total of three PIAs occurred at the above junction, including one vehicular, one pedestrian and one cyclist accident respectively, all of which resulted in slight injuries.

8.3.9 For the pedestrian and the pedal cycle incidents, the records state that it was not known how this collision occurred.

8.3.10 For the vehicular accident, a vehicle collided into the back of the vehicle in front, resulting in a crash.

Shoreditch High Street/Bethnal Green Road/Holywell Lane junction

8.3.11 A total of seven PIAs occurred at the above junction, including one pedestrian, two cyclist and four vehicular accidents. The vehicles included one car, one bus/coach and two powered 2-wheelers (scooters or motorbikes).

8.3.12 The pedestrian accident was caused by the pedestrian crossing the road in-between stationary parked cars, thus limiting visibility to the oncoming vehicle.

8.3.13 The two cyclist accidents were a result of vehicles turning right and crossing the path of the cyclists.

8.3.14 For the vehicular PIAs, one PIA record states “it was not known how this collision occurred”, one involved a standing passenger onboard the bus falling over, one of a vehicle failing to give way, and one accident as a result of a motorcycle trying to overtake.

8.4 CAR CLUBS

8.4.1 Two car club bays are currently provided on Quaker Street immediately to the south of the site. In addition, car club bays are located on Lamb Street (further to the south of the site), Hearn Street and King John Court to the west of the site, and Swanfield Street to the north; all of these bays are located within approximately 400 metres from the centre of the site.

9.0 DESCRIPTION OF PROPOSALS

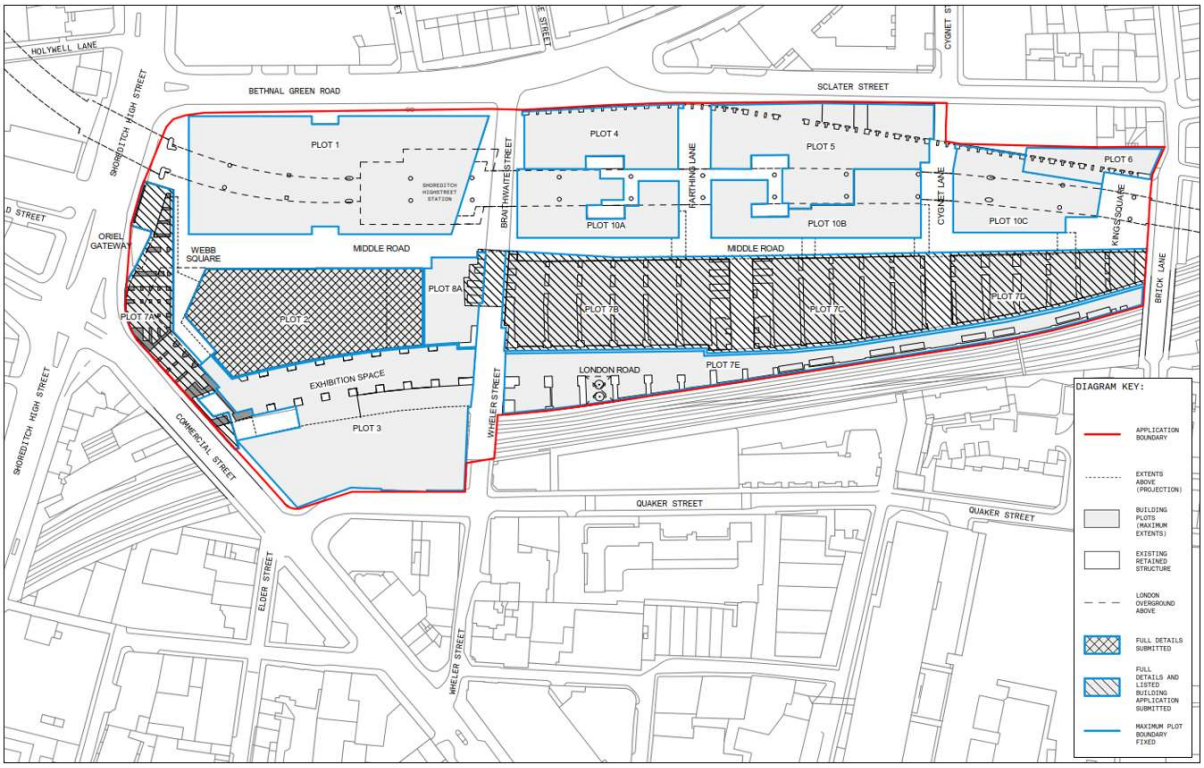
9.0 DESCRIPTION OF PROPOSALS

9.1 INTRODUCTION

9.1.1 This section details the site in terms of access strategy, servicing arrangements and parking provision. A copy of the proposed Masterplan General Arrangement layouts for basement, ground and first floor levels is provided at Appendix J.

9.1.2 The site has been divided into plots of land, Plots 1-11 as shown in Figure 9.1.

Figure 9.1: Site Plots



9.2 SCHEDULE OF ACCOMMODATION

9.2.1 Details of the development land uses and quantum of development are described within Section 1.6 and Appendix K.

9.2.2 The Transport Assessment will consider the Maximum Scenario for each Plot and land use as set out in Table 9.1. As the split of A class use is unknown at this stage, for the purpose of the Transport Assessment only, a split of 35% food; 35% non-food and 30% A2-A5 has been applied.

9.2.3 The quantum has been calculated on a worst case scenario basis, considering both options for Plot 1 Retail Food along with non-food bases, and Plot 3 Office base and Retail base.

Table 9.1: Proposed Development (Maximum Quantum)

Plot / Building	Retail (Food)	Retail (Non-food)	A2, A3 andA5	Office	Residential	Cultural	Hotel
1	331 m^2	331 m^2	284 m^2	54,230 m^2	-	-	-
2	823 m^2	823 m^2	705 m^2	66,930 m^2	-	-	-
3	865 m^2	865 m^2	741 m^2	17,342 m^2	-	3,685 m^2	-
4	205 m^2	205 m^2	176 m^2	-	144 units	-	-
5	351 m^2	351 m^2	301 m^2	521 m^2	84 units	315 m^2	-
6	-	-	-	-	-	2,385 m^2	-
7	2,057 m^2	2,057 m^2	1,763 m^2	-	-	390 m^2	-
8	902 m^2	902 m^2	773 m^2	-	138 units	299 m^2	150-rooms
10	1,248 m^2	1,248 m^2	1,070 m^2	-	134 units	-	-
11	60 m^2	60 m^2	51 m^2	-	-	-	-
Total	**6,841 m^2**	**6,841 m^2**	**5,864 m^2**	**139,023 m^2**	**500 units**	**7,074 m^2**	**150-rooms**

9.3 ACCESS STRATEGY

9.3.1 Whilst the site location presents a number of opportunities, there are also a number of constraints in terms of the position of rail lines, presence of listed building structure and third-party structure, areas unsuitable for building foundations, position of the Transport for London Road Network (TLRN) and nearby junctions.

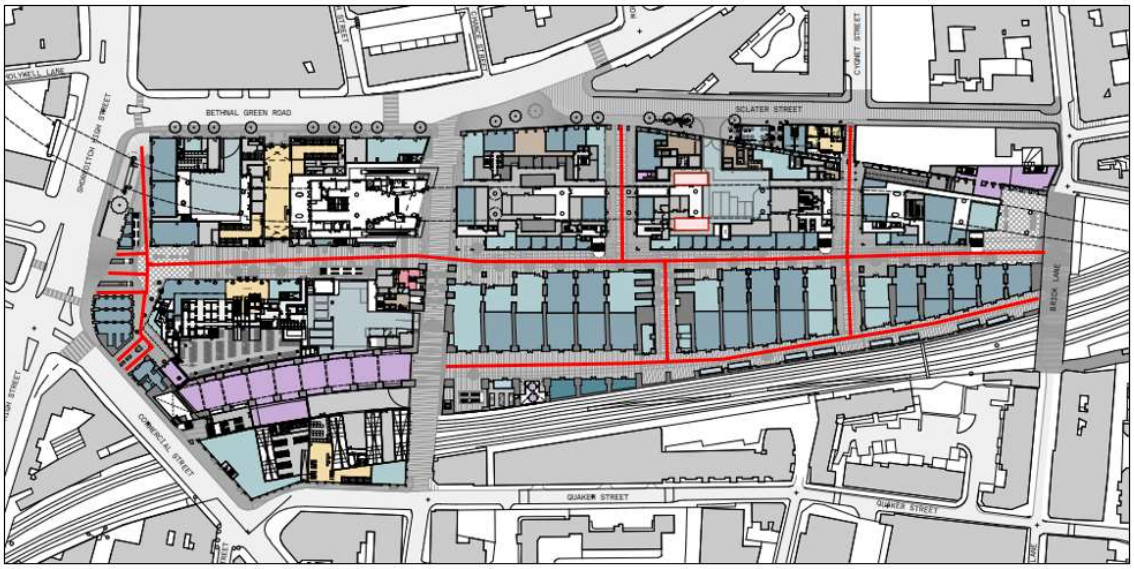
9.3.2 These physical barriers have informed the access strategy which has been discussed in detail with LBH, LBTH and TfL during the pre-application process. The following provides a summary of the site access strategy.

Pedestrian Access

9.3.3 Pedestrian access to the site will be provided from Bethnal Green Road, Sclater Street, Brick Lane, Braithwaite Street, Commercial Street and Shoreditch High Street. Existing footways will connect with building entrances on site. Where opportunity permits, building lines have been set back to increase effective widths of existing footways in the public highway.

9.3.4 Figure 9.2 shows the new pedestrian routes available through the site in red, with Braithwaite Street, an existing route for pedestrians, also being retained.

Figure 9.2: New Pedestrian Routes through the Site



9.3.5 The development scheme also includes the provision of a public realm at platform level. The public realm will be accessed via steps/lifts, which have been designed to accommodate predicted footfall to and from the public realm. The location of the public realm is shown in Figure 9.3.

Figure 9.3: Park at First Floor Level

Cycle Parking & Access

9.3.6 Cycle parking will be provided in accordance with the New Draft London Plan with adequate long-stay and short-stay cycle parking provided on-site.

Short-stay Cycle Parking

9.3.7 Table 9.2 shows the minimum short-stay cycle parking requirements for the maximum quantum of development across the whole site. The quantum has been calculated on a worst case scenario basis, considering both options for Plot 1 Retail Food along with non-food bases, and Plot 3 Office base and Retail base.

Table 9.2: Minimum Short-stay Cycle Parking Requirements

Use	Quantum of Development	Minimum Short-stay cycle parking spaces
Office	135,752 m^2	37
A1 (Food) (35% total A use)	6,741 m^2	78
A1 (Non-food) (35% total A use)	6,741 m^2	28
A1-A5 (30% total A use)	5,778 m^2	293
Residential	500 units	13
Hotel	150 rooms	4
Cultural	4,170 m^2	24

Total	**477**
70% policy provision	**334**

9.3.8 As the split of A class use is unknown at this stage, the short-stay cycle parking estimate has assumed a split of 35% food; 35% non-food and 30% A2-A5.

9.3.9 In addition, further to pre-application discussions with TfL, LBH and LBTH, it was agreed to provide 70% of the minimum policy requirement to ensure the new pedestrian streets are not cluttered with visitor cycle parking. It was agreed that the use of the short-stay cycle parking would be monitored and if there is demand for additional short-stay cycle spaces these would be provided.

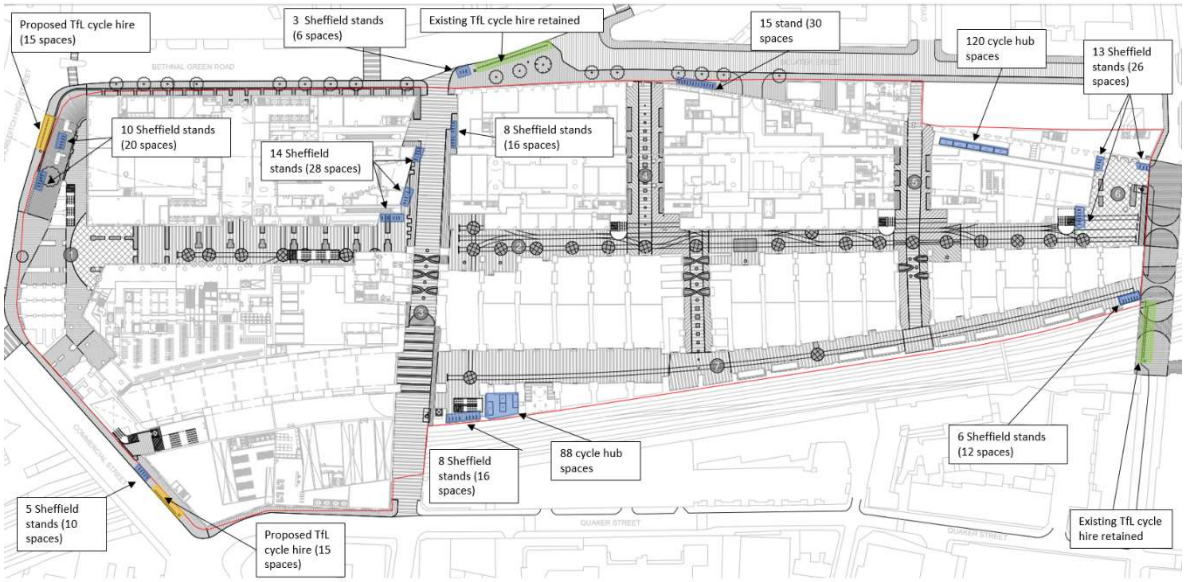
TfL Cycle Hire

9.3.10 There are currently three TfL cycle hire docking stations next to the site: 37 docking points on Bethnal Green Road; 22 docking points on Brick Lane; and 16 docking points on Commercial Street. The development proposals include the provision of two additional docking stations: one on the east edge of Shoreditch High Street, south of the junction with Bethnal Green Road which would provide 15 docking points; and a second on the north edge of Commercial Street, west of the junction with Quaker Street, which would also provide 15 docking points.

Cycle Parking Locations

9.3.11 Figure 9.4 shows the locations of public cycle parking and TfL Cycle Hire docking stations which will be present as part of the site.

Figure 9.4: Proposed Cycle Parking



Long-stay Cycle Parking

9.3.12 Table 9.3 shows the minimum long-stay cycle parking provision by Building for each of the proposed uses.

Table 9.3: Minimum Long-stay Cycle Parking Required

Plot / Building	Retail (Food)	Retail (Non-food)	A2-A5	Office	Residential	Cultural	Hotel
1	2	1	2	723	0	-	-
2	5	3	4	892	0	-	-
3	5	3	4	231	0	-	-
4	1	1	1	0	248	-	-
5	2	1	2	7	144	-	-
6	0	0	0	0	0	4	-
7	12	5	10	0	0	-	-
8	5	4	4	0	237	-	8
11	0	0	0	0	0	-	-
10	7	4	6	0	230		

9.3.13 It is intended for changing and showering facilities to be provided for staff of the retail and office uses, as requested by the GLA and TfL.

Cycle Accessibility

9.3.14 The existing cycle accessibility to and from the site is considered excellent. The site is ideally placed on the edge of the City of London to facilitate journeys by cycle including those to employment, shopping and leisure facilities and to surrounding residential areas. Section 14 of this report considers cycle access to the site and the overall wider strategy in detail.

Vehicular Access

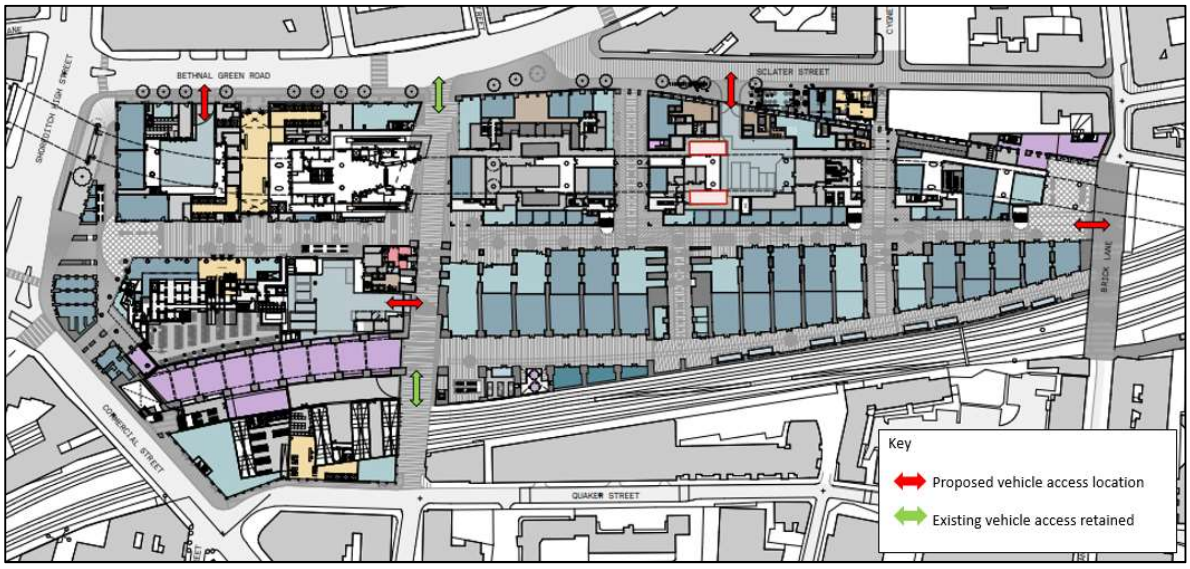
9.3.15 The proposals include the following new points of vehicle access onto the site at the following locations:

- Bethnal Green Road, approximately 35m east of the junction with Shoreditch High Street;

- Sclater Street, approximately 70m east of the junction with Bethnal Green Road;
- Brick Lane, south of the rail arches; and
- Braithwaite Street, north of the junction with London Road, beneath the rail arches.

9.3.16 Figure 9.5 shows the location of the proposed vehicle accesses, and shows the existing accesses on Braithwaite Street.

Figure 9.5: Proposed Vehicle Access Arrangements



9.3.17 The proposed vehicle access on Bethnal Green Road would take the form of an all-movements priority junction. The site access would be approximately 7.3m in width which would allow two-way vehicle movements. The proposed vehicle access will require amendments to the location of the existing bus stop and bus cage on the north side of Bethnal Green Road. The proposed access would provide access to a service yard only. The site access may require a yellow box junction in the westbound lane on Bethnal Green Road, to avoid vehicle queues blocking the access, however this would be subject to further assessment and detailed design.

9.3.18 The proposed vehicle access on Sclater Street would be an all-movements priority junction providing access to a service yard only. The proposed access point is on the two-way section of Sclater Street, which is one-way only eastbound, east of the junction with Cygnet Street. The site access would be approximately 7m in width which would allow for two-way vehicle movements. The proposed access will require the removal of three on-street parallel parking bays along the south edge of Sclater Street. The parking bays are permit holder bays or used as pay & display bays. It should be noted Sclater Street is closed to vehicles on Sunday between 8am-4pm for the market.

9.3.19 The proposed Brick Lane access would be a left-in, left-out only priority junction as Brick Lane is one-way northbound only. The access will allow service vehicle and emergency vehicle access only to the new Middle Road running through the site. The proposed access would be approximately 7m in width. The proposed access will require the removal of four on-street parallel parking bays along the west edge of Brick Lane. The parking bays are Business permit holder only bays. It should be noted Brick Lane is closed to vehicles on Sunday between 8am-4pm for the market.

9.3.20 The proposed vehicle access on Braithwaite Street will provide access to a service yard. To provide the new vehicle access, amendments to the rail arches will be required to achieve sufficient headroom. The access will not accommodate two-way movements due to width restrictions caused by the existing rail arches, therefore an access control will be required. The access control would give priority to vehicles entering the site to reduce the risk of vehicles queuing on Braithwaite Street to enter the site.

9.3.21 The existing vehicle access via Braithwaite Street will be retained, which will continue to be closed to through traffic, however accessible from Bethnal Green Road to the north and Quaker Street from the south.

9.3.22 In addition, the existing vehicle access on London Road, at the junction with Braithwaite Street will be retained for service vehicle access, which wil be detailed further later in the report.

9.3.23 The new Middle Road will form a junction with the existing Braithwaite Street which will be used for vehicle access on occasion, in the form of delivery vehicle access and emergency vehicle access. Middle Road will primarily be a pedestrian route and not accessible for general traffic, therefore vehicle access will be controlled.

9.3.24 Existing vehicle crossovers and site access points, where no longer required, will be removed to improve pedestrian routes around the site.

9.3.25 Amendments are proposed to the existing highway arrangement to facilitate the access strategy.

9.3.26 TfL and the Boroughs have requested a Stage 1 Road Safety Audit for the proposed vehicle access points which will be provided. The GLA has suggested for this arrangement to be secured across all land uses through the Section 106 agreement.

Emergency Vehicle Access

9.3.27 Emergency vehicle access for the site has been considered; with the main access routes via Braithwaite Street and the new Middle Road access through the centre of the site.

9.3.28 The swept path analysis for a fire tender is provided at Appendix L.

9.4 DELIVERY AND SERVICING STRATEGY

9.4.1 It is intended for all delivery and servicing activity to take place on site, within dedicated service yards and servicing areas, with all vehicles entering and exiting the site in forward gear. The site layout plan shows proposed design, as appropriate, for each of the dedicated servicing areas as they relate to plots / buildings associated with detailed and outline planning applications.

9.4.2 For delivery vehicles, it is considered that day-to-day activity will comprise of vehicles up to the size of a 10m rigid HGV. For refuse vehicles, notably vehicle specifications for LBH and LBTH vary slightly and this has been taken into consideration during the design process of the site layout. Drawings to show swept path analysis for delivery and servicing vehicles are provided at Appendix M.

9.4.3 The delivery and servicing strategy for the whole of the site can be summarised as follows:

- Bethnal Green Road service yard – will service Plot 1 only;
- Sclater Street service yard – will service Plots, 4, 5 and 10;
- Middle Road service area – will service Plots 7A, 7B, 7C, 7D and 7E;
- Braithwaite Street service yard – will service Plots 2 and 8;
- London Road service area – will service Plot 3 only.

9.4.4 Table 9.4 shows the estimated servicing demand for each of the service yards and service areas.

Table 9.4: Estimated Servicing Vehicle Arrivals by Service Yard

Service Yard	Plots / Buildings	Daily total deliveries	Development peak hour deliveries	Capacity
Bethnal Green Road	Plot 1	135	18	6 bays
Sclater Street	Plot 4	78	13	5 bays
	Plot 5			
	Plot 10			
Middle Road	Plot 7	58	8	-
Braithwaite Street	Plot 2	238	28	8 bays
	Plot 8			
London Road	Plot 3	65	8	2 bays

9.4.5 The GLA and TfL have confirmed that a site-wide Delivery and Servicing Plan will need to be secured through the Section 106 agreement with detailed plans submitted for individual plots/phases. TfL has suggested that the plan(s) would be subject to approval by TfL, LBH and LBTH. The Applicant confirms that this will be acceptable. Further details on the delivery and servicing strategy are provided in the draft Delivery and Servicing Plan chapter.

Refuse Collection

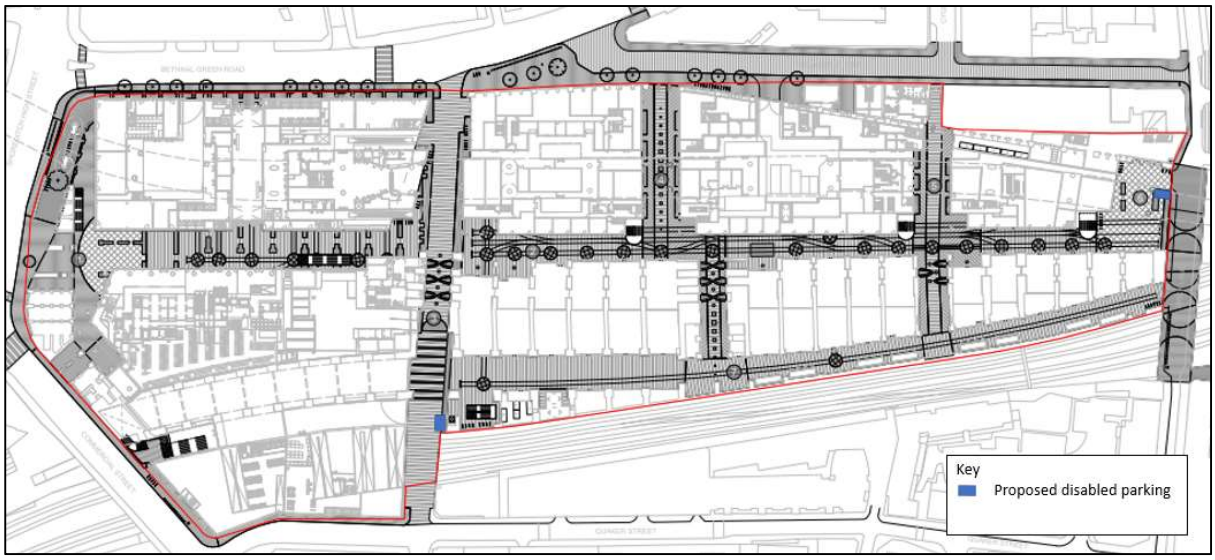
9.4.6 All refuse collection will take place on site from within the service yards or service areas. It is expected that waste and recycling material associated with the residential units will be collected by the LBH/LBTH. For the office and retail uses, it may be that refuse collection is organised through private companies. A Waste Strategy has been prepared separately and will be submitted as part of the planning application.

9.5 CAR PARKING

9.5.1 The proposed development will be car-free with the exception of disabled parking provision.

9.5.2 The proposals include two on-site disabled parking bays for the Detailed Component for Plot 2 and Plot 7, with one disabled bay for each of the proposed uses, office (Plot 2) and retail (Plot 7). The location of the disabled parking bays are shown in Figure 9.6.

Figure 9.6: Disabled Parking Layout Plan



9.5.3 With regard to the Outline Application Component, the Applicant will continue to work with the Boroughs and the GLA to develop an appropriate strategy for disabled parking provision for the wider site as the phased development progresses.

Permit Free Agreement

9.5.4 The GLA and TfL have confirmed that a permit free agreement will need to be put in place to ensure residents are not eligible for on street parking permits. The Applicant confirms that this will be acceptable. As a consequence, parking stress analysis has not been undertaken since the Proposed Development would not lead to an increase in the occupancy of residential parking bays on nearby roads.

Electric Vehicle Charging Points

9.5.5 As the site will be car-free, there will be no provision for Electric Vehicle Charging Points (EVCP) on-site, although the service yards may require EVCP to meet future demand.

CAR PARKING MANAGEMENT PLAN

9.5.6 The GLA and TfL have requested a Car Parking Management Plan will need to be secured through the Section 106 agreement demonstrating how the disabled parking spaces would be allocated and managed during the different phases of development. The Applicant confirms that this will be acceptable.

9.6 CAR CLUB

9.6.1 The design led scheme focuses upon offering a significant area of public space, including the new east-west Middle Road route providing access to public realm (Shoreditch Place and Braithwaite Square), for users of the site to benefit from and enjoy. As such, vehicle access to and from the site are largely limited to servicing vehicle access and emergency vehicle access only.

9.6.2 Initial discussions have taken place with a car club operator and it is generally their preference for car club bays to be provided at grade on public roads so that they would also benefit the surrounding resident and daytime populations.

9.6.3 It is noted that the site location benefits from existing car club provision. Specifically, two car club bays are currently provided on Quaker Street immediately to the south of the site. In addition, car club bays are located on Lamb Street (further to the south of the site), Hearn Street and King John Court to the west of the site, and Swanfield Street to the north; all of these bays are located within approximately 400 metres from the centre of the site.

9.7 PICK UP AND DROP OFF ACTIVITY

9.7.1 There is no on-site provision for vehicle pick-up and drop-off due to the pedestrian nature of the site.

9.7.2 Vehicle pick-up and drop-off will be on the surrounding streets where existing Traffic Regulations Orders permit.

9.7.3 Suitable areas identified which would not impede general traffic movements include:

- Bethnal Green Road – double yellow lines west of Bus Stop K;
- Braithwaite Street - at junction with Bethnal Green Road;
- Sclater Street – two-way section between Bethnal Green Road and Cygnet Street on the double yellow lines on the north-side of the road;
- Braithwaite Street – at junction with Quaker Street; and
- Quaker Street – double yellow lines on north and south edge of the road.

10.0 EXISTING TRIP GENERATION

10.0 EXISTING TRIP GENERATION

10.1 INTRODUCTION

10.1.1 This section considers the operation of the former and existing site uses, and the assumptions made to allow for a robust assessment.

EXISTING SITE USES

10.1.2 The site was formerly the Bishopsgate Goods Yard; a passenger rail station from 1840 to 1875, then a freight terminal until destroyed by fire in 1964.

10.1.3 The site is currently, in part, occupied by Boxpark and Powerleague who use the site on a temporary basis, providing retail and leisure uses. The site is also partly occupied by Shoreditch High Street Overground Station. The remaining part of the site is currently vacant.

10.1.4 It may be considered that Shoreditch High Street Overground Station is the main draw for pedestrian trips along Bethnal Green Road (south side). However, pedestrian surveys show that during peak hours that the station is not at its busiest (for example, a weekday lunchtime, Saturday and Sunday lunchtime peaks compared with a Weekday AM and PM peak), pedestrian flows along Bethnal Green Road are greater. This is attributed to retail draw of the Boxpark units from the western area of the site.

TRIP GENERATION

10.1.5 Trip generation would have been associated with the former site use, and moreover, trip generation is evidently associated with the existing site leisure and retail uses.

10.1.6 Whilst base pedestrian survey data undertaken for this assessment includes the operation of the existing site uses, for a robust assessment, a base of zero trips to and from the site has been assumed (i.e. trips associated with the existing site uses have not been removed from baseline pedestrian networks).

11.0 CUMULATIVE SCHEMES

11.0 CUMULATIVE SCHEMES

11.1 INTRODUCTION

11.1.1 LBTH and LBH have confirmed a number of committed and planned developments which are to be taken into consideration for the purpose of the Transport Assessment.

11.2 COMMITTED AND PLANNED DEVELOPMENTS

11.2.1 A summary of relevant committed and planned developments is provided in Table 11.1.

Table 11.1: Committed and Planned Developments

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
1 (LBTH)	Land within former Truman's Brewery site, (LPA Ref. PA/12/00090)	Demolition of the existing store building, sub-station, workshops and boundary wall to Buxton Street and Spital Street up to the Cooperage Building and erection of a 3 storey high data centre with basement accommodation including provision of Use Class B1.	Application permitted (12 April 2012). Permission has lapsed without implementation.
2 (LBTH)	London Fruit Exchange Brushfield Street And Multi Storey Car Park Whites Row, Brushfield Street, London (LPA ref: PA/16/03266)	Demolition of Whites Row Multi-Storey Car Park, 99-101 Commercial Street (The Bank), 54 Brushfield Street (The Gun Public House), and partial demolition of the London Fruit & Wool Exchange behind the retained Brushfield Street facade and the erection of a six storey building with a basement, for business, employment and retail use (Use Classes B1/A1/A2/A3 & A4) with landscaping and associated works, together with a new pavilion building for retail accommodation (Use Class A1).	Application permitted (11 October 2017)
3 (LBH)	Art Otel - east of Old Street roundabout at the junction of Old Street, Rivington Street and Great Eastern Street. (LPA Ref: 2009/2405)	Demolition of existing buildings on the site and construction of a part eighteen storey and part six storey building for use as a Hotel, plus retail, bar and restaurant, art gallery and art cinema; Offices; and roof top bar and restaurant; together with ancillary hard and soft landscaping, revised vehicular access/egress, 48 cycle spaces and refuse/service arrangements.	Under construction

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
4 (LBTH)	Black Lion House, 45 Whitechapel Road (LPA Ref. PA/13/02162)	Change of use, refurbishment and extension to existing office building (Use Class B1), to provide 11, 537m2 / 217 bed hotel (Use Class C1) including an additional 7th, 8th and 9th storey extension. Erection of a single storey office building.	Under construction
5 (LBTH)	Aldgate Place (LPA Ref. PA/13/00218)	Demolition of existing buildings and creation of a mixed use development, comprising three towers of 22, 25 and 26 storeys and a series of lower buildings ranging from 6 to 9 storeys. Provision of 463 private and affordable residential dwellings (use class C3), together with office (use class B1), hotel (use class C1), retail including restaurants, cafes and drinking establishments (use classes A1-A4) and leisure (use class D2) uses; creation of new pedestrianized street, public open spaces, children's play spaces and associated car and cycle parking together with associated highways works and landscaping.	Under construction
6 (CoL)	Bevis Marks House, 24 Bevis Marks (LPA Ref: 14/00433/FULMAJ)	The demolition of the existing buildings and construction of 2 basement levels and ground plus 16 storey building (89m AOD) comprising office (Class B1) use [35,658sq.m GEA] and retail (Class A1/A3) uses [758sq.m GEA] with associated servicing and plant facilities. [Total 36,416sq.m GEA].	Under consideration
7 (LBTH)	Fakruddin Street and Pedley Street (LPA Ref. PA/12/02228)	Redevelopment of site (including land at Fakruddin Street) to provide a car free development of 63 units (14x 1 bed flats, 28x 2 bed flats, 12x 3 bed and 9x 4 bed house) for 100% affordable housing within three blocks measuring between two and seven storeys including associated shared and private amenity space, landscaping, disabled parking, cycle parking, child play area and community centre (273m2) including community building (90m2).	Under construction
8 (LBTH)	11-31 Toynbee Street and 67-69 Commercial Street, London	Demolition of the existing buildings on site and redevelopment to provide a part three, part four, part five storey building with basement, comprising a flexible workspace area on ground	Application permitted (18 October 2017)

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
	(LPA Ref: PA/16/02878/A1)	floor and basement (Use Class B1); a fitness tuition facility in basement (Use Class D2); office space on ground floor (Use Class B1); a larger commercial unit on ground floor for flexible A1/A2/A3/A5 use; two smaller commercial units on ground floor for flexible A1/A2/A3/A5/B1 use; an internal commercial unit on ground floor for flexible A1/A2/A3/A5 use; 23 residential units (Use Class C3) ; creation of roof terrace, amenity space and bin store; landscaping works.	
9 (LBTH)	Site At 3-11 Goulston Street And 4-6 And 16-22 Middlesex Street (LPA Ref: PA/18/01544)	Demolition of existing substation and construction of a part 8/16/20/24 storey building with basement, including 988 rooms of purpose built student accommodation (sui generis); 488sqm of incubator floorspace and 2,919sqm of affordable workspace (Use Class B1) at ground, first, second and third floor levels; together with cycle parking; landscaping and public realm improvements.	Decision pending
10 (was 37) (LBTH)	Enterprise House, 21 Buckle Street, London, E1 8NN (PA/16/03552).	Demolition of existing office building and erection of a 13 storey building (plus enclosed roof top level plant storey) rising to 56.32m (AOD) containing 103 unit aparthotel (C1 Use) with B1 Use Class office workspace at ground and mezzanine level with an ancillary café (A3 Use Class) and hotel reception space at ground floor, together with ancillary facilities, waste storage and associated cycle parking store.	Granted Planning Permission at appeal 17 December 2018.
11 (LBTH)	Site at 2-6 Commercial Street, 98 and 101-105 Whitechapel High Street, carpark to the rear of 95-97 Whitechapel High Street (known as Spreadeagle Yard) and Canon Barnett Primary School (LPA Ref: PA/18/02615/A1)	Demolition of 98 - 105 Whitechapel High Street, 2 - 6 Commercial Street and the western annex of the Canon Barnett Primary School; retention of the façade of 102 -105 Whitechapel High Street; to facilitate a redevelopment to provide buildings ranging from ground plus 3 ?19 storeys, comprising office floorspace (Class B1), retail floorspace (Class A1-A5), educational floorspace (Class D1); relocation and expansion of the existing school playground; associated car and cycle parking,	Registered

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		hard and soft landscaping and other associated works.	
12 (LBTH)	Land bounded by 2-10 Bethnal Green road, 1-5 Chance Street (Huntingdon Industrial Estate) and 28-32 Redchurch Street (PA/19/00294)	Request for an Environmental Impact Assessment Scoping Opinion under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) for redevelopment to provide an office-led mixed-use development comprising approximately 17,000 sqm (GEA) office floorspace (Use Class B1(a)) and 5,500 sqm (GEA) of flexible ground and lower ground floorspace (Use Class A1, A3 and B1(a), with associated plant and cycle parking in a building ranging from 2 to 10 storeys above ground with two levels of basement. | Land bounded by 2-10 Bethnal Green road, 1-5 Chance Street (Huntingdon Industrial Estate) and 28-32 Redchurch Street	Not yet submitted. EIA Scoping Opinion issued 7 March 2019.
13 (LBH)	Principal Tower (Principal Place / Bishops Place) (LPA Ref: 2016/2044)	Minor material amendment to planning permission 2015/0279 dated 13/05/2015, for the following development: Demolition of the rear of 233 Shoreditch High Street, perimeter walls, viaduct structure across Plough Yard and all other structures on the site; erection of a decking structure and development comprising the erection of one part 10, part 16 storey building to provide 76,530sqm B1 floor space together with 1885sqm at ground floor level of A1-A4 floor space (Building 1); one 50-storey block comprising 30,486sqm of private residential floorspace together with 242sqm at ground floor level of A1-A4 floor space (Building 2); Affordable housing component of one 14 storey block comprising 3,615sqm of affordable residential floorspace plus 116sqm of Class A1-A4 floor space at ground floor (Building 3); and one 6 storey block comprising 1,709sqm of affordable residential floorspace (Building 4); one single storey block comprising of 263sqm of flexible space Class A1- A4/D1/D2/B1 (Building 5), one single kiosk comprising of 100sqm of Class A1-A4, parking spaces; open space; all	Under Construction or Complete & Unsold

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		other associated works. The amendment is to vary conditions 2 (approved plans) and 38 (residential mix) in order to increase the number of units within Building 2 from 273 to 301 as well as condition 10 (retail opening hours) to extend the hours of retail use to 0700 to 2300 Mon to Wed 0700 to 2400 Thurs to Sat and 0700 to 2230 on Sun and public holidays. Other amendments include the addition of a D2 use to the flexible use proposed in Building 1, increased cycle provision, alterations to waste storage at buildings 2 and 3, reduction in retail floorspace in Building 3, and window alterations in Building 2.	
14 (LBH)	The Stage (Plough Yard) (LPA Ref: 2015/3453)	Minor material amendment (under Section 73 of the Town and County Planning Act 1990) to planning permission 2012/3871, dated 07/10/2015. The amendment is to vary conditions 1 (approved plans), 55 (floorspace) and 56 (unit mix) in order to provide 27 additional units in Building one (412 residential units in total); the relocation of plant and uses ancillary to the residential building; alterations to the basement of the development; alterations to the floorplans, the cladding material and the elevations of Building one; and, minor increases in A1 - A4, B1 and C3 floorspace. The development is subject to an Environmental Impact Assessment (EIA) in accordance with the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2011.	Under Construction or Complete & Unsold
15 (LBH)	5-29 Sun Street 8-16 Earl Street & 54 Wilson Street (LPA Ref: 2015/0877)	Demolition of 17-29 Sun Street, 1-17 Crown Place and 8-16 Earl Street (excluding front façade) and construction within the eastern part of the site of a 3 level basement plus lower ground, ground level and mezzanine and part 6, part 10 storey podium building above ground level/mezzanine level with two towers of 29 and 33 storeys above ground/mezzanine level. The new building provides flexible office/retail floorspace at lower ground level (Class B1/A1/A3/A4), retail at ground	Under Construction

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		and mezzanine level (Class A1, A3 and A4), office (Class B1) at lower ground, ground, mezzanine and levels 1-6 and 247 residential units (Class C3) at levels 7 - 33. Refurbishment of 5-15 Sun Street with roof extension and three storey rear extension (plus basement) to provide a 32 bed hotel (Class c1), Class A3 restaurant, Sui Generis clubhouse and hotel courtyard. Refurbishment and extension of 54 Wilson Street to provide a 7 storey (plus basement) office building (Class B1) with flexible office/retail (Class b1/A1/A3) at ground floor level. Provision of vehicle access, public courtyard, amenity space, car parking, with associated plant and works.	
16 (LBTH)	120 Vallance Road 2-4 Hemming Street (LPA Ref: PA/15/01231)	Demolition of existing buildings at 120 Vallance Road and 2-4 Hemming Street and erection of four buildings to provide 1,331sqm (GEA) of commercial space, 152 residential units and new public realm, landscaped amenity space, cycle parking and all associated works	Under Construction or Complete & Unsold
17 (LBH)	201-207 Shoreditch High Street (LPA Ref: 2015/2403)	Demolition of existing buildings and structures and erection of a part 7, part 10 and part 30 storey building (plus 2 levels of basement) comprising office (Class B1) and hotel (Class C1) accommodation with ancillary retail, restaurant, event space, lounge and amenity areas; roof terraces; refuse and recycling facilities; cycle parking; servicing and plant; and landscaping.	Permission Granted
18 (LBH)	13-14 Appold Street (LPA Ref: 2015/1685)	Demolition of existing building and erection of a 45 storey mixed use office (Use Class B1) and business hotel (Use Class C1) with ancillary retail / restaurant use (A1/A3) at ground and lower ground and ancillary servicing and plant. The application is accompanied by an Environmental Statement pursuant to the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.	Permission Granted – Not Started

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
19 (LBH)	84-86 Great Eastern Street (LPA Ref: 2015/1834)	Demolition of existing buildings on the site and construction of a part twenty two storey (Block A: Ground plus twenty one floors) and part five/ part six storey (Block B: Ground plus four/ five floors) building for use as a 346 room hotel (22,174sqm GIA use Class C1 including health and leisure facilities); flexible uses including retail, bar and restaurant, art gallery and art cinema (3,324sqm GIA Use Class A1/ A3/ A4/ D1 and D2); private members club/ hotel use (781 sqm GIA sui generis/ Class C1); Offices (6,734 sqm GIA use Class B1); and public bar and restaurant (662 sqm GIA Use Class A3/ A4); together with ancillary hard and soft landscaping, revised vehicular access/ egress, 130 cycle spaces, 6 disabled vehicular spaces, refuse/ service arrangements, and all other works associated with the development	Permission Granted – Not Started
20 (LBH)	1-13 Long Street (LPA Ref: 2012/2013)	Erection of a new part 4, part 5, part 8-storey building to provide for 237 rooms of student accommodation and associated communal areas; erection of a new 10-storey building and two-storey extensions to the existing buildings at 1-3 Long Street and 5-9 Long Street to create 6-storey buildings along with associated refurbishment works to provide for 73 residential units; conversion of ground floor of 5-9 Long Street to provide for 816 sq m (GEA) of Class B1 use floorspace; construction of a landscaped podium above car parking area at ground floor level (40 car spaces); the provision of 255 cycle spaces and access and landscape works.	Under Construction or Complete & Unsold
21 (LBTH)	114-150 Hackney Road (LPA Ref: PA/17/00250)	Mixed use redevelopment of site including part demolition, part retention, part extension of existing buildings alongside erection of complete new buildings ranging in height from four storeys to six storeys above a shared basement, to house a maximum of 9 residential units (Class C3), 12,600 sqm (GEA) of employment floorspace (Class B1), 1,340 sqm (GEA) of flexible office and	Permission Granted – Not started

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		retail floorspace at ground floor level (falling within Use Classes B1/A1-A4) and provision of of Public House (Class A4), along with associated landscaping and public realm improvements, cycle parking provision, plant and storage.	
22 (CoL)	100 Liverpool Street & 8 - 12 Broadgate (LPA Ref: 15/01387/FULEIA)	Refurbishment and extension of existing buildings including retention of buildings structural frame and construction of new facade and the provision of three additional floors and rooftop plant to provide office (B1) use; retail (A1), flexible use for either retail (A1/A2/A3) or leisure (D2) uses at lower ground, ground and first floor levels; and flexible office (B1) /restaurant (A3) use at 9th floor level; provision of car and cycle parking; hard and soft landscaping; alterations to facilities associated with the bus station; and the provision of other works ancillary to the main building. (Total Floorspace 69,029sq.m (GEA) (Minor amendments to previously approved application 14/01285/FULEIA).	Under Construction
23 (LBH)	97-137 Hackney Road (LPA Ref: 2015/3455)	Demolition of all existing buildings and construction of three replacement buildings ranging in height from ground plus four storeys to ground plus eight storeys, above shared basement. Proposed mix of uses to include a maximum of 184 residential units (Class C3), 13,334 sqm (GIA) of employment floorspace (Use Class B1), and 4,243 sqm (GIA) of flexible commercial/retail space at basement and ground floor levels (falling within Use Classes A1-A4, and B1) which can comprise of no more than 1,500 sqm (GIA) of A1 floorspace, no more than 500 sqm (GIA) of A2 floorspace, no more than 1,500 sqm (GIA) of A3 floorspace, no more than 1,000 sqm (GIA) of A4 floorspace, and no more than 1,400 sqm (GIA) of B1 floorspace, along with associated landscaping and public realm improvements, parking provision, plant and storage, and other works incidental to the proposed development.	Under Construction

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
24 (was 38) (CoL)	Land Adjacent To 20 Bury Street London EC3A 5AX (18/01213/FULEIA).	Demolition of existing building and structures and construction of a building to a height of 305.3m AOD for a mixed-use visitor attraction, including viewing areas [2,597sq.m GEA], an education/community facility [567sq.m GEA] (Sui Generis) and restaurant/bar use (Class A3/A4) [1,535sq.m GEA]; together with a retail unit at ground floor (Class A1); a new two-storey pavilion building [1,093sq.m GEA] (Sui Generis) comprising the principal visitor attraction entrance with retail at ground floor level (Class A1/A3) [11sq.m GEA] and a public roof garden; provision of ancillary cycle parking, servicing and plant and alterations to the public realm.	Likely to be determined before the Proposed Development.
25 (LBI)	Speedfix House and Monmouth House, 19 – 23 Featherstone Street (LPA Ref: P2015/3136/FUL)	Demolition of existing buildings and redevelopment of the site to provide a building of part 10, part 11 storeys fronting City Road and five storeys along Featherstone Street to provide 13,393sq.m. of office space (B1) including affordable workspace; 404sq.m. of retail (A1); together with ancillary hard and soft landscaping, revised vehicular access/egress, 302 cycle spaces, one disabled vehicular space, refuse/service arrangements and all other works associated with the development. This application may affect the character and appearance of a conservation area and the setting of a listed building. Town and Country Planning (Listed Building and Conservation Areas) Act 1990 (as amended).	Permission Granted – Not Started
26 (CoL)	150 Bishopsgate (LPA Ref 17/00623/FULL)	Application under Section 73 of the Town and Country Planning Act 1990 to vary Conditions 33 and 54 of planning permission 14/001151/FULL dated 02.02.2017 to enable minor material amendments to the approved scheme for alterations to 142- 150 Bishopsgate and 1-17 Devonshire Row (odd numbers), relocation of 1 Stone House Court and redevelopment of Stone House (128-140 Bishopsgate and 77-84 Houndsditch), Staple Hall (87-90 Houndsditch) and 1, 3 and 5 Stone	Under construction

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		House Court, to provide a mixed use development comprising a luxury hotel, residential accommodation, retail uses (A1 and A3), hard and soft landscaping works including provision of a new public plaza, alterations to vehicular and pedestrian access and highways layout together with ancillary plant, servicing and associated works. The minor material amendments include amendments to elevational detailing, internal layout including mix of residential units, reconstruction of Devonshire Row southern spine wall, alterations to the public plaza and public realm and creation of a ballroom entrance pavilion at the south-west corner of the plaza. (56,526sq.m gea)	
27 (CoL)	(100 Bishopsgate) 61 St Mary Axe, 80-86 Bishopsgate, 88-90 Bishopsgate, 12-20 Camomile Street, 15-16 St Helen's Place And 33-35 St Mary Axe (North Elevation Only) (LPA Ref: 12/00129/FULL)	Amendments under section 73 to planning permission 11/00332/FULEIA dated 23 November 2011 for the erection of three buildings to comprise office (B1), retail (A1-A4), Library (D1) and Livery Hall (Sui Generis) uses with associated public space and landscaping, disabled car parking, cycle parking, servicing and plant.	Under construction
28 (LBTH)	Silwex House, Quaker street (LPA Ref: PA/16/00392/A1	Demolition of the roof and part side elevations, the retention and restoration of the southern and northern elevations and the construction of a two storey roof extension to provide a new hotel (Use Class C1) development comprising approximately 260 bedrooms over basement, ground and four upper floors with ancillary cafe space and servicing on the ground floor, associated plant in the basement and roof, improvements to the front pavement and associated works.	Granted 2016
29 (LBH)	Shoreditch Village (183-187 Shoreditch High Street, bounded by Holywell Lane, New Inn Yard and rail viaduct)	Demolition of 17 Anning Street, rear of 186 Shoreditch High Street and rear of 187 Shoreditch High Street. Redevelopment to provide 3 mixed-use buildings ranging from 2 to 8 storeys (plus basement), comprising office (B1) use, flexible retail (A1/A3)	Granted 2018

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
	(LPA Ref: 2017/0596)	use and flexible office/retail (B1/A1/A3) use. Works include external alterations and refurbishment of 187 Shoreditch High Street, with change of use to flexible office/retail (B1/A1/A3) use; new public realm and street market; and façade retention of 186 Shoreditch High Street including accommodating new ground floor public access passageway from Shoreditch High Street to new public realm, along with associated landscaping, roof plant, terraces and other works incidental to the proposed development.	
30 (LBH)	168-178 Shoreditch High Street (LPA Ref: 2015/3316)	Demolition of petrol filling station and erection of a 6 storey (plus basement) mixed use development comprising 868 sqm of A3 (restaurants and cafes) floorspace on ground and basement floors and 2,884sqm of B1 (Business) floorspace on the 1st - 5th floors	Granted 2016
31 (LBTH)	281-285 Bethnal Green Road, London, E2 6AH (PA/17/00299/A1).	Demolition of the existing building (Use Classes B8 and B1a) and redevelopment, including the reinstatement and restoration of the principal facade and the former Rex Cinema auditorium, to provide a single screen cinema (Use Class D2) measuring 390 sq.m (GIA), 130 bedroom hotel (Use Class C1) measuring 3,885 sq.m (GIA) and restaurant and bar (Use Class A3), collectively measuring 276 sq.m (GIA), along with 24 no. cycle spaces and 1 no. disabled car park and associated highways works.	Planning Permission Granted 16 June 2017
32 (LBTH)	Land bounded by Elder Street, Folgate Street, Blossom Street, Norton Folgate, Shoreditch High Street and Commercial Street, E1 (PA/14/03548).	Redevelopment of the former Nicholls and Clarke urban block and adjoining former depot site, Loom Court and land and buildings north of Fleur de Lis Passage and Fleur de Lis Street, including retention and refurbishment of buildings, for commercially led mixed use purposes comprising buildings of between 4 and 14 storeys to provide B1 (office), A1 (retail), A3 (restaurants and cafés), A4 (public	Granted Planning Permission 3 May 2016

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		house) and 40 residential units; together with new public open spaces and landscaping, new pedestrian accesses, works to the public highway and public realm, the provision of off-street parking, and all necessary ancillary and enabling works, plant and equipment.(AMENDED PLANS RECEIVED showing retention of 12-13 Blossom Street Warehouses as separate buildings) | Land bounded by Elder Street, Folgate Street, Blossom Street, Norton Folgate, Shoreditch High Street and Commercial Street, E1	
33 (was 39) (COL)	2-3 Finsbury Avenue 16/00149/FULEIA	Demolition of existing buildings and construction of a building arranged over three basement floors, ground and 32 upper floors plus mezzanine and three rooftop plant levels (168.4m AOD) to provide office accommodation (Class B1) (61,867sq.m); flexible retail uses (for either class A1, A2 or A3) at part ground and mezzanine levels (4,250sq.m GIA); cafe/restaurant uses (Class A3) at 13th floor level (1,291sq.m); flexible retail uses (for either class A1 or A3) at part ground floor level (248sq.m); a flexible space for office, conferencing, events and/or leisure use (for either Class B1, D1 or D2) at 13th to 18th floor levels (5,333sq.m) and a publicly accessible roof terrace and associated facilities at 13th floor level; hard and soft landscaping works; servicing facilities; and other works incidental to the development (total floor area 85,378sq.m GIA). | 2-3 Finsbury Avenue London EC2M 2PA	Granted planning permission 29 March 2018
34 (LBTH)	Former Beagle House Now Known As Maersk House, Braham Street, London (PA/18/00971)	Demolition of existing building and the erection of mixed use development with flexible retail floorspace at ground level (Use Classes A1-A3), with B1 office use space above contained within a single building of ground floor plus 17 storeys (with an additional two storeys of enclosed plant at roof level and two basement levels). Minor Material Amendment (with respect to Variation of Condition No 2 - approved plans) of planning	Planning Permission Granted 29 March 2019

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		permission dated PA/16/00782 Amendments to include: Additional storey of accommodation to north-west and south-west quadrants of building (not involving an increase in the maximum height of the scheme) Change to structural grid of building (spacing of pillars) and appearance of base of development Internal changes including core layout and lift strategy Ground and basement layout change including revised cycle access Confirmed boundary line ownership	
35 (LBH)	49-51 Paul Street Hackney London EC2A 4LJ (2018/2104).	Redevelopment of the site by the erection of a building up to 10 storeys in height to accommodate a 145 room hotel (C1 Use Class), and a 147sqm restaurant/café (A3 Use Class) at ground floor level, with roof plant enclosure and other associated works.	Granted
36 (LBH)	Development House 56-64 Leonard Street LONDON EC2A 4LT (2017/4694)	Demolition of existing office building (B1) and construction of new ten storey office building (B1) with flexible retail use (A1/A3) at ground floor, terraces and other associated works. [Re-consultation for 14 days to account for (1) additional set-back to the Leonard Street north elevation upper level setback façade (levels 05-08) by approximately 2.5m; (2) additional set back to the taller element of the Kiffen Street Western façade (levels 05-08) by approximately 550mm; and (3) an increase in the area of office provision in the lower ground level by moving plant down to the basement level	Granted
Included for consideration of Townscape and Visual Impact effects only			
37 (COL)	22 Bishopsgate, London EC2N (LPA Ref: 16/00849/FULEIA)	Amendments to planning permission ref 15/00764/FULEIA (for construction of a building arranged on three basement floors, ground and 61 upper floors plus mezzanines and plant	Granted 2017

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		comprising floorspace for use within Classes A and B1 of the Use Classes Order and a publicly accessible viewing gallery and facilities (Sui Generis); hard and soft landscaping works; the provision of ancillary servicing and other works incidental to the development (200,714sq.m GEA.) comprising changes to the layout and configuration of the basement and base of the building, including; relocation of the retail units; changes to the proposed wind mitigation measures; changes to the cycle parking provision and facilities; changes to the Bishopsgate elevation at lower levels; changes to the art street; and changes to the proposed land use distribution and floor area (201,863sq.m GEA).	
38 (COL)	1 Leadenhall Leadenhall Court 1 Leadenhall Street London EC3V 1PP (LPA Ref: 18/00740/FULEIA)	Demolition of the existing building and redevelopment to provide a 36 storey building with 28 floors for office use (Class B1) with retail floorspace (Class A1-A4) at basement, ground and fourth floor, office lobby and loading bay at ground floor, a publicly accessible terrace at fourth floor, 5 floors of plant and ancillary basement cycle parking (63,613sq.m GIA).	Granted
39 (COL)	1 Undershaft, London EC3P 3DQ (LPA Ref: 16/00075/FULEIA)	Demolition of the existing buildings and construction of a ground plus 72 storey building (304.94m AOD) for office use (Class B1) [131,937sq.m GEA], retail (Class A1-A3) [2,178sq.m GEA] at ground and lower ground floor, a publicly accessible viewing gallery (Sui Generis) [2,930sq.m GEA] at level 71-72 and a restaurant (Class A3) [1,220sq.m] at level 70. Public Realm improvement works, ancillary basement cycle parking, servicing and plant. [Total 154,100sq.m GEA]	Under Consideration
40 (COL)	100 Leadenhall Street, 100, 106 & 107 Leadenhall Street London EC3A 3BP, (LPA Ref: 18/00152/FULEIA)	Demolition of the existing buildings and construction of a ground plus 56 storey building (263.4m AOD) for office use (Class B1) [102,043sq.m GEA], retail use (Class A1/A3/A4) [882sq.m GEA] at lower levels, a publicly accessible viewing gallery	Granted

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
		(Sui Generis) and after hours Restaurant/Bar (Sui Generis) [1,934sq.m GEA] at levels 55 and 56, new and improved Public Realm, ancillary basement cycle parking, servicing area and plant. [Total Scheme Area: 122,091sq.m GEA]	
41 (COL)	40 Leadenhall Street Site Bounded By 19-21 & 22 Billiter Street, 49 Leadenhall Street, 108 & 109-114 Fenchurch Street, 6-8 & 9-13 Fenchurch Buildings London EC3 (LPA Ref: 13/01004/FULEIA.)	Partial demolition and works of refurbishment and reinstatement to 19-21 Billiter Street; demolition of all other buildings on the site; redevelopment to provide a new building comprising two basement levels and ground plus part 10, 14 and 34 storeys plus plant (total height 170m AOD) containing offices (B1) and flexible retail/financial and professional services/cafe and restaurant uses (A1/A2/A3) at ground floor level; food and drink (A3/A4) uses at levels 13 and 14; change of use at ground and first floor of 19-21 Billiter Street to retail/cafe and restaurant/bar use (A1/A3/A4); the provision of hard and soft landscaping; alterations to Fenchurch Buildings and other incidental works. (125,699sq.m GIA).	Under construction
42 (COL)	6-8 Bishopsgate (2017)	Demolition of existing buildings and the erection of a new building comprising lower ground level, three basement levels, ground floor plus part 10, 25 and 51 storeys including plant [221.2m AOD] to provide office (Class B1) use [85,892sq.m GEA], flexible shop/cafe and restaurant (Class A1/ A3) uses [445sq.m GEA] at part ground floor and level 1 and flexible shop/cafe/restaurant/office (A1/A3/B1) uses [199sq.m GEA] at part ground floor and level 1; The provision of a publicly accessible roof top viewing gallery (Sui Generis) [819sq.m GEA] at level 50 with dedicated entrance at ground floor level; the provision of hard and soft landscaping. [TOTAL 87,355sq.m GEA].	Granted 2018

11.2.2 Available information in respect to predicted flows and associated distribution for the above cumulative schemes has been obtained and included, as appropriate, for the purpose of this assessment

12.0 PROPSED TRIP GENERATION

12.0 PROPOSED TRIP GENERATION

12.1 INTRODUCTION

12.1.1 This section details the estimated trip generation by mode of travel for the proposed development during weekday AM and PM peak hours, and over the day, taking into consideration the following scenarios, as described in Section 1.1.

- Maximum Build Out;
- Detail Component; and
- Limited Development Scenario (LBTH development only).

12.1.2 The expected total multi-modal trip generation is provided towards the end of this section. All figures have been rounded to the nearest whole number.

12.1.3 It is acknowledged that the assessments within this TA consider the Maximum Build Out as representing a worst case scenario.

12.2 RESIDENTIAL TRIP GENERATION

12.2.1 Trip generation estimates for the residential element of the proposals are presented below. In terms of peak hour periods, weekday AM, lunchtime, and PM peak hours have been considered, as well as Saturday and Sunday lunchtime peak hours.

Residential Weekday Trip Generation

12.2.2 To predict multi-modal trip generation for the proposed residential units, the TRAVL database has been reviewed for comparable residential sites. Specifically, two sites provided within the TRAVL database are considered to have similar characteristics to the proposed development, in terms of location and accessibility to public transport. These sites are detailed below and have been referred to for the trip generation exercise.

12.2.3 To extend the survey sample, reference has also been made to survey data commissioned by WSP at a high density residential development site. Details of the three sites referred to for this assessment to derive residential trip rates are summarised in Table 12.1.

Table 12.1: Comparable Residential Sites in London

Site	Location	PTAL	Number of Units	Number of Car Parking Spaces
St George Wharf (TRAVL)	London Borough of Lambeth, adjacent to Vauxhall Station	6	927	793
Riverside West (TRAVL)	London Borough of Wandsworth, Smugglers Way	5	533	578
City Quarter (WSP)	London Borough of Tower Hamlets, between Leman Street and Commercial Road	6	295	108

12.2.4 Whilst the site is considered comparable to the above sites in terms of location and accessibility to public transport, car parking ratio per unit is much greater for the above sites compared to the car-free residential development at the site. However, it is considered that average total person trip rates for the above is appropriate for deriving total person trip generation for the residential element proposed at the site, as summarised in Table 12.2.

Table 12.2: Residential Trip Rates per Unit

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
Total Person (All Modes)	0.128	0.532	0.660	0.345	0.158	0.503	2.603	2.691	5.287

12.2.5 The forecast modal split has been estimated using the 2011 Census 'Journey to Work' data from the Haggeston and Weaver wards, in which the site is located. This data has been adjusted to reflect the car-free residential development, with car driver trips being redistributed onto the public transport network, as described below.

12.2.6 The estimated mode share has been applied to the weekday peak total person trip rates set out in Table 12.2 to derive trips by mode of travel for the proposed residential units.

12.2.7 The residential modal split is summarised in Table 12.3. The full residential trip generation calculations are provided at Appendix N.

Table 12.3: Residential Modal Split

Mode	Modal Share from 2011 Census*	Redistributed Modal Share
Underground/Rail	28.93%	34.96%
Bus	18.75%	22.66%
Motorcycle	1.09%	1.16%
Car Driver	7.47%	1.34%
Car Passenger	0.47%	0.51%
Taxi/Minicab	0.71%	0.75%
Bicycle	11.96%	12.79%
Walk	24.15%	25.82%
Other	0.76%	Redistributed
Home	5.71%	
Total	100.00%	100.00%

*Modal share from 2011 Census 'Journey to Work' Data for the Haggeston and Weaver wards

12.2.8 As shown above, underground/rail modes have been amalgamated for the purpose of the directional trip assignment. Public transport trips have been distributed across the stops/stations closest to the site using a corridor-based methodology, dependent on the trip origin, with full details provided at Section 15 of this report.

12.2.9 Table 12.4 shows the estimated residential trips by mode of travel for the AM and PM peak hours, and over the day, for the maximum scenario of 500 units.

Table 12.4: Weekday Residential Trip Generation – Maximum Build Out (500 units)

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Weekday Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LUL/Rail	22	93	115	60	28	88	455	470	924
Bus	15	60	75	39	18	57	295	305	599
Motorcycle	1	3	4	2	1	3	15	16	31
Car Driver	1	4	4	2	1	3	17	18	35
Car Passenger	0	1	2	1	0	1	7	7	13
Taxi/Minicab	0	2	2	1	1	2	10	10	20
Bicycle	8	34	42	22	10	32	166	172	338
Walk	17	69	85	45	20	65	336	347	683
Total	**64**	**266**	**330**	**173**	**79**	**252**	**1302**	**1346**	**2644**

12.2.10 With regard to the Detailed Components, Plot 2 and Plot 7 do not include any proposed residential use.

12.2.11 Table 12.5 shows the residential trip generation for the residential use within LBTH, which is the same as Table 12.4 as Plots, 4, 5, 8 and 10 are located wholly within the LBTH.

Table 12.5: Weekday Residential Trip Generation – Limited Development Scenario (Maximum)

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Weekday Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LUL/Rail	22	93	115	60	28	88	455	470	924
Bus	15	60	75	39	18	57	295	305	599
Motorcycle	1	3	4	2	1	3	15	16	31
Car Driver	1	4	4	2	1	3	17	18	35
Car Passenger	0	1	2	1	0	1	7	7	13
Taxi/Minicab	0	2	2	1	1	2	10	10	20
Bicycle	8	34	42	22	10	32	166	172	338
Walk	17	69	85	45	20	65	336	347	683
Total	**64**	**266**	**330**	**173**	**79**	**252**	**1302**	**1346**	**2644**

12.3 OFFICE TRIP GENERATION

12.3.1 The TRICS database has been reviewed to estimate total person trip rates for the proposed office use. A summary of the criteria used to select sites is provided in Table 12.6.

Table 12.6: Office TRICS Selection Criteria

Criteria	Range
GFA (m^2)	6,000+
PTAL	4-6
Year	2004+
Employee Density	1 per 12-18m^2 GFA

12.3.2 The criteria listed in Table 12.6 result in two sites for selection; Marks and Spencer's Headquarters (Survey Code: 410) and Eccleston Place (Survey Code: 512). The average total person trip rates derived from the above TRAVL sites are shown in Table 12.7.

Table 12.7: Office Total Person Trip Rates per 100m2 GFA

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
Total Person (All Modes)	2.675	0.078	2.753	0.055	1.916	1.971	8.602	7.401	16.003

12.3.3 With regard to lunchtime trips, it is not considered appropriate to use the same modal split for lunchtime journeys, given that during the office lunchtime break there are likely to be many more local journeys (particularly for food shopping) compared to weekday AM and PM peaks which are dominated by commuting to and from the office.

12.3.4 It is considered reasonable to assume that, of the two-way trips generated by the office space at lunchtime, 80% of these will be walking trips within the immediate vicinity of the site. Furthermore, the nature of the retail space proposed within the site is likely to attract a significant proportion of lunchtime food shopping trips from the on-site office space.

12.3.5 Consequently, 80% of the lunchtime food shopping trips (i.e. 64% of the total trip generation) have been assumed to remain internal to the site, with the remaining 20% (i.e. 16% of the total trip generation) of trips distributed across the local pedestrian network in proportion to the existing footfalls on the key arterial routes from the site. The remaining 20% of total trips (i.e. non lunchtime food shopping trips) have been distributed according to the office modal split as described above. Therefore, the walking trips during the weekday lunchtime peak include those trips assumed to be internal to the development site.

12.3.6 Table 12.8 shows the estimate office mode share which has been obtained from the 2001 Census for the daytime population in the Bishopsgate ward. The Census mode share has been adjusted to reflect the car-free development.

Table 12.8: Office Modal Split

Mode	Modal Share from 2001 Census*	Redistributed Modal Share
Underground	32.07%	34.14%
Train	51.36%	54.67%
Bus	4.88%	5.20%
Motorcycle	1.53%	1.53%
Car Driver	4.89%	0.00%
Car Passenger	0.61%	0.00%
Taxi/Minicab	0.72%	0.72%
Bicycle	1.06%	1.06%
Walk	2.69%	2.69%
Other	0.19%	Redistributed
Home	0.01%	
Total	**100%**	**100.00%**

*2001 Census – Daytime Population (Bishopsgate Ward)

12.3.7 The estimated office trips by mode of travel for the AM and PM peak hours, and over the day are shown in Table 12.9, with the full trip generation data contained at **Appendix O.**

Table 12.9: Office Trip Generation for Maximum Build Out (139,023m2)

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LUL/Rail	3303	96	3398	68	2365	2434	10621	9138	19758
Bus	193	6	199	4	138	142	622	535	1157
Motorcycle	57	2	59	1	41	42	183	157	340
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Taxi/Minicab	27	1	28	1	19	20	86	74	160
Bicycle	39	1	41	1	28	29	127	109	236
Walk	100	3	103	2	72	74	322	277	598
Total	3719	108	3827	77	2663	2740	11959	10289	22248

12.3.8 With regard to the detailed component for Plot 2 and Plot 7, Plot 2 includes a maximum of 66,930 m2 of office use. Table 12.10 shows the estimated office trips by mode of travel for the detailed planning application, assuming the maximum build out scenario.

Table 12.10: Office Trip Generation - Detailed Scheme Components (66,930 m2)

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LUL/Rail	1590	46	1636	33	1139	1172	5113	4399	9512
Bus	93	3	96	2	67	69	299	258	557
Motorcycle	27	1	28	1	20	20	88	76	164
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Taxi/Minicab	13	0	13	0	9	9	41	36	77
Bicycle	19	1	20	0	14	14	61	53	114
Walk	48	1	50	1	34	35	155	133	288

Total	**1790**	**52**	**1842**	**37**	**1282**	**1319**	**5757**	**4953**	**10711**

12.3.9 Table 12.11 shows the estimated office trips generation by mode of travel for the proposed office use within LBTH only.

Table 12.11: Office Trip Generation – Limited Development Scenario (Maximum 521 m2)

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LUL/Rail	12	0	13	0	9	9	40	34	74
Bus	1	0	1	0	1	1	2	2	4
Motorcycle	0	0	0	0	0	0	1	1	1
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Taxi/Minicab	0	0	0	0	0	0	0	0	1
Bicycle	0	0	0	0	0	0	0	0	1
Walk	0	0	0	0	0	0	1	1	2
Total	14	0	14	0	10	10	45	39	83

12.4 HOTEL TRIP GENERATION

12.4.1 The TRICS database has been reviewed to estimate total person trip rates for the proposed hotel use. A summary of the site used is provided in Table 12.12.

Table 12.12: Office TRICS Selection Criteria

Site	Location	Rooms
Holiday Inn, Jamestown Road	Camden	130
Park Plaza County Hall Hotel, Addington Street	Lambeth	398
Thistle Victoria Hotel, Buckingam Palace, Road	Westminster	357

12.4.2 The average total person trip rates derived from the above TRICS sites are shown in Table 12.13.

Table 12.13: Hotel Total Person Trip Rates per Room

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)		
	In	Out	Two-way	In	Out	Two-way
Total Person (All Modes)	0.224	0.367	0.591	0.442	0.302	0.744

12.4.3 Table 12.14 shows the estimate hotel mode share which has been obtained from the G-Gate Hotel.

Table 12.14: Hotel Modal Split

Mode	Modal Share
LUL/Rail	3%
Bus	2%
Motorcycle	0%
Car Driver	1%
Car Passenger	0%
Taxi/Minicab	11%
Bicycle	0%
Walk	78%
Other	4%
Total	**100%**

12.4.4 The estimated hotel trips by mode of travel for the AM and PM peak hours, and over the day are shown in Table 12.15, with the full trip generation data contained at Appendix P.

Table 12.15: Hotel Trip Generation for Maximum Build Out (150-rooms)

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)		
	In	Out	Two-way	In	Out	Two-way
LUL/Rail	0	2	2	1	3	4
Bus	3	1	4	0	0	1
Motorcycle	0	0	0	0	0	0
Car Driver	1	0	1	0	0	0
Car Passenger	0	0	0	0	0	0
Taxi/Minicab	5	8	13	5	5	9
Bicycle	0	0	0	0	0	0
Walk	16	55	71	41	44	85
Total	26	71	96	51	53	104

12.4.5 With regard to the detailed component, the proposed hotel use is part of Plot 8, therefore is not included in the detailed application.

12.4.6 As the proposed hotel will sit wholly within the LBTH boundary, the trip estimate for the Limited Development Scenario will be the same as that shown in Table 12.15.

12.5 RETAIL AND LEISURE TRIP GENERATION

Weekday and Weekend Trip Generation

12.5.1 Previously following consultation with TfL, LBH and LBTH, it was requested for Spitalfields Market to be surveyed as this was considered comparable to the proposals in terms of the nature of the retail and relative small leisure area, and location given that it is situated a short distance to the south of the site from Commercial Street and within close proximity to Brick Lane. The presence of a central eating space within the market is also thought to allow for an analogue of the adjacent public realm and park spaces within the site, in terms of trip generation behaviour.

12.5.2 A survey of Spitalfields Market was undertaken on a weekday, Saturday and Sunday in January 2014. The survey undertaken at Spitalfields Market incorporated a pedestrian cordon and questionnaire to ascertained visitor numbers and respondents' shopping habits, including their mode of transport. The questionnaire attained a good average response rate of 65% with 1245 responses covering a total group size of 1891 people.

Deriving Trip Rates

12.5.3 The survey information provided by the Spitalfields Market survey has been compared and coordinated with the revised Retail Assessment. The study reported the following headline figures for comparison goods shoppers and convenience goods shoppers.

- A total expenditure of £118.575M per annum (maximum scenario), made up of £90.45M comparison and £28.125M convenience expenditure; and
- The associated questionnaire results enabled expenditure per visitor to be established. In respect to comparison goods, this identified that visitors will spend on average approximately £25 during their trip; and in respect to convenience goods, on average visitors will spend £22 during their trip.

12.5.4 If it is assumed that as a direct comparator the Proposed Development has the same number of visitors at the Maximum Build Out of retail use as Spitalfields, the expenditure per shopper is calculated as being approximately £20 (£118.575M and 6.14M visitors per annum). This is slightly lower than the retail study, and demonstrates that overall the number of visitors predicted is robust and likely to be a slight over estimation for the site.

12.5.5 It is considered relevant that the transport study is consistent with the conclusions of the retail study, and as such, the findings of the retail study have been taken into consideration when deriving a retail trip rate from the Spitalfields Market survey. For the purpose of this assessment it is concluded that, when taking into consideration predicted expenditure against the Maximum Build Out of retail floor area proposed, it would not be appropriate to apply the results of the survey undertaken at Spitalfields Market on a pro rata floor area basis, as this will lead to a significant overestimation of visitor numbers and a very low retail spend per visitor. Instead, the analysis has used the results of the Spitalfields Market surveys which quantified the extent to which retail customers visit multiple shops as part of a single trip, therefore reducing the trip generation beyond the boundary of the site.

Pass-by/ Linked/Diverted Trips

12.5.6 The questionnaire survey determined the percentage of respondents who were walking past Spitalfields Market but did not enter, hence representing pass-by footfall rather than trips generated by the retail space itself. Furthermore, a proportion of respondents who entered Spitalfields Market did not visit any of the stalls or shops, and were using the internal routes as a thoroughfare. Consequently both pass-by and pass-through trips could be quantified and removed from the retail trip generation, since they will otherwise represent existing trips already present on the adjacent pedestrian network.

12.5.7 Whilst the large sample size indicates the results to be robust, it is possible that the number of pass-by and pass-through respondents has been underestimated given that workers using the Market as a cut-through route to or from work could be considered less likely to stop and participate in the survey. On this basis, it is possible that the proportion of true pass-by/pass-through trips is higher than stated, especially on a weekday, and therefore the overall number of primary retail trips is robust.

12.5.8 Table 12.16 summarises the number of linked/diverted trips expected as ascertained from the survey.

Table 12.16:Total Person Retail Trip Generation – Linked/Diverted Trips – All

Time Period	Diverted/Linked Trips		
	In	Out	Total
Weekday AM Peak (0830-0930)	8	7	15
Weekday Lunchtime Peak (1230-1330)	679	669	1348
Weekday PM Peak (1730-1830)	145	152	297
Saturday Peak (1300-1400)	1551	1496	3047
Sunday Peak (1300-1400)	1679	1637	3316

Primary Trips

12.5.9 Table 12.17 summarises primary trip generation (i.e. trips new to the network) for the retail element of the proposals, as determined by the Spitalfields Market survey.

Table 12.17: Total Person Retail Trip Generation – Primary Trips – All Development Scenarios

Time Period	In	Out	Total
Weekday AM Peak (0830-0930)	139	121	260
Weekday Lunchtime Peak (1230-1330)	1572	1549	3120
Weekday PM Peak (1730-1830)	465	487	952
Saturday Peak (1300-1400)	695	671	1365
Sunday Peak (1300-1400)	1794	1750	3544

12.5.10 Primary trips have been assigned to the network based on the modal split ascertained from the questionnaire survey. Sub-questions ascertained the bus route number and rail station used by these modes' patrons, allowing a detailed pedestrian trip generation assessment to be undertaken which includes not just walk-only trips but also walking connections between public transport access points and the Proposed Development's retail units.

12.5.11 The overall retail trip generation (including linked/diverted and primary trips) is broken down by mode in Tables 12.18 and 12.19 in accordance with questionnaire survey results.

Table 12.18: Weekday Retail Inbound Trip Generation by Mode of Travel – Maximum Build Out

Mode	Weekday AM Peak (08:30 – 09:30)			Weekday Inter Peak (12:30 – 13:30)			Weekday PM Peak (17:30 – 18:30)		
	In	Out	Two Way	In	Out	Two Way	In	Out	Two Way
LUL/Rail	80	69	149	490	483	972	179	187	365
Bus	10	9	19	114	112	226	21	22	42
Motorcycle	0	0	0	6	6	11	0	0	0
Car Driver	5	4	9	0	0	0	4	4	8
Car Passenger	0	0	0	16	16	31	12	13	25
Taxi/Minicab	0	0	0	6	6	11	17	18	34
Bicycle	0	0	0	51	51	102	29	30	59
Walk	46	40	86	913	900	1813	211	221	432
Total	141	122	263	1595	1572	3167	472	494	966

Table 12.19: Weekend Retail Inbound Trip Generation by Mode of Travel – Maximum Build Out

Mode	Saturday Peak (13:00 – 14:00)			Sunday Peak (13:00 – 14:00)		
	In	Out	Two Way	In	Out	Two Way
LUL/Rail	384	371	755	931	908	1839
Bus	73	71	144	244	238	483
Motorcycle	6	5	11	9	9	19
Car Driver	8	8	17	49	47	96
Car Passenger	23	22	44	114	111	226
Taxi/Minicab	10	10	20	46	45	91
Bicycle	2	2	4	26	26	52
Walk	199	192	390	401	391	792
Total	705	681	1385	1820	1776	3597

12.5.12 The Detailed Scheme component comprises a much smaller volume of retail space which, in itself, would not be expected to generate a significant amount of primary retail trips: visits to the retail units would be likely to comprise diverted/pass-by trips or those generated by other land uses within the site as discussed below.

12.5.13 In addition to the trips detailed in Tables 12.18 and 12.19, the retail space is expected to generate some internal demand, with residents and office workers visiting the adjacent shops (particularly during weekday lunchtimes) without leaving the site.

12.5.14 These trips are quantified separately in Table 12.20 below, since they are walking trips internal to the site and hence excluded from the subsequent analysis. For robustness, the trip generation calculated on the basis of the maximum quantum of development is considered to apply also in the other two scenarios.

Table 12.20: Retail Trip Generation – Walking Trips Internal to Site – All Development Scenarios

Time Period	Inbound	Outbound	2-way total
Weekday AM Peak (0830-0930)	0	0	0
Weekday Lunchtime Peak (1230-1330)	397	391	788
Weekday PM Peak (1730-1830)	0	0	0
Saturday Peak (1300-1400)	58	561	115
Sunday Peak (1300-1400)	33	32	63

12.5.15 For a weekday, the period of greatest trip generation is during the Lunchtime peak. However, the majority of these are walking trips, and in particular, short journeys between local offices and new retail units for food purchase; consequently, the impact on the public transport network at this time is much less.

12.5.16 When comparing trip generation derived by the Spitalfields Market survey, with survey data obtained from Westfield, the Spitalfields Market survey determines retail trip generation by floorspace to be 45% greater than at Westfield. Given that the retail use proposed at the site will not serve as a landmark retail destination such as Westfield, it is considered that this assessment is robust.

Public Realm

12.5.17 Whilst the public realm will attract new trips to the site, they will be largely complimentary to the proposed development and to the wider local area with its high number of existing visitors both at Brick Lane, Spitalfields and on Shoreditch High Street. It is considered that assessing the retail trip generation on the basis of the complete Spitalfields Market complex including its central eating and market area, allows for a significant trip generation at the park as an adjacent use, with the remainder of trips being associated and linked with the significant existing pedestrian flows on Brick Lane, Shoreditch High Street and from Shoreditch High Street station.

D1 and D2 Land Use

12.5.18 The Proposed Development includes 4,462m2 of D1 and D2 land uses. This form of land-use is considered to be ancillary and would only be expected to generate walk trips within the vicinity of the site rather than drawing primary trips in its own right. Consequently, these categories of land use have not been considered further as part of the trip generation analysis.

12.6 TOTAL TRIP GENERATION

12.6.1 Table 12.21 shows total trip generation for each of the development scenarios during identified peak hours are presented below. The retail trips internal to the site shown in Table 12.20, generated predominantly by the office workers on weekday lunchtimes and to a lesser extent by residents at weekends, have been omitted from this table in order to avoid double counting: these trips are already accounted for as trips generated by the office and residential land uses.

Table 12.21: Weekday Total Trip Generation – Maximum Build Out

Mode	Weekday AM Peak (08:30 – 09:30)			Weekday Inter Peak (12:30 – 13:30)			Weekday PM Peak (17:30 – 18:30)		
	In	Out	Two Way	In	Out	Two Way	In	Out	Two Way
LUL/Rail	3405	260	3665	1530	1836	3366	308	2582	2891
Bus	221	76	297	192	219	411	64	178	242
Motorcycle	58	5	63	24	29	53	3	42	45
Car Driver	7	8	15	2	2	4	6	5	12
Car Passenger	0	2	2	16	16	32	13	13	26
Taxi/Minicab	32	11	43	19	22	41	24	42	66
Bicycle	48	35	83	74	84	158	52	69	121
Walk	179	167	345	1007	1018	2024	299	357	656
Total	3950	567	4516	2868	3228	6094	773	3289	4062

Table 12.22: Weekend Total Trip Generation – Maximum Build Out

Mode	Saturday Peak (13:00 – 14:00)			Sunday Peak (13:00 – 14:00)		
	In	Out	Two Way	In	Out	Two Way
LUL/Rail	414	421	835	950	936	1887
Bus	92	102	194	256	255	512
Motorcycle	7	7	14	10	10	20
Car Driver	10	10	21	51	50	101
Car Passenger	23	22	45	115	112	227
Taxi/Minicab	16	15	31	51	50	101
Bicycle	13	20	32	33	35	68
Walk	261	270	532	456	454	910
Total	839	869	1708	1925	1904	3830

Table 12.23: Weekday Total Trip Generation – Limited Development Scenario

Mode	Weekday AM Peak (08:30 – 09:30)			Weekday Inter Peak (12:30 – 13:30)			Weekday PM Peak (17:30 – 18:30)		
	In	Out	Two Way	In	Out	Two Way	In	Out	Two Way
LUL/Rail	91	144	235	379	395	774	188	171	358
Bus	25	68	93	99	110	210	54	34	88
Motorcycle	1	3	4	5	5	10	2	1	3
Car Driver	5	7	12	2	2	4	5	4	9
Car Passenger	0	2	2	12	12	23	9	9	19
Taxi/Minicab	5	10	15	9	9	19	18	18	36
Bicycle	9	34	43	47	54	100	43	32	75
Walk	65	152	217	707	713	1420	235	220	455
Total	203	424	626	1264	1303	2565	557	490	1047

Table 12.24: Weekend Total Trip Generation – Limited Development Scenario

Mode	Saturday Peak (13:00 – 14:00)			Sunday Peak (13:00 – 14:00)		
	In	Out	Two Way	In	Out	Two Way
LUL/Rail	301	312	612	675	668	1344
Bus	71	81	151	184	185	369
Motorcycle	5	5	10	7	7	15
Car Driver	8	8	16	37	36	73
Car Passenger	16	16	32	81	79	160
Taxi/Minicab	13	13	25	38	37	74
Bicycle	12	19	31	25	28	53
Walk	203	214	416	337	339	676
Total	631	669	1300	1388	1381	2769

Table 12.25: Weekday Total Trip Generation – Detailed Scheme

Mode	Weekday AM Peak (08:30 – 09:30)			Weekday Inter Peak (12:30 – 13:30)			Weekday PM Peak (17:30 – 18:30)		
	In	Out	Two Way	In	Out	Two Way	In	Out	Two Way
LUL/Rail	1624	75	1699	693	830	1523	108	1217	1325
Bus	97	6	104	76	84	160	11	76	86
Motorcycle	27	1	28	11	13	24	1	20	20
Car Driver	2	2	4	0	0	0	2	2	3
Car Passenger	0	0	0	7	7	13	5	5	10
Taxi/Minicab	13	0	13	6	7	14	7	17	24
Bicycle	19	1	20	27	29	56	13	26	39
Walk	68	18	86	399	398	797	90	128	218
Total	1850	103	1953	1219	1368	2587	236	1490	1726

Table 12.26: Weekend Total Trip Generation – Detailed Scheme

Mode	Saturday Peak (13:00 – 14:00)			Sunday Peak (13:00 – 14:00)		
	In	Out	Two Way	In	Out	Two Way
LUL/Rail	162	156	318	392	382	774
Bus	31	30	61	103	100	203
Motorcycle	2	2	5	4	4	8
Car Driver	4	3	7	20	20	41
Car Passenger	10	9	19	48	47	95
Taxi/Minicab	4	4	9	19	19	38
Bicycle	1	1	2	11	11	22
Walk	84	81	164	169	165	333
Total	297	286	583	766	747	1514

12.7 DELIVERY AND SERVICING TRIPS

12.7.1 It is generally considered that most deliveries occur during a weekday, therefore the estimates are service vehicle arrivals for the weekday peak hours and over a day.

Residential Use

12.7.2 Residential servicing trip rates have been obtained from 12-hour period surveys for high density residential site (Discovery Dock East, Isle of Dogs) previously undertaken by WSP.

12.7.3 The average trip rates for these sites have been applied to the proposed maximum level of residential development as shown in Table 12.27.

Table 12.27: Delivery and Servicing Trips for Residential – Maximum Build Out (500 units)

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	3	3	6	3	3	6	29	26	55
HGV	3	3	6	-	-	-	8	8	16

12.7.4 The detailed components will not include any residential use, therefore residential servicing trips would not apply to the Detailed Components.

12.7.5 The proposed residential units will be provided in Plots 4, 5, 8 and 10, therefore would sit wholly within the LBTH. The residential servicing trips for the maximum Limited Development Scenario would be those trips shown in Table 12.27.

Office Use

12.7.6 To estimate delivery and servicing trips associated with the office use, relevant and comparable survey information associated with the Broadgate surveys have been used.

12.7.7 The estimated number of delivery and servicing trips for the maximum build out scenario for office use are shown in Table 12.28.

Table 12.28: Delivery and Servicing Trips for Office Use – Maximum Build Out (139,023 m2)

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	4	4	8	10	10	20	297	297	593
HGV	0	0	1	1	1	2	26	26	52

12.7.8 The estimated number of delivery and servicing trips for the Plot 2 detailed planning application for the office use are shown in Table 12.29.

Table 12.29: Delivery and Servicing Trips for Office Use – Detailed Scheme Components (66,930m2)

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	20	20	40	5	5	10	143	143	286
HGV	2	2	4	0	0	1	12	12	25

12.7.9 The estimated number of delivery and servicing trips for the office use within the LBTH only are shown in Table 12.30.

Table 12.30: Delivery and Servicing Trips for Office Use– Limited Development Scenario (Maximum 21,341m2)

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	6	6	12	1	1	2	46	46	92
HGV	1	1	2	-	-	-	4	4	8

Hotel Use

12.7.10 To estimate delivery and servicing trips associated with the proposed hotel use, relevant data associated with the recent application at Portal Way, Gypsy Corner in the London Borough of Ealing has been used to derive hotel servicing trips. The application included a Hotel with 159 rooms, comparable to the proposed development.

12.7.11 The estimated servicing trip numbers for the proposed hotel use are shown in Table 12.20. As demonstrated, the majority of deliveries are expected to be made by LGVs, with a smaller proportion made by HGVs.

12.7.12 Table 12.31 shows the estimated number of delivery and servicing trips for the maximum build out scenario for hotel use.

Table 12.31: Delivery and Servicing Trips for Hotel Use – Maximum Build Out (150-rooms)

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	2	2	4	2	2	4	39	39	78
HGV	1	1	2	1	1	2	8	8	16

12.7.13 The proposed hotel will be provided in Plot 8 which is not part of the detailed component, therefore would not be included within the Detailed Component assessment.

12.7.14 The proposed hotel site would sit wholly within the LBTH boundary, therefore the servicing trips for the Limited Development Scenario would be as shown in Table 12.31.

Retail Use

12.7.15 Retail servicing trips have been forecast using surveys undertaken in 2014 at Imperial Wharf in Fulham and Bow Quarter in Tower Hamlets. These were commissioned by WSP and have been used successfully on a number of other similar residential developments. This provides a recent and significant sample to forecast servicing demand and is a method WSP have agreed as appropriate on a number of other occasions.

- Imperial Wharf (1,745 Dwellings) – 2014 survey; and
- Bow Quarter (773 Dwellings) – 2016 survey.

12.7.16 Estimated servicing trip numbers for the proposed retail use are shown in Tables 12.32 – 12.34. As demonstrated, the majority of deliveries are expected to be made by LGVs, with a smaller proportion made by HGVs.

Table 12.32: Delivery and Servicing Trips for Retail Use (19,546m^2) – Maximum Build Out

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	11	11	22	5	5	10	119	119	228
HGV	0	0	0	5	5	10	13	13	26

Table 12.33: Delivery and Servicing Trips for Retail Use (13,881m^2) – Detailed Scheme Components

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	8	8	16	4	4	8	84	84	169
HGV	1	1	2	4	4	8	7	7	14

Table 12.34: Delivery and Servicing Trips for Retail Use (12,434m²) – Limited Development Scenario (Maximum)

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	10	10	20	2	2	4	91	91	182
HGV	1	1	2	0	0	0	7	7	14

Total Servicing Trip Generation

12.7.17 The total delivery and servicing forecast for all proposed land uses is summarised in Tables 11.35 – 11.37.

Table 12.35: Total Delivery and Servicing Trips – Maximum Build Out

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	56	56	112	20	20	40	464	461	925
HGV	7	7	14	7	7	14	113	113	226

Table 12.36: Total Delivery and Servicing Trips – Detailed Scheme Components

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	21	21	42	6	6	11	157	157	314
HGV	2	2	4	1	1	2	21	21	42

Table 12.37: Total Delivery and Servicing Trips – Limited Development Scenario (Maximum)

Mode	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LGV	17	17	34	8	8	16	159	159	315
HGV	3	3	6	4	4	8	5	15	30

13.0 IMPACT ON PEDESTRIAN NETWORK

13.0 IMPACT ON PREDESTRIAN

13.1 INTRODUCTION

13.1.1 This section considers the likely effect of the site on the local pedestrian network.

13.1.2 It is acknowledged that there is a proportion of pedestrian trips associated with the existing retail uses on site and this has not been removed from the network for this assessment. Figures have been rounded to the nearest whole number.

13.1.3 The calculations have been undertaken for the Maximum Build Out scenario of the Proposed Development, since this generates the greatest number of trips and would therefore have the greatest impact on transport.

13.2 EXPECTED CHANGE

13.2.1 Table 13.1 summarises the expected peak pedestrian trips as a result of the site during peak hours, including pedestrian trips to and from modes of public transport.

13.2.2 As set out within the retail trip generation methodology, a proportion of trips are expected to be diverted/linked trips already occurring on the adjacent network; these trips have not been subtracted within Table 13.1 (therefore, not all trips will be new to the network).

Table 13.1: Predicted Trip Generation on Pedestrian Infrastructure

Peak Hour	In	Out	Two-way
Weekday AM Peak (0830-0930)	3813	510	4323
Weekday Lunchtime Peak (1230-1330)	3418	3752	7170
Weekday PM Peak (1730-1830)	819	3271	4090
Saturday Peak (1300-1400)	2342	2311	4653
Sunday Peak (1300-1400)	3365	3307	6673

13.2.3 The portion of those total trips in Table 13.1 which are expected to be linked/diverted trips, as opposed to new trips on the network, is quantified in Table 13.2.

Table 13.2: Total Person Retail Trip Generation – Linked/Diverted Trips

Time Period	Diverted/Linked Trips		
	In	Out	Total
Weekday AM Peak (0830-0930)	8	7	15
Weekday Lunchtime Peak (1230-1330)	689	679	1368
Weekday PM Peak (1730-1830)	148	154	302
Saturday Peak (1300-1400)	1574	1518	3092

Sunday Peak (1300-1400)	1704	1662	3366

13.2.4 The portion of those total trips in Table 13.1 which are expected to be internal walking trips within the site arising from occupants of the office and retail spaces visiting the retail units, and which are therefore new to the network but will not use the links outside the site boundary, is quantified in Table 13.3.

Table 13.3: Total Person Retail Trip Generation – Internal Trips

Time Period	Internal Walking Trips		
	In	Out	Total
Weekday AM Peak (0830-0930)	0	0	0
Weekday Lunchtime Peak (1230-1330)	397	391	788
Weekday PM Peak (1730-1830)	0	0	0
Saturday Peak (1300-1400)	58	561	115
Sunday Peak (1300-1400)	33	32	63

13.2.5 The scheme design offers permeability from the north to south and east to west cordons and it is considered that the main pedestrian desire lines from the development will be as follows.

- Shoreditch High Street station located within the site;
- Bethnal Green Road and Shoreditch High Street, to the north and west respectively, and Commercial Street to the south west, where bus stops are located;
- Towards Old Street station and nearby amenities to the northwest;
- Towards amenities located in and around Spitalfields Market to the south;
- Towards Aldgate East station and nearby amenities to the southeast; and
- Towards Liverpool Street station and nearby amenities to the southwest.

13.3 TRIP DISTRIBUTION

13.3.1 With regard to trip distribution, pedestrian trips associated with each of the proposed land uses have been considered in turn, as described below. The permeability that the scheme design offers has been taken into consideration when assigning trips.

Residential and Office Use Classes

13.3.2 For the residential use, the distribution of pedestrian only trips (as opposed to those connecting to other forms of public transport) has been undertaken based on the 2011 'Method of Travel to Work' Census Data for Haggerston and Weaver wards, whilst the distribution of pedestrian only trips for the office use has been undertaken based on the 2001 Daytime Population Census Data for Haggerston and Weaver wards. The distribution of pedestrians travelling to and from bus stops and stations has been based on Census data as described in detail at Section 14.

Retail Use Class

13.3.3 Retail trips have been separated into linked/diverted and primary trips as discussed at Section 11. Linked/diverted journeys have been distributed based on existing footfall proportions on the two main shopping axes (Shoreditch High Street and Brick Lane) which are most likely to generate the linked/diverted retail demand. Primary trips have been distributed according to the existing pedestrian distribution observed by the 2013 pedestrian surveys.

13.3.4 Notably, the Spitalfields Market survey shows that during the weekday Lunchtime peak approximately 48% of primary retail trips were derived from the workplace. As such, 48% of primary trips during the weekday Lunchtime peak have been distributed on the pedestrian network in proportion to the spatial distribution of the daytime population (which is concentrated to the south around Liverpool Street and Broadgate). The remaining weekday Lunchtime pedestrian trips have been distributed with the assumption that such trips will generally follow a similar pattern to baseline pedestrian flows. Pedestrian Comfort Level (PCL) Audit

13.3.5 To consider the effect of the proposals on key pedestrian links adjacent to the site, as well as internal links proposed within the site, a Pedestrian Comfort Level (PCL) audit has been undertaken.

13.3.6 Where building lines have been proposed to be set back to increase effective footways with the proposals, existing footway widths have been amended accordingly. The new internal links within the site have been assessed based on the proposed width at the narrowest point.

13.3.7 It is predicted that the site will attract large numbers of visitors to the area, whose footfall is captured by the site trip generation. By contrast the number of additional pedestrians (even those walking to public transport stops) generated by nearby committed schemes is low.

13.3.8 Initially the following pedestrian flow scenarios were therefore assessed using the proposed footway design:

- 2018 baseline; and
- 2018 baseline plus Proposed Development.

13.3.9 For robustness, an allowance should be made for future increases in pedestrian demand not directly generated by the Proposed Development. TfL anticipates cumulative growth of patronage at Shoreditch High Street station of 2.7% per annum, equating to a 49% increase from 2018 (the surveyed year) to 2033 (the opening year of the Proposed Development).

13.3.10 This method has been used to apply future growth to the baseline pedestrian counts for the weekday AM and PM flows as it offers a higher growth figure compared to using the committed development flows from nearby cumulative schemes. This is not being applied to weekend flows, since it is considered that application of an annual growth factor at the Overground station is more realistic for growth in residential and workplace populations as opposed to retail and leisure footfall, which the Proposed Development flows adequately account for. Similarly, weekday lunchtime pedestrian flows are predominantly generated by nearby office sites which are also captured as part of the retail demand which the Proposed Development generates, and which therefore do not require the application of an additional annual growth factor.

13.3.11 The PCL assessment has therefore additionally been undertaken for the weekday AM and weekday PM flows in the following scenarios:

- 2033 future baseline using TfL growth figures; and
- 2033 future baseline using TfL growth figures plus Proposed Development.

13.3.12 Table 13.4 shows the 2018 baseline with proposed development PCL assessment results for the weekday AM and PM peak hours.

Table 13.4: 2018 Baseline plus Proposed Development PCL Audit – Weekday

Link		Baseline width (m)	Future width (m)	Weekday AM Peak		Weekday PM Peak	
				Base	Future	Base	Future
1a	Bethnal Green Road (north side)	3.6	3.6	A-	A-	A-	A-
1b	Bethnal Green Road (south side)	4	5	A-	A-	B+	B+
2a	Sclater Street (north side)	2.3	2.3	A+	A+	A	A
2b	Sclater Street (south side)	2.2	4.5	A	A+	A	A+
3a	Brick Lane (east side)	2	2	A	A	B+	B+

3b	Brick Lane (west side)	2.1	18	A	A+	B+	A+
4a	Quaker Street (north side)	2	2	A	A	A	A-
4b	Quaker Street (south side)	2.3	2.3	A+	A+	A+	A+
5a	Commercial Street (north side)	2.2	2.5	A	B+	A	B+
5b	Commercial Street (south side)	2.7	2.7	A+	A-	A	A-
6a	Shoreditch High Street (east side)	3.5	18	A-	A	B+	A
6b	Shoreditch High Street (west side)	3	3	A	B+	A-	B
7a	Middle Road (East of Braithwaite)		9.5		B+		B
7b	Middle Road (West of Braithwaite)		13		A-		A-
8a	Braithwaite Street (North of Middle Road)	8	8	A	A-	A	A-
8b	Braithwaite Street (South of Middle Road)	10	10	A+	A+	A+	A+
9a	Bishopsgate West side (lower walkway)	5	5	B	C-	B-	D
9b	Bishopsgate West side (upper walkway)	4.5	4.5	A+	A	A+	A

13.3.13 Table 13.5 shows the 2018 baseline with proposed development PCL assessment results for the weekend peak hours.

Table 13.5: 2018 Baseline plus Proposed Development PCL Audit – Weekend

Link		Baseline width (m)	Future width (m)	Saturday Peak		Sunday Peak	
				Base	Future	Base	Future
1a	Bethnal Green Road (north side)	3.6	3.6	A	A	A	A-

1b	Bethnal Green Road (south side)	4	5	A-	B+	B+	B
2a	Sclater Street (north side)	2.3	2.3	A	A	A	A-
2b	Sclater Street (south side)	2.2	4.5	A	A	A-	A
3a	Brick Lane (east side)	2	2	B	B-	A-	B+
3b	Brick Lane (west side)	2.1	18	B+	A+	A-	A+
6a	Shoreditch High Street (east side)	3.5	18	A-	A+	A-	A
6b	Shoreditch High Street (west side)	3	3	A	A-	A	B

13.3.14 Table 13.6 shows the 2033 future year with site PCL assessment results for the weekday AM and PM peak hours.

Table 13.6: 2033 Future Baseline (TfL growth rate) plus Proposed Development PCL Audit – Weekday

Link		Baseline width (m)	Future width (m)	Weekday AM Peak		Weekday PM Peak	
				2033 Future Base	2033 Future Base + Dev	2033 Future Base	2033 Future Base + Dev
1a	Bethnal Green Road (north side)	3.6	3.6	B+	B+	B+	B+
1b	Bethnal Green Road (south side)	4	5	B+	B+	B-	B-
2a	Sclater Street (north side)	2.3	2.3	A+	A+	A	A
2b	Sclater Street (south side)	2.2	4.5	A	A+	A-	A
3a	Brick Lane (east side)	2	2	A	A	B	B-
3b	Brick Lane (west side)	2.1	18	A-	A+	B	A+

4a	Quaker Street (north side)	2	2	A-	A-	A-	A-
4b	Quaker Street (south side)	2.3	2.3	A+	A+	A+	A+
5a	Commercial Street (north side)	2.2	2.5	A	B	A-	B
5b	Commercial Street (south side)	2.7	2.7	A+	A-	A	B+
6a	Shoreditch High Street (east side)	3.5	18	B+	A	B-	A
6b	Shoreditch High Street (west side)	3	3	A	B	B+	C+
7a	Middle Road (East of Braithwaite)		9.5		B+		B
7b	Middle Road (West of Braithwaite)		13		A-		A-
8a	Braithwaite Street (North of Middle Road)	8	8	A	A-	A	A-
8b	Braithwaite Street (South of Middle Road)	10	10	A+	A+	A+	A+
9a	Bishopsgate West side (lower walkway)	5	5	C+	D	C-	D
9b	Bishopsgate West side (upper walkway)	4.5	4.5	A	A-	A	A

13.3.15 Table 13.7 shows the 2033 future year with site PCL assessment results for the weekend peak hours.

Table 13.7: 2033 Future Baseline (TfL growth rate) plus Proposed Development PCL Audit – Weekend

Link		Baseline width (m)	Future width (m)	Saturday Peak		Sunday Peak	
				Base	Future	Base	Future
1a	Bethnal Green Road (north side)	3.6	3.6	A	A	A	A-
1b	Bethnal Green Road (south side)	4	5	A-	B+	B+	B
2a	Sclater Street (north side)	2.3	2.3	A	A	A	A-
2b	Sclater Street (south side)	2.2	4.5	A	A	A-	A
3a	Brick Lane (east side)	2	2	B	B-	A-	B+
3b	Brick Lane (west side)	2.1	18	B+	A+	A-	A+
6a	Shoreditch High Street (east side)	3.5	18	A-	A+	A-	A
6b	Shoreditch High Street (west side)	3	3	A	A-	A	B

13.3.16 In comparison to the baseline scenario, the site is expected to lead to an increase in footfall particularly along the western side of Bishopsgate, as a result of people walking between Liverpool Street Station and the site. The results in the tables above are based on apportioning the flows on the Bishopsgate (west) upper and lower walkways based on the existing proportions which see the vast majority of pedestrian use the lower route. However, if the footfall increases, a greater proportion of pedestrians are likely to use the upper walkway in order to avoid the congestion. If the Bishopsgate (west) pedestrians are evenly split across the two walkways, then the PCL will be C+ or better across all links on the network.

14.0 IMPACT ON CYCLE NETWORK

14.0 IMPACT CYCLE NETWORK

14.1 INTRODUCTION

14.1.1 This section considers the likely effect of the proposed development on the local cycle infrastructure for Maximum Build Out, which generates the highest number of cycle trips.

14.2 CYCLE PARKING PROVISION

14.2.1 Chapter 9 of the report sets out in detail proposed long stay and short stay cycle parking provision, as well as cycle hire facilities. It is considered that that the provision of good quality on site cycle parking facilities for all users of the development will promote cycling to decrease the reliance on public transport.

14.2.2 Long-stay cycle parking for residents and staff would be provided on site in convenient, secure and covered areas, within buildings. Long-stay cycle parking for the Plot 2 office will be at ground floor level and easily accessible via a direct entrance.

14.2.3 Short-stay cycle parking for visitors will be provided at ground floor level across the site in Sheffield stand and two on-site cycle hubs to provide short-stay cycle parking and cycle maintenance services.

14.2.4 The provision of TfL cycle hire docking points (net increase of 30 spaces) will be provided in the adopted public highway on Shoreditch High Street and Commercial Street, which will be beneficial to users of the site as well as the local community.

14.3 CYCLE ACCESSIBILITY

14.3.1 The existing cycle accessibility to and from the site is considered excellent. The site is ideally placed on the edge of the City of London to facilitate journeys by cycle including those to employment, shopping and leisure facilities and to surrounding residential areas.

14.3.2 A large choice of cycle routes are accessible directly from the site, providing access to the wider LCN. Key northbound and southbound routes are facilitated along the site's eastern and western boundaries, along with a connection through the middle of the site on Braithwaite Street. In addition, a number of existing TfL recommended 'quieter' east-west cycle routes are located to the north and south of the site on key axis, providing local connections as well as connections with LCN routes.

14.3.3 The site scheme has been based upon a strategy of providing a high degree of accessibility to the surrounding cycle infrastructure, through the placement of resident, employee and visitor cycle parking and an increase provision of cycle hire facilities as shown in Figure 9.4.

14.3.4 Figure 9.4 shows that cycle parking is proposed to be provided at convenient locations around the whole perimeter of the site, thereby allowing short-term visitors arriving by bike to park within close proximity to their final destination. Secure cycle parking is also provided within each plot for the occupants of the buildings.

14.4 ADDITIONAL CYCLE TRIPS

14.4.1 Table 14.1 summarises the expected cycle trips during peak hours for the Maximum Build Out scenario.

Table 14.1: Estimated Trip Generation on Cycle Infrastructure

Peak Hour	In	Out	Two-way
Weekday AM Peak (0830-0930)	48	35	83
Weekday Lunchtime Peak (1230-1330)	74	84	158
Weekday PM Peak (1730-1830)	52	69	121
Saturday Peak (1300-1400)	13	20	32
Sunday Peak (1300-1400)	33	35	68

14.4.2 It is expected that the greatest peak for cycle trips will occur during a weekday Lunchtime peak hour. It is predicted that the proposed development for the whole of the site will result in approximately 158 two-way cycle trips during this peak hour.

14.4.3 It is considered that that the provision of good quality on site cycle parking facilities for all users of the proposed development will promote cycling to meet modern day demand and help to decrease the reliance on public transport.

15.0 IMPACT ON PUBLIC TRANSPORT NETWORK

15.0 IMPACT ON PUBLIC TRANSPORT NETWORK

15.1 INTRODUCTION

15.1.1 In accordance with TfL Best Practice Guidelines for Transport Assessments, the net future increase in public transport trips by modes has been established for bus stops and stations relevant to the location of the site for each direction of travel.

15.1.2 This section considers the likely effect of the proposed development on the public transport infrastructure for Maximum Build Out, which is the worst case scenario.

15.2 BUS

15.2.1 As described in Chapter 7, the site is located in close proximity to bus stops served by 14 bus services, which offer a combined frequency of approximately 100 buses per hour at peak times.

15.2.2 In order to assign the residential bus trip generation to individual bus routes, trip end-points for journeys from the development have been distributed using the 2011 'Method of Travel to Work' Census Data for the Haggerston and Weaver wards. Only destination wards within Greater London have been included.

15.2.3 For office bus trips to the site, trip start-points have been distributed using the 2001 Daytime Population Census Data for the Haggerston and Weaver wards; again, only origin wards within Greater London have been included.

15.2.4 Bus trips to and from the site were then assigned onto one of 18 bus corridors, each one representing an area of London accessible directly from the site using one or more routes. This allows the proportion of bus users travelling to or from each corridor to be calculated, with these proportions then assigned to the relevant bus trips for each scenario (inbound office AM, outbound residential AM etc).

15.2.5 For those corridors served by multiple buses on common route sections (for example buses 67, 149 and 242 along Kingsland Road), journeys have been distributed proportionally based on the peak frequencies of each service as identified in Table 6.1.

15.2.6 Retail trips have been proportionally assigned to bus routes directly, based on the results of questionnaires undertaken at nearby Spitalfields Market in January 2014.

15.2.7 Tables 15.1 and 15.2 below show the number of additional passengers by bus route in each direction resulting from the development for the Sunday peak period, which is forecast to have the highest bus generation, and the weekday AM and PM peak hours which are the busiest existing periods.

Table 15.1: Additional Bus Passengers per Bus Route by Direction – Weekday AM Peak

Route	Direction	Additional Passengers per Hour		Additional Passengers per Bus	
		Inbound	Outbound	Inbound	Outbound
8	West	10	9	1.3	1.1
8	East	4	1	0.5	0.1
26	North	4	1	0.6	0.2
26	South	5	5	0.7	0.7
35	South	8	2	1.3	0.4
42	South	7	2	1.1	0.4
47	South	17	3	2.8	0.4
48	North	8	3	1.1	0.4
48	South	3	1	0.4	0.2
67	North	34	6	5.6	1.0
67	South	0	0	0.0	0.1
78	South	16	2	2.6	0.4
135	East	7	3	1.1	0.6
149	North	16	6	1.6	0.6
149	South	4	2	0.4	0.2
205	West	20	6	2.4	0.8
205	East	17	5	2.1	0.6
242	West	4	4	0.6	0.6
242	North	5	2	0.7	0.3
344	South	18	5	2.3	0.6
388	West	5	5	0.9	0.8
388	East	7	2	1.1	0.3

Table 15.2: Additional Bus Passengers per Bus Route by Direction – Weekday PM Peak

Route	Direction	Additional Passengers per Hour		Additional Passengers per Bus	
		Inbound	Outbound	Inbound	Outbound
8	West	6	8	0.8	1.0
8	East	0	1	0.1	0.1
26	North	2	6	0.3	0.8
26	South	4	7	0.6	1.0
35	South	1	6	0.2	1.0
42	South	1	2	0.2	0.4
47	South	2	12	0.3	2.0
48	North	2	6	0.3	0.8
48	South	1	1	0.1	0.2
67	North	4	23	0.7	3.9
67	South	0	0	0.0	0.0
78	South	3	14	0.6	2.3
135	East	2	5	0.4	0.8
149	North	4	11	0.4	1.1
149	South	1	2	0.1	0.2
205	West	5	15	0.6	1.9
205	East	3	12	0.4	1.5
242	West	6	12	0.9	1.7
242	North	5	13	0.7	1.8
344	South	3	9	0.4	1.2
388	West	3	5	0.6	0.8
388	East	1	5	0.2	0.8

15.2.8 As shown in the tables above, the maximum number of additional forecast passengers per bus are expected to be observed on route 67, with an additional 6 inbound passengers per southbound bus in the AM peak and an additional 4 passengers per northbound bus in the PM peak. This is in part attributable to the fact that route 67 is the only direct route between the site and South Tottenham, Turnpike Lane and Wood Green – locations which also do not have a direct rail connection to Shoreditch High Street. However, it is also noted that the route is common with bus number 149 (which is expected to have lower numbers of additional trips) as far north as Stamford Hill; consequently, it is likely that passengers making shorter journeys will be spread more evenly across the two routes and thus lead to less crowding on any one bus.

15.3 OVERGROUND/RAIL/UNDERGROUND

15.3.1 As described within Chapter 7, the site is situated within easy walking distance of several rail and underground stations, including Shoreditch High Street London Overground Station which is located within the site.

15.3.2 Assignment of residential and office trips to rail and underground services has been undertaken using a similar method to that used for buses, i.e. the 2011 'Method of Travel to Work' Census Data and the 2001 Daytime Population Census Data were used to assign the residential and office trips respectively onto one of 11 corridors serving four stations in the vicinity of the site (Shoreditch High Street, Old Street, Aldgate East and Liverpool Street). The assignment takes into account the most convenient overall route from the site to each ward identified as generating overground/rail/underground demand for journeys to and from residential or office units as appropriate.

15.3.3 As part of the trip generation and modal split calculations for the residential and office elements of the development, which are based on census data, the underground and rail modes were amalgamated and then distributed by rail corridor and station for the following reasons:

- The mode of transport serving Shoreditch High Street station changed between 2001 (the year of the office census data, when Shoreditch Underground Station was served, at peak times and Sunday mornings, by the East London line) and 2011 (the year of the residential census data, when Shoreditch High Street Station was served by London Overground which is classed as a National Rail operator);
- The frequency and attractiveness of Overground services from Shoreditch High Street Station is now greater than was the case for the old East London line, and hence it is reasonable to assume that the demand for Overground travel (which is a National Rail operator) to and from Shoreditch High Street is greater now than was the demand for underground travel to and from the previous Shoreditch Underground Station; and
- Responses to the census questions on mode of transport may be partly subjective in terms of whether the main mode or the final mode is noted. For example, a commuter from Kent to London Bridge (National Rail) and hence on to Old Street (Underground) could be undecided as to whether to state their

dominant mode (National Rail) or their final mode excluding the walk to their destination (Underground).

15.3.4 Consequently, the Census modal shares of National Rail and underground have been first amalgamated, and subsequently split across eleven rail corridors serving four stations as listed in Table 15.3. This ensures that all rail options serving the site are considered appropriately.

Table 15.3: Rail corridors

Code	Corridor	Operator
a	Shoreditch High Street (North)	National Rail
b	Shoreditch High Street (South)	National Rail
c	Old Street (North - National Rail)	National Rail
d	Old Street (North - Northern line)	Underground
e	Old Street (South - Northern Line)	Underground
f	Aldgate East (West)	Underground
g	Aldgate East (East)	Underground
h	Liverpool Street (Central - West)	Underground
i	Liverpool Street (Central - East)	Underground
j	Liverpool Street (Circle/H&C/Met - West)	Underground
k	Liverpool Street (National Rail)	National Rail

15.3.5 Retail visitors travelling by rail-based modes have been distributed by route and station based on the Spitalfields questionnaire results from January 2014.

15.3.6 Tables 15.4 and 15.5 below show the number of additional passengers by station in each direction resulting from the development as a whole (including office, residential and retail land uses).

Table 15.4: Additional Rail/Underground Passengers per Route by Direction – Weekday AM Peak

Corridor	Additional Passengers per Hour		Additional Passengers per Train	
	Inbound	Outbound	Inbound	Outbound
Shoreditch High Street (North)	125	35	7.8	2.2
Shoreditch High Street (South)	308	50	19.3	3.1
Old Street (North - National Rail)	64	2	4.3	0.1
Old Street (North - Northern line)	209	16	9.9	0.8
Old Street (South - Northern Line)	560	24	28.0	1.2

Aldgate East (West)	255	43	10.6	1.8
Aldgate East (East)	67	7	3.5	0.4
Liverpool Street (Central - West)	595	109	19.8	3.6
Liverpool Street (Central - East)	180	13	6.7	0.5
Liverpool Street (Circle/H&C/Met - West)	278	58	11.1	2.3
Liverpool Street (National Rail)	685	27	20.2	0.8

15.3.7 As shown above, the maximum additional inbound and outbound passengers during the AM peak period is forecast to be 28 per train on the Northern Line (southbound) at Old Street and 4 on the Central Line (westbound) at Liverpool Street respectively.

Table 15.5: Additional Rail/Underground Passengers per Route by Direction – Weekday PM Peak

Corridor	Additional Passengers per Hour		Additional Passengers per Train	
	Inbound	Outbound	Inbound	Outbound
Shoreditch High Street (North)	21	98	1.3	6.1
Shoreditch High Street (South)	30	226	1.9	14.1
Old Street (North - National Rail)	2	44	0.1	2.9
Old Street (North - Northern line)	8	143	0.4	6.8
Old Street (South - Northern Line)	12	383	0.6	19.1
Aldgate East (West)	34	206	1.4	8.6
Aldgate East (East)	5	50	0.3	2.6
Liverpool Street (Central - West)	104	512	3.9	17.1
Liverpool Street (Central - East)	12	133	0.4	4.9
Liverpool Street (Circle/H&C/Met - West)	56	247	2.1	9.9
Liverpool Street (National Rail)	21	482	0.3	14.2

15.3.8 As shown above, the maximum additional inbound and outbound passengers during a weekday PM peak period is forecast to be 4 on the Northern line (eastbound) and 19 passengers on the Northern Line (southbound) at Old Street respectively.

16.0 IMPACT ON HIGHWAY NETWORK

16.0 IMPACT ON HIGHWAY NETWORK

16.1 INTRODUCTION

16.1.1 This section sets out an assessment of the change in prevailing local highway infrastructure conditions arising from the site for Maximum Build Out, which is the worst case scenario.

16.1.2 The difference between the Maximum Build Out scenario and the Limited Development Scenario or Detailed Component is unchanged however with respect to the maximum car parking provision proposed. On this basis, whilst the non-maximum development assessments will be expected to reduce trips to the site, the level of change will be proportionally low and will not result in any change in the effects listed below.

16.2 CHANGE IN TRAFFIC FLOWS

16.2.1 The proposed development is car-free and therefore the number of additional car trips expected to be added to the network is minimal.

16.2.2 The distribution of car and taxi movements on the network is based on the robust assumption that any drop-offs would occur on Bethnal Green Road or Sclater Street adjacent to the site, rather than on nearby roads which in practice is likely and which would reduce the traffic impact on streets adjacent to the site.

16.2.3 Taking this robust approach, the proposed development would generate an additional 15 two-way total car movements in the weekday AM peak hour, and 12 during the PM peak hour. A further 44 and 65 two-way total taxi movements would be generated in the weekday AM and PM peak hours respectively. This is a robust position given that in reality many journeys by taxi may be using vehicles which are already on the road network (for example having dropped off other passengers nearby) and which therefore represent new, rather than diverted, trips.

16.2.4 The development will generate up to 62 servicing trips in the AM peak hour across the site. During the PM peak hour up to 27 servicing trips will be generated. These trips will be distributed across several service yards; Chapter 18 provides further details.

16.2.5 Table 16.1 shows the change in 18 hour Annual Average Weekday Traffic (AAWT) arising from the Proposed Development. This encapsulates all the car, taxi and servicing trips generated by the Proposed Development during the busiest weekday periods, and compares against a Future Baseline scenario with existing traffic volumes plus those arising from committed schemes.

Table 16.1: Change in 18 hour Annual Average Weekday Traffic (AAWT) on key links

Link	Future Baseline		Future Baseline + Proposed Development		Percentage Change	
	Total Vehicles	HGVs	Total Vehicles	HGVs	Total Vehicles	HGVs
Great Eastern Street west of Holywell Lane	23300	2392	23815	2455	**2%**	**3%**
Shoreditch High Street north of Redchurch Street	9647	2221	9795	2247	**2%**	**1%**
Bethnal Green Road east of Shoreditch High Street	12065	1348	12834	1443	**6%**	**7%**
Sclater Street between Bethnal Green Road and Cygnet Street	2101	314	2408	366	**15%**	**17%**
Brick Lane between Grimsby Street and Quaker Street	2709	539	2842	562	**5%**	**4%**
Wheler Street between Quaker Street and Commercial Street	566	223	864	271	**53%**	**22%**
Commercial Street between Quaker Street and Shoreditch High Street	21137	2696	21854	2800	**3%**	**4%**
Shoreditch High Street between Commercial Street and Folgate Street	13219	3353	13628	3391	**3%**	**1%**
Shoreditch High Street between Bethnal Green Road and Commercial Street	20562	3674	21477	3790	**4%**	**3%**
Bethnal Green Road east of Sclater Street	8007	688	8135	714	**2%**	**4%**
Brick Lane north of Sclater Street	2709	539	2768	562	**2%**	**4%**
Brick Lane south of Quaker Street	3275	761	3408	785	**4%**	**3%**
Holywell Lane	3407	450	3498	468	**3%**	**4%**

16.2.6 As shown in Table 16.1 above, the principal links experiencing a significant percentage increase in traffic flows are Wheler Street and Sclater Street, attributable to their role as access routes to the servicing yards at the northern and southern ends of the site respectively.

16.2.7 It is noted that, while the percentage increase in traffic on these links appears high, the absolute change is in the order of 300 vehicle movements across the day which is not considered to be a significant impact across the day.

16.2.8 Sclater Street and Wheler Street are accessed via priority junctions and experience a low increase in absolute traffic flow across the course of the day. On other links, including those forming approach arms to signalised junctions, the percentage increase is even lower. On the basis that the vehicle trips generated by the operation of the site are not considered to have a material impact on traffic flow on the network, traffic modelling was not undertaken.

16.3 PROPOSED HIGHWAY ARRANGEMENT

16.3.1 Consideration has been given to the existing highway arrangement within the vicinity of the proposed site accesses, and some amendments to the highway arrangement have been identified to support the proposals. The plan provided at Appendix Q shows intended amendments to the existing highway arrangement, which can be summarised as follows.

- The existing bus stop on the northern side of Bethnal Green Road will be relocated a short distance further to the east to allow for vehicles access and egress to and from the proposed dedicated servicing area contained within Plot 1.
- It is proposed that a new pedestrian crossing on Bethnal Green Road will be implemented, connecting the southern side of Bethnal Green Road in proximity to Shoreditch High Street station with its northern side, the type of crossing is to be agreed with the Boroughs and TfL;
- The provision of a pick up and drop off bay on Sclater Street towards its western end is proposed;
- Amendments to the positioning of some on street parking bays on Sclater Street and Brick Lane to allow for intended accesses to the site will be implemented as part of the Proposed Development. Parking beat data provided by LBTH indicates that the Proposed Development will not be detrimental with respect to existing levels of parking demand; and
- Amendments to the existing highway arrangement on the northern side of Quaker Street adjacent to Plot 3 to facilitate development.

16.4 CAR PARKING AND PICK UP / DROP OFF

16.4.1 The proposed development will be car-free. However, in accordance with policy, the development proposals include the provision of two disabled parking bays on-site as part of the Detailed Component for Plots 2 and 7. The disabled parking bays will be provided on the east edge of Braithwaite Street and a second on the north-east corners of the site, located off Brick Lane.

16.4.2 With regard to disabled parking provision for the Outline Application, discussions are ongoing with the Boroughs and TfL to identify suitable disabled parking provision.

16.4.3 On-street parking on the surrounding streets is controlled, and the site is located within controlled parking zone. It is acknowledged new residents will not be permitted on-street parking permits.

16.4.4 A pick up / drop off bay is proposed on the southern kerbside of Sclater Street at its western end. This will allow visitors to the site to be dropped off and collected by car. It is noted that taxis and private hire vehicles are also permitted to stop in the bus lane on the southern side of Bethnal Green Road to load and unload passengers. As a consequence there is ample capacity for the small proportion of site users travelling by car to be dropped off and picked up.

16.4.5 In addition there is a local taxi rank located on Ebor Street which provides two spaces.

16.4.6 All servicing for the site will take place on site and there is therefore no requirement to use any new or existing on-street servicing bays.

17.0 OUTLINE CONSTRUCTION LOGISTICS PLAN

17.0 OUTLINE CONSTRUCTION LOGISTICS PLAN

17.1 INTRODUCTION

17.1.1 This Outline Construction Logistics Plan (CLP) has been prepared by WSP on behalf of the applicant to accompany the Detailed Application and Outline Application for the site at the Goodsyard site in Shoreditch, Hackney.

17.1.2 The Outline CLP is required by TfL and the Boroughs for the planning application submission. It should be noted a Principal Contractor has not been appointed at this pre-application stage, therefore the contents of the Outline CLP are based on assumptions made by WSP on behalf of the Applicant.

17.1.3 A detailed CLP will be developed following the appointment of a Principal Contractor which may be varied from the details set out in this report. The CLP developed by the Principal Contractor will form the basis of agreeing the construction arrangements with TfL and the Boroughs accordance with best practice and guidance. The logistics will be dependent on suppliers, working methodology and programme and these will be coordinated by the Principal Contractor.

17.1.4 The Outline CLP aims to support sustainable construction practices and reduce negative effects of construction work on local communities, residents, businesses and the environment. The objectives of the Outline CLP include:

- To demonstrate that construction materials can be delivered and waste removed in a safe, efficient and environmentally friendly way;
- To identify deliveries that can be reduced, re-timed or even consolidated, particularly during peak periods;
- To help cut congestion on London's roads and ease pressure on the environment;
- To improve the reliability of deliveries to the site; and
- To reduce fuel costs for freight operators.

17.1.5 The site is located next to the A10 Shoreditch High Street and sits on the Borough boundary between the London Borough of Hackney and the London Borough of Tower Hamlets. A more detailed site description is included in the Transport Statement. Policy Considerations

17.2 POLICY CONSIDERATIONS

Introduction

17.2.1 This section of the document looks at the policy considerations taken into consideration when compiling this CMP.

The London Plan (2016)

17.2.2 The London Plan was initially published in July 2011 with subsequent alterations since adopted; Revised Early Minor Alterations to the London Plan in October 2013, Further Alterations to the London Plan (FALP) in March 2015 and Minor Alterations to the London Plan in March 2016 with a fix version in January 2017.

17.2.3 Policy 6.3 'Assessing effects of development on transport capacity' states that: 'Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan and should be co-ordinated with travel plans'.

17.2.4 This policy also notes that "the use of construction logistics plans and delivery and servicing plans may help ease congestion and/or encourage modal shift".

17.2.5 Policy 6.14: Freight - The Mayor of London will work with all relevant partners to improve freight distribution (including servicing and deliveries) and to promote movement of freight by rail and waterway. The Mayor supports the development of corridors to bypass London, especially for rail freight, to relieve congestion within London.

17.2.6 Development proposals will be considered more favourably should the following criteria be met:

- Locate developments that generate high numbers of freight movements close to major transport routes;
- Promote the uptake of the Freight Operators Recognition Scheme, construction logistics plans and delivery and servicing plans. These should be secured in line with the London Freight Plan and should be co-ordinated with travel plans and the development of approaches to consolidate freight; and
- Increase the use of the Blue-Ribbon Network for Freight Transport.

The Mayor's Transport Strategy (2018)

17.2.7 The Mayor's Transport Strategy promotes the use of CLPs. For all planning applications that meet the criteria for referral to the Mayor, comprehensive CLPs will need to be submitted in accordance with TfL's best practice guidance.

The London Low Emissions Zone (2008)

17.2.8 The Low Emissions Zone (LEZ) is a scheme that aims to improve air quality in the City by setting and enforcing new emissions standards for HGV's, large vans and minibuses, and deterring the use of the most polluting vehicles by freight operators. The London LEZ is a "first" for the UK and is one of the largest schemes of its type in the world.

17.2.9 The LEZ came into force in 2008 for lorries over 12 tonnes with different vehicles affected over time and tougher emissions standards were subsequently introduced in 2012. Cars and motorcycles are not affected.

17.2.10 The LEZ operates 24 hours a day, seven days a week, every day of the year including weekends and public holidays, with a daily charge of £200 being applicable for Lorries, buses and coaches; and £100 for heavy vans and minibuses which do not meet the required standards.

17.2.11 The LEZ is enforced through fixed and mobile cameras which read your vehicle registration number plate as you drive within the LEZ and check it against a database of vehicles which meet the LEZ emissions standards, or are either exempt or registered for a 100% discount, or if the LEZ daily charge has been paid.

Construction Logistics Plan Guidance (TfL, 2017)

17.2.12 Transport for London issued the 'Construction Logistics Plan Guidance' in July 2017 ("Guidance"), the purpose of which is to ensure that CLPs of high quality are produced to minimise the impact of construction logistics on the road network. The Guidance focuses on reducing the impact of construction in terms of:

- Environmental impact: Lower vehicle emissions and noise levels;
- Road risk: Improving the safety of road users;
- Congestion: Reduced vehicle trips, particularly in peak periods; and
- Cost: Efficient working practices and reduced deliveries.

17.2.13 CLPs provide a framework for understanding and managing construction vehicle activity into and out of a proposed development and should detail:

- The amount of construction traffic generated;
- The routes the construction vehicles will use and consideration of local impacts;
- The impact on relevant Community Considerations; and
- Any traffic management that will be in place.

17.2.14 There are two types of CLPs that may be required. An outline (draft) CLP accompanies the planning application and gives the planning authority an overview of the expected logistics activity during the construction programme. A detailed CLP is submitted to a planning authority pursuant to, and in discharge of, a condition that has been imposed on the planning permission. It provides the planning authority with the detail of the logistics activity expected during the construction programme.

17.2.15 The Guidance suggests a range of measures and strategies that should be considered to reduce the impact of construction on the local environment.

Freight Operator Recognition Scheme (FORS)

17.2.16 The proposed development is designed to encourage freight operators to take up green fleet management, use best practice and to increase the sustainability of London's freight distribution. The scheme has already been developed with trade union involvement and close collaborative partnership to engage effectively with freight operators and facilitate the sharing of information.

17.2.17 Operators will join the scheme as members, with tiers of membership reflecting freight operator achievements. It will offer members incentives to increase the sustainability of their operations and to develop their skills, and includes best practice guidance on:

- Training to improve safety and reduce CO2 and emissions;
- Maintenance to improve safety and reduce fuel consumption, CO2 and emissions;
- Management of road risk to improve safety, particularly for pedestrians and cyclists;
- Fuel efficiency to save costs and reduce CO2 and emissions; and
- The use of low-carbon engine technologies such as hybrid and electric vehicles, hydrogen fuel cells and bio fuels to reduce CO2 and other harmful emissions.

17.2.18 It recognises legal compliance as the base 'bronze' level and promotes the uptake of best practice covering fuel efficiency, alternative fuels and low carbon vehicles, management of road risk, legal record keeping and reducing penalty charge notices through the higher 'silver' and 'gold' levels. It will also recognise operator achievements with rewards that encourage operators to raise standards to reduce, in particular, CO2 emissions and collisions between heavy goods vehicles (HGVs) and cyclists.

17.2.19 Benefits are designed to reflect operator needs. These will include a subsidised training programme called London Freight Booster which will include an NVQ Level 2 qualification that supports the ongoing competencies requirements for drivers.

17.2.20 Members also benefit from advice about fuel efficiency, Penalty Charge Notice (PCN) reduction, legal record keeping and the management of occupational road risks. Tailored action plans to help reduce collisions, emissions and costs will also be developed.

17.2.21 The scheme sets Freight Operator Recognition Scheme Standards, a quality benchmark for use by clients when awarding servicing, maintenance and supply contracts. This provides a simple way for clients to ensure the sustainable credentials of freight operators.

17.3 CONSTRUCTION PROGRAMME

17.3.1 This chapter sets out the indicative construction programme for the Proposed Development. When a contractor is appointed, a Detailed CLP will be prepared providing further information and confirming the programme and construction methodology.

17.3.2 Table 17.1 shows the proposed construction programme, with Phase 1 works beginning in early 2021 and completion of Phase 8 in early 2034.

Table 17.1: Construction Phasing

Phase	Plots / Buildings	Start Date	End Date	Duration
Phase 1	Building 2 / Plot 2 (public Realm and podium up to Braithwaite Street).	January 2021	June 2024	42 months
Phase 2	Plot 7 – Retail Units in the Arches.	November 2021	November 2022	12 months
Phase 3	Building 5 and 10 b (affordable housing) and Building 6	December 2022	March 2025	40 months
Phase 4	Buildings 8a, 8b and 8c	August 2025	September 2028	40 months
Phase 5	Building 10c	July 2028	August 2031	24 months
Phase 6	Building 1	October 2028	September 2031	36 months

Phase 7	Buildings 4 and 10a	June 2030	January 2033	32 months
Phase 8	Building 3	September 2031	January 2034	28 months

17.3.3 The construction programme consists of eight Phases which will build out the individual Plots and Buildings as shown in Table 17.1.

17.4 VEHICLE ROUTING AND SITE ACCESS

17.4.1 This chapter details the vehicle routing and access arrangements for construction vehicles to and from the site.

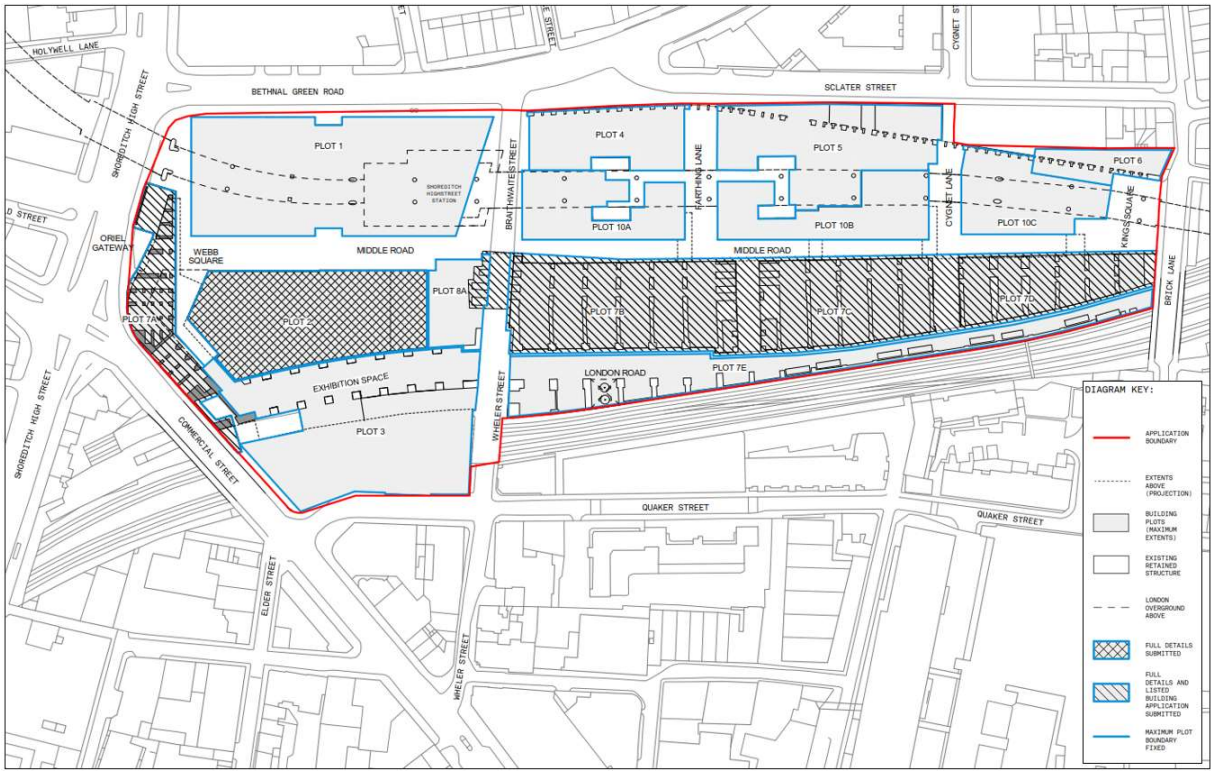
17.4.2 The main access routes to the site would include the A10, the A501, and the A1202, all trunk roads which are part of the TLRN. The A10 provides a direct route to the north of the site, adjoining the A406 North Circular, the main arterial route around London.

17.4.3 The A501 provides access the west, adjoining the A1, which connects to the A406 North Circular near Finchley. The A1202 forms a junction with the A11 to the south of the site, and provides a route to the east, adjoining the A12 near Bromley-by-Bow, which provides access to the North Circular at Redbridge.

17.4.4 Any routes to the south would be via Commercial Street, and would need to access the A13 and cross the River Thames at the Blackwall Tunnel, or Tower Bridge Road.

17.4.5 The TLRN routes identified above will provide access for construction vehicles to junctions next to the site. The local access routes which will be used to access the site will vary depending on the Phase of construction on-site, which will be reviewed in the following sections. Figure 71.2 shows the site plots which are referred to in the construction phasing table shown as Table 17.1.

Figure 17.1: Site Plots



Phase 1

17.4.6 Phase 1 includes part of Plot 7A and the proposed exhibition area, located on the west part of the site, between Plot 1 to the north and Plot 3 to the south. It is assumed Plot 2 will only be accessible via Braithwaite Street due to the listed structures to the west and the A10. It should be noted there is an existing height restriction formed by the rail bridges over Braithwaite Street, approximately 4m, which would need to be considered, however should be sufficient clearance for tipper vehicles and concrete vehicles. The main access route for Plot 2 would be via either Commercial Street to the south of Bethnal Green Road to the north, both of which can be accessed via the A10.

Phase 2

17.4.7 Phase 2 includes part of Plot 7, which includes Phase 1 next to the junction between Shoreditch High Street and Commercial Street; and Plots 7B, 7C, 7D, and 7E on the east part of the site, along the south edge. To avoid impacting the A10 Shoreditch High Street and to protect the listed arches, it is assumed construction vehicles would access the site via Braithwaite Street, either from the north (junction with Bethnal Green Road) or from the south (junction with Quaker Street) to access Plot 7A. As Plot 2 will be under construction, it is assumed an internal route on site would be available to access Plot 7A via Braithwaite Street.

17.4.8 Plots 7B, 7C, 7D, and 7E along the south edge of the site could be accessed via either Braithwaite Street or Brick Lane. It should be noted Brick Lane is a one-way northbound only street which can be accessed via the A11 Whitechapel Road or Commercial Street, via the junction with Hanbury Street. It is assumed the internal access route east-west through the site would be available, which would provide access between Brick Lane and Braithwaite Street to disperse vehicle movements.

Phase 3

17.4.9 Phase 3 includes Plots 5, 6 and 10b which are all located in the north east corner of the site, next to Sclater Street and Brick Lane. It is assumed an internal access road will be available for the works which would provide a route through the site between Braithwaite Street and Brick Lane. However, it is assumed Sclater Street would be a main access route during the construction of Plot 5. Sclater Street would be accessed via Bethnal Green Road, using the all-movements priority junction.

Phase 4

17.4.10 Phase 4 includes Plot 8 which is in the centre of the site, to the west of Braithwaite Street, between Plots 2 and 7. Phase 4 construction is scheduled to begin once Plot 2 and 7A, and Phase 2 (Plots 7A, 7B, 7C, 7D and 7E) are complete. Access would likely be from Braithwaite Street from either the north, at the junction with Bethnal Green Road, or the south, via Quaker Street.

Phase 5

17.4.11 Phase 5 consists of Building 10c only which is located in the north east corner of the site, and adjoins Plot 6 which is scheduled to be complete. The main point of access is likely to be via the internal site road which is accessed via Braithwaite Street and Brick Lane.

Phase 6

17.4.12 Phase 6 includes the construction of Building 1 on the north west corner of the site, at the junction between Shoreditch High Street and Bethnal Green Road, next to the Shoreditch High Street station. It is assumed the internal site road would still be available as an access point, therefore Braithwaite Street would be a primary access route. It is assumed Bethnal Green Road would also be a primary point of access onto Plot 1.

Phase 7

17.4.13 Phase 7 includes Buildings 4 and 10a, which are adjacent plots on the east part of the site, east of Braithwaite Street. Buildings 4 and 10a are bordered by Braithwaite Street to the west, Sclater Street / Bethnal Green Road to the north, and a new internal route to the west. It is assumed the internal access road would also be available, therefore the plots could be accessed via Braithwaite Street and the internal site roads. It is assumed Sclater Street / Bethnal Green Road would also be a point of access during certain points of construction.

Phase 8

17.4.14 The final phase, Phase 8, would include the construction of Building 3 on the south part of the site, bordered by Quaker Street. IT is assumed the primary points of access would be via Braithwaite Street and Quaker Street, with construction vehicles routing via Commercial Street.

17.4.15 It should be noted that should there be any need for loading/unloading activity to take place on street at any point in time during the construction programme; this will be formally agreed with the respective borough/TfL, as appropriate.

17.5 STRATEGIES TO REDUCE IMPACTS

17.5.1 Many strategies and measures are planned to reduce the impacts of construction and construction traffic on the local area. The planned measures can be categorised as follows:

- Committed – Measures that will be implemented as part of the CLP;
- Proposed – Measures that are feasible and likely to be implemented. Once a contractor is appointed these measures will be studied further and confirmed within the Detailed CLP; and
- Considered – Measures that are unlikely to be implemented or feasible but could be investigated or become relevant in the future.

17.5.2 Table 17.2 summarises the planned measures for the construction of the Proposed Development, based on the checklist provided in TfL's CLP guidance. Committed measures must be complied with as part of a CLP.

Table 17.2: Construction Planned Measures

Planned Measures	Committed	Proposed	Considered
Measures influencing construction vehicles and deliveries			
Safety and environmental standards and programmes	**X**		
Adherence to designated routes	**X**		
Delivery scheduling	**X**		
Re-timing for out of peak deliveries		**X**	
Re-timing for out of hours deliveries		**X**	
Use of holding areas and vehicle call off areas		**X**	
Use of logistics and consolidation centres			**X**
Measures to encourage sustainable freight			
Freight by water			**X**
Freight by rail			**X**
Material procurement measures			

Design for manufacture and assembly and off-site manufacture			**X**
Re-use of material on-site			**X**
Smart procurement		**X**	
Other measures			
Collaboration with other sites in the area	**X**		
Implement a Staff Travel Plan	**X**		

Considerate Contractors Scheme

17.5.3 All Contractors will be required to register under the Considerate Constructors Scheme.

CLOCS

17.5.4 The CLOCS (Construction Logistics and Community Safety) standard will be signed up to, which will ensure that the construction contractor (as well suppliers and sub-contractors) follow safe practices in the management of their operations, vehicles, drivers and construction sites.

Fleet Operators Recognition Scheme

17.5.5 All construction vehicle operators will be required to be accredited in line with the Fleet Operator Recognition Scheme (FORS). FORS accreditation confirms that a fleet operator can demonstrate that appropriate systems and policies exist to ensure drivers are suitably fit, qualified and licenced to operate vehicles which are properly maintained, equipped and insured. It is a mechanism by which adherence to the CLOCS standard can be assured and monitored.

Coordination of Deliveries

17.5.6 The Principal Contractor would co-ordinate all deliveries and collections to / from the site, and ensure that as far as possible:

- All delivery and collection vehicles are aware of the proposed routing;
- Prior to a delivery or collection, haulers would notify the relevant authorities (TfL, Police, Highways Authority etc.) in accordance with the Road Vehicles (Authorisation of Special Types) (General) Order 2003 if required;
- Liaison with with occupants of adjacent buildings to avoid delays to service deliveries due to construction vehicles;
- Deliveries will be made on a 'just in time' basis'; and
- Larger vehicle movements would be scheduled to avoid peak hours on the local road network, if possible.

17.5.7 Construction deliveries would be carefully planned with delivery times agreed with each contractor using a web-based booking system. Delivery schedules would be produced to look at the profiles of forthcoming deliveries and to regulate journeys and eliminate bottlenecks.

Staff Travel

17.5.8 A staff travel plan will be prepared by the contractor as part of the Detailed CLP to encourage the use of sustainable modes and take advantage of the accessible location of the site.

17.5.9 The site will not provide car parking for construction workers will be provided. Staff cycle parking facilities will be provided.

Control of Dust and Dirt

17.5.10 All vehicle routes used by construction traffic will be regularly inspected for any deposits of soil / debris deposited by construction traffic and if necessary, the road will be swept using a mechanical sweeper.

17.5.11 Effective wheel / body washing facilities will be provided and used as necessary before vehicles egress the site. Recycled water would be used wherever possible. Supplementary cleaning would be provided as necessary using suitable means to keep the surrounding highway clean.

17.5.12 Dust suppression will be achieved by ensuring that all materials transported to / from the Site are enclosed or fully sheeted. During dry periods the site surface will be dampened to control the generation of dust.

Emergency Access

17.5.13 Safe access routes for the emergency services will be maintained and controlled by a Traffic Marshal permanently located at the principal construction site access.

Site Management

17.5.14 Welfare facilities and site offices for the Principal Contractor and all sub-contractors will be located on-site. Operatives will only be permitted to access the Site after receiving induction training and will be required to enter and leave via a security gate.

17.5.15 Site notice boards will be provided at the site entrance. These will display the project particulars, contact details, access and egress procedures, site rules and all necessary health and safety information.

17.5.16 All plant and materials will be safely secured and stored at the end of each day.

17.5.17 The Principal Contractor will consult with local residents regarding traffic management protocols.

Temporary Road Closures

17.5.18 Occasional temporary road closures would be anticipated to establish and remove the tower cranes or to deliver large items of building plant and infrastructure items. Any necessary lane closures on the local highway network would avoid peak periods if possible, and would be agreed with TfL / Boroughs prior to commencement. Notices regarding any planned closures and diversion of either roads or footpaths shall be given by the Principal Contractor to the relevant Borough, the police, fire brigade and other emergency services sufficiently in advance of the required closure or diversion.

17.6 ESTIMATED VEHICLE MOVEMENTS

17.6.1 Table 17.3 shows a worst-case assessment regarding the effect of HGV vehicular movements on the adjacent highway network during excavation/demolition, expected to be the most intense activities. During all other construction phases, vehicular flows are generally a third, or less, than such peak activity periods.

Table 17.3: Estimated Construction Vehicle Movements

Link	Two-way Traffic Flow					
	Weekday AM Peak			Weekday PM Peak		
	Total Existing Traffic Flow	Predicted HGV Demolition Traffic	% Increase	Total Existing Traffic Flow	Predicted HGV Demolition Traffic	% Increase
Bethnal Green Road	1079	12	1.1%	1009	12	1.2%
Sclater Street	189	12	6.3%	158	12	7.6%
Commercial Street	1843	12	0.7%	1451	12	0.8%
Shoreditch High Street	1090	12	1.1%	1045	12	1.1%

17.6.2 It is predicted that the percentage change in vehicular flow with demolition and construction traffic will be negligible along Bethnal Green Road, Commercial Street and Shoreditch High Street. The effect of demolition and construction traffic along Sclater Street will only occur during Phase 4, which forms approximately 10% of the density of the whole of the development being proposed. As such, Phase 4 will take place over a shorter time frame and consideration of 12 HGVs to and from the site during peak hour periods is likely to be an overestimation in any event.

17.6.3 In summary, the above shows a worst-case scenario which will be limited principally during excavation/demolition phases of the site. During all other construction phases, vehicular flows are generally a third, or less, than such peak activity periods.

17.7 IMPLEMENTING, MONITORING & UPDATING

Management

17.7.1 The CLP will form part of the final Construction Management Plan (CMP) and will be implemented prior to commencement of construction at the site.

17.7.2 The Applicant will work with the appointed Principal Contractor to implement the measures identified above. The continuing management of the CLP will be the responsibility of the Principal Contractor and will cover the lifetime of the planned construction works.

17.7.3 The CLP will be implemented from commencement of demolition and/or construction activities on the site.

Monitoring and Review

17.7.4 The Principal Contractor will nominate a member of staff to be responsible for the day-to-day organisation and monitoring of construction logistics for the Site, which given the size and complexity of the project may be a full-time role. The responsibilities of this Logistics Manager role will include the implementation and management of the CLP for the lifetime of the construction project.

17.7.5 As well as planning and co-ordinating the day-to-day site deliveries, on-site arrangements to accommodate delivery vehicles, and the arrangements for special deliveries, the Logistics Manager will liaise with nominated representatives of the Applicant other on-going construction projects to agree, where practical to do so, consolidation of vehicle activity and other measures to support the running of the CLP. The Logistics Manager will also liaise regularly with key personnel at TfL, the Boroughs, and local resident groups.

17.7.6 TfL and the Boroughs will be notified of the nominated individual prior to commencement of activities at the site.

17.7.7 The CLP is a 'live' document and will be regularly reviewed by the developer. The CLP will be reviewed no less than annually. Should updates be required, these will be undertaken and an updated version issued to TfL, the Boroughs, and other key stakeholders. Should the annual review identify that no material changes are required; this too will be articulated to TfL, the Boroughs, and key stakeholders.

17.7.8 The Logistics Manager will monitor vehicle movements on a daily basis and will carry out surveys of vehicle movements and routing at regular intervals throughout the construction project.

17.7.9 In addition, the following aspects of the construction project logistics will be monitored:

- Early deliveries / collections and those seeking to wait on surrounding public highway so that the sub-contractor and/or supplier can be notified and warned of the need to follow the strategies articulated in this document;

- The number of vehicle movements during the network peak hours to assist in minimising impacts during peak times; and
- Construction staff travel patterns.

Securing the CLP

17.7.10 This document which will be implemented from the point at which demolition and/or construction activities commence at the site (subject to a planning consent). The detailed CLP will be produced by the Principal Contractor once appointed and this is expected to be secured by way of an appropriately worded planning condition or a legally binding S106 Agreement.

18.0 DRAFT DELIVERY AND SERVICING PLAN

18.0 DRAFT DELIVERY AND SERVICING PLAN

18.1 INTRODUCTION

18.1.1 This Draft Delivery and Servicing Plan (DSP) has been prepared by WSP on behalf of the Applicant to accompany the Detailed Application and Outline Application for the proposed development at the Goodsyard site in Shoreditch, Hackney.

18.1.2 The Full Delivery and Servicing Management Plan will be secured by planning condition.

18.2 EXISTING SITE

18.2.1 The site is located next to the A10 Shoreditch High Street and sits on the Borough boundary between the London Borough of Hackney and the London Borough of Tower Hamlets. A detailed description of the existing site location is included in the Transport Statement.

18.3 DEVELOPMENT PROPOSALS

18.3.1 The 2015 Amended Scheme proposed the comprehensive mixed use redevelopment of the site comprising of up to 1,356 residential units (Class C3), up to 65,859 m2 Gross Internal Area (GIA), retail (Class A1, A2, A3 and A5) up to 17,499 m2 GIA, assorted uses (Class D1, D2, sui generis) and 22,642 m2 of new public open space and landscaping.

18.3.2 Following further consultation with the GLA, LBTH and LBH, the Applicant now submits the Proposed Amendments which consist of: a comprehensive redevelopment of the site which will include the provision of up to 138,575 m2 Gross External Area (GEA) of commercial floorspace (B1 use), up to 19,260 m2 GEA of retail floorspace (A1, A2, A3 and A5 use) the provision of up to 500 residential homes and the provision for up to a 150 room hotel and public realm.

18.4 REPORT

18.4.1 The purpose of the Draft DSP is to identify where loading and unloading activity will occur and facilitate the safe and efficient use of areas for servicing. This chapter has been drafted in accordance with guidance provided within the Transport for London, (TfL) document 'Management Freight Effectively: Delivery and Servicing Plans'.

18.4.2 The DSP will remain a live document that will evolve over time to ensure that objectives are met in the most appropriate manner. It is intended that this will complement the objectives of the Travel Plan through the implementation of sustainable delivery initiatives.

18.4.3 Following this introduction, the remainder of this chapter is structured as follows:

- Policy Guidance;
- Delivery and Servicing Proposals;
- Delivery and Servicing Management; and
- Monitoring and Enforcement.

18.5 POLICY AND GUIDANCE

18.5.1 This section details relevant guidance for the purpose, aims and structure of Delivery and Servicing Plans (DSP).

The London Plan (2016)

18.5.2 The London Plan was initially published in July 2011 with subsequent alterations since adopted; Revised Early Minor Alterations to the London Plan in October 2013, Further Alterations to the London Plan, (FALP) in March 2015 and Minor Alterations to the London Plan in March 2016 with a fix version in January 2017. It is part of the statutory development plan. The London Plan aims to ensure that London's transport is easy, safe and convenient for everyone and actively encourages more walking and cycling and makes better use of the River Thames.

18.5.3 Policy 6.3, regarding the effects of development on transport capacity, states that development proposals should ensure that impacts on transport capacity and the transport network are fully assessed and development should not adversely affect safety on the transport network. Delivery and servicing plans should be secured.

18.5.4 Policy 6.14 relating to freight notes that development proposals should promote the uptake of the Fleet Operators Recognition Scheme, provide delivery and servicing plans, consider innovative freight solutions, minimise congestion impacts and improve safety.

Transport for London – Deliveries in London

18.5.5 TfL work with operators, boroughs and partners across the freight industry to ensure that goods and services get delivered in London on time, and in a safe, clean and efficient way.

18.5.6 The 'Deliveries in London' online portal provides advice on making and receiving deliveries, including parking and loading, delivering efficiently and driving near vulnerable road users. The guidance portal seeks to:

- Ensure that London's transport networks allow for the efficient and reliable handling and distribution of freight and the provision of servicing to support London's economy;
- Minimise the adverse environmental impact of freight transport and servicing in London; and
- Minimise the impact of congestion on the carriage of goods and provision of servicing.

Transport for London – Rethinking Deliveries Report

18.5.7 The Rethinking Deliveries Report seeks to understand different delivery strategies currently employed across the world and subsequently implement effective solutions on a wider scale in both the private and public sectors.

18.5.8 The goal of the report is to consolidate deliveries; reducing the number of vehicles carrying freight into a city by improving utilisation of available vehicle capacity. Consolidation solutions can be split into either behavioural or physical solutions, as follows:

18.5.9 Behavioural solutions:

- Procurement led solutions;
- Upstream supply chain; and
- Click & collect at store.

18.5.10 Physical solutions:

- Urban consolidation centres;
- Micro-consolidation centres;
- Locker boxes / locker banks; and
- Pick-up drop-off (PUDO) facility shop.

18.5.11 The Rethinking Deliveries Report identifies that working in tandem "with neighbouring organisations in joint procurement and consolidation has the potential over the longer term to reduce costs, streamline ordering processes, enhance collaborative working and minimise environmental impacts."

Getting the Timing Right: Making the Most of Quieter Times for Deliveries (2014)

18.5.12 The guidance aims to help local authorities, businesses and fleet operators make the most of the opportunities that re-timing deliveries can offer, outlining the benefits and key issues to consider when planning deliveries.

18.5.13 Relating to businesses specifically, the guidance sets out that re-timing deliveries brings the following

18.5.14 benefits:

- More cost-effective deliveries, at a time to suit the business;
- More reliable delivery patterns, as journeys are less likely to be delayed by congestion, enabling businesses to plan the working day more effectively;
- A better experience for customers if products are always available when they want them, premises are clear of delivery equipment and staff have more time to focus on offering a good service; and
- Being a better neighbour and enhancing corporate social responsibility by reducing the number of vehicles delivering to site.

18.5.15 The guidance documents also explain that, provided deliveries are completed quietly, spreading them more evenly throughout the day ensures a better environment for businesses, residents and visitors to the area. Other benefits of spreading deliveries include:

- Safer streets, with less risk of collisions between goods vehicles and vulnerable road users;
- Reduced congestion and more efficient use of on-street loading facilities; and
- Air quality improvements, as traffic moves around the area more easily.

Code of Practice for Quieter Deliveries (September, 2015)

18.5.16 TfL's Code of Practice for Quieter Deliveries, (September 2015) offers guidance on how to minimise noise from out-of-hours deliveries. The guidance provides a list of general guidance pointers, as well as measures for drivers and measures to reduce noise at the delivery point. Key measures include:

- Ensuring all equipment is well maintained and in good working order;
- Using quieter vehicles and equipment where possible e.g. quiet roll cages, rubber floor mats;
- Making sure all colleagues involved are briefed and trained appropriately, and are aware of the Code of Practice;
- Liaising with suppliers to minimise the likelihood of vehicles arriving at the same time; and
- Ensuring the driver is aware of any local access issues.

Freight Operator Recognition Scheme

18.5.17 The Freight Operator Recognition Scheme, (FORS) is a voluntary scheme that encourages sustainable best practice for fleet operators. FORS promotes safe working practices, legal compliance and a corporate social responsibility to improve the performance of fleet operators. The project has been developed with trade union involvement and collaboration with freight operators and the facility of sharing information.

18.5.18 Operators join the scheme as members, with tiers of membership reflecting freight operator achievements. It will offer members incentives to increase the sustainability of their operations and to develop their skills, including best practice development for:

- Training to improve safety and reduce CO2 and emissions;
- Maintenance, to improve safety and reduce fuel consumption, CO2 and emissions;
- Management of road risk to improve safety, particularly for pedestrians and cyclists;
- Fuel efficiency, to save costs and reduce CO2 and emissions; and
- The use of low-carbon engine technologies such as hybrid and electric vehicles, hydrogen fuel cells and biofuels to reduce CO2 and emissions.

Delivery and Servicing Plans (TfL Online Portal)

18.5.19 Delivery and Servicing Plans, (DSPs) will be used to increase building operational efficiency by reducing delivery and servicing impacts to premises, specifically CO2 emissions, congestion and collisions. They also provide a tool for use by Traffic Authorities and Planning Authorities to improve reliability.

18.5.20 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 the consideration of consolidation and collaborative delivery arrangements to help reduce the impact of commercial goods and servicing vehicle activity in and out of premises/developments.

18.5.21 Specific consideration will be given to increasing the number of freight operators using best practice, and promoting Freight Operator Recognition Scheme (FORS) membership through appropriate contract award criteria for servicing, maintenance and supply contracts. Organisations using this approach will be able to demonstrate best value and environmental credibility. DSPs specifically help 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 follow best practice, (e.g. FORS).

18.5.22 These plans can sit alongside, and work in conjunction with, an employee travel plan, to ensure that all transport associated with a site is efficient, cost-effective and as sustainable as possible. DSPs will ultimately be integrated into the travel planning process and monitored in the same way as a travel plan.

18.5.23 TfL and the GLA will take a lead in implementing DSPs for their own premises, with the boroughs following in due course. In parallel, DSPs will be linked to planning conditions for major new developments.

18.5.24 In time, borough and GLA planners will require all large planning applications for developments and all smaller developments over an agreed threshold to develop and implement DSPs. Plans will be tracked through the Travel Plan iTrace system and will feed the TRICS database to provide valuable freight data.

18.5.25 To help prioritise where attention should be focused in line with the Traffic Management Act 2004,

18.5.26 London's traffic authorities will be encouraged to monitor the location and density of penalty charge notices for commercial vehicles.

Transport for London: Delivery and Servicing Plans – Making Freight Work for You

18.5.27 TfL provide additional guidance on the production of Delivery and Servicing plans within their on-line document entitled Delivery and Servicing Plans: Making Freight Work for You. The document identifies that the plan needs to be tailored to the specific requirements of the building, but outputs can include:

- Proactively managing deliveries to reduce the number of delivery and servicing trips, particularly in the morning peak;
- Identify areas where safe and legal loading can take place; and
- Select delivery companies who can demonstrate their commitment to following best practice – for example, FORS members.

18.5.28 The guidance also identifies out some of the most effective tools and techniques to minimise the impact of freight activity on London's roads.

London Low Emissions Zone

18.5.29 The Low Emissions Zone, (LEZ) is a scheme that aims to improve air quality in the city by setting and enforcing new emissions standards for HGV's, Large Vans and minibuses, and deterring the use of the most polluting vehicles by freight operators. The London LEZ is a "first" for the UK and is one of the largest schemes of its type in the world.

18.5.30 The LEZ came into force on 4 February 2008 for lorries over 12 tonnes with different vehicles affected over time and more stringent emission standards introduced in 2012. Cars and motorcycles are not affected.

18.5.31 The LEZ operates 24 hours a day, 7 days a week, every day of the year including weekends and public holidays, with a daily charge of £200 being applicable for lorries, buses and coaches, and £100 for heavy vans and minibuses which do not meet the required standards.

18.5.32 The LEZ is enforced through fixed and mobile cameras which read vehicle registration number plates within the LEZ and check them against a database of vehicles which meet the LEZ emissions standards, or are either exempt or registered for a 100% discount, or have paid the LEZ daily charge.

LoCity: Collaborating to Protect the Environment

18.5.33 LoCITY is an industry-led initiative to reduce the impact of commercial vehicles on the environment through:

- Improving London's air quality and delivering health benefits to Londoners;
- Contributing towards London's targets on reducing carbon dioxide emissions; and
- Helping fleets save money by running clearer, more efficient vehicles.

18.5.34 LoCITY targets a reduction in NOx emissions from commercial vehicles, to comply with the European Commission air quality levels.

Transport for London Travel Planning Guidance (2013)

18.5.35 TfL have incorporated servicing management plans within the overall scope of the preparation of Travel Plans for new developments, with the aim of achieving the following:

- Consolidate, simplify and improve previous guidance on development-related travel planning. This will be based on the lessons learned and experience gained over recent years;
- Facilitate further progress across London in the quantity and quality of travel plans secured through the planning process;
- Ensure that deliveries and servicing are taken into account from the earliest stage in the planning process; and
- Provide boroughs with assistance on the requirements/considerations to be included within their Local Development Frameworks (LDFs).

18.6 DELIVERY AND SERVICING PROPOSALS

18.6.1 The proposed maximum quantum of development for each Plot which has been applied for the service vehicle assessment is provided in Table 18.1.

Table 18.1: Proposed Maximum Quantum of Development by Plot

	Retail	Office	Residential	Hotel	Total (Sq m) excluding Residential
Plot 1	945 sq.m	54,230 sq.m	-	-	55,174
Plot 2	2,350 sq.m	66,930 sq.m	-	-	72,151
Plot 3	2,470 sq.m	17,342 sq.m	-	-	19,078
Plot 4	587 sq.m	-	144 units	-	587
Plot 5	1,004 sq.m	521	84 units	-	1,525
Plot 6	-	-	-	-	-
Plot 7	5,878 sq.m	-	-	-	5,878
Plot 8	2,578 sq.m	-	138 units	150-rooms	2,578
Plot 10	3,565 sq.m	-	134 units	-	3,565
Plot 11	170 sq.m	-	-	-	170

18.6.2 It should be noted the proposed D1 and D2 class uses have not been included in the delivery and servicing vehicle trip estimates as the volume would be relatively low against the background traffic and proposed estimates for the larger proposed uses. The delivery and servicing vehicle arrangements for the D1 and D2 uses have been considered in servicing vehicle access arrangements to provide off-street facilities.

18.6.3 The daily service vehicle arrival trip rates applied for the four main uses on-site are listed below:

- Retail – 0.1 vehicle arrivals per 100 sq.m
- Office – 0.23 vehicle arrivals per 100 sq.m
- Residential – 0.07 vehicle arrivals per unit
- Hotel – 0.16 vehicle arrivals per room

18.6.4 The arrival profiles over a day have been obtained from various sources. The daily service vehicle arrival profile derives from the following for each land use:

- Retail – survey data from Imperial Wharf and Bow Quarter
- Office - survey data from Broadgate
- Residential - a survey of the Discovery Dock residential development
- Hotel – survey data from Hotel Keys

18.6.5 The level of delivery and servicing vehicle activity has been estimated for each Plot based on the maximum quantum of development provided in Table 18.1.

18.6.6 Table 18.2 shows the estimated level of servicing vehicle activity for each Plot.

Table 18.2: Estimated Servicing Vehicle Arrivals

	Network AM Peak hour (0800-0900)	Network PM peak hour (1700-1800)	Daily	Development Peak hour
Plot 1	18	5	135	18
Plot 2	23	7	179	23
Plot 3	7	3	65	8
Plot 4	2	1	16	3
Plot 5	2	1	17	3
Plot 6	0	0	0	0
Plot 7	3	3	58	8
Plot 8	5	4	59	8
Plot 10	3	3	45	7
Plot 11	0	0	2	0

18.7 DELIVERY AND SERVICING MANAGEMENT

18.7.1 The site will be serviced by five on-site service yards and service areas as listed below:

- Bethnal Green Road service yard (Plot 1)
- Sclater Street service yard (Plots 4, 5 ,10)
- Middle Road service area (Plot 7)
- Braithwaite Street service yard (Plots 2, 8)
- London Road service area (Plot 3)

18.7.2 Table 18.3 below sets out the number of deliveries being accommodated by each service yard across the site.

Table 18.3: Estimated Servicing Vehicle Arrivals by Service Yard

Service Yard	Plots / Buildings	Daily	Development Peak hour	Capacity
Bethnal Green Road	Plot 1	135	18	6 bays
Sclater Street	Plot 4	78	14	5 bays
	Plot 5			
	Plot 10			

Middle Road	Plot 7	58	8	-
Braithwaite Street	Plot 2	238	30	8 bays
	Plot 8			
London Road	Plot 3	65	8	2 bays

Bethnal Green Road Service Yard

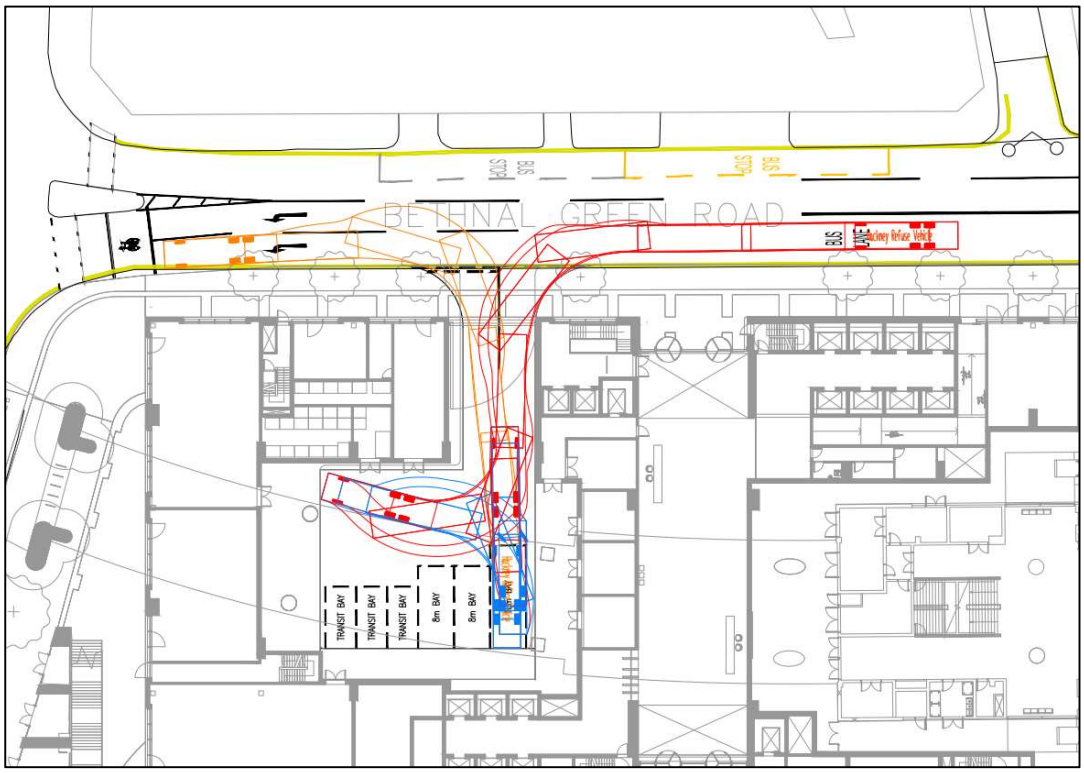
18.7.3 The proposed service yard on Bethnal Green Road will service Building 1 only which will provide a maximum of 945 sq.m of retail and a maximum of 54,230 sq.m of office.

18.7.4 The delivery and servicing vehicles will access the dedicated servicing area from Bethnal Green Road, via a new point of access. The new access is approximately 35m east of the stop line on Bethnal Green Road at the signal junction with Shoreditch High Street.

18.7.5 To provide the new access, it is proposed to move bus stop J located on the north side of Bethnal Green Road to a position further east to facilitate vehicle movements in and out of the new access.

18.7.6 Figure 18.2 shows the proposed Bethnal Green Road layout showing vehicles accessing the bays independently and the vehicle entering and exiting the service yard in a forward gear.

Figure 18.1: Bethnal Green Road Service Yard Layout



Key

Red: Inbound tracking

Blue: Reversing Manoeuvre

Orange: Exit tracking

Key

Red: Inbound tracking

Blue: Reversing Manoeuvre

Orange: Exit tracking

18.7.7 The Bethnal Green Road service yard shows six loading bays on-site, with an estimated peak hour demand of 18 vehicle arrivals.

18.7.8 Waste collection will be undertaken from within the Bethnal Gren service yard.

18.7.9 Appendix M shows the delivery and servicing vehicle swept path assessments.

Sclater Street Service Yard

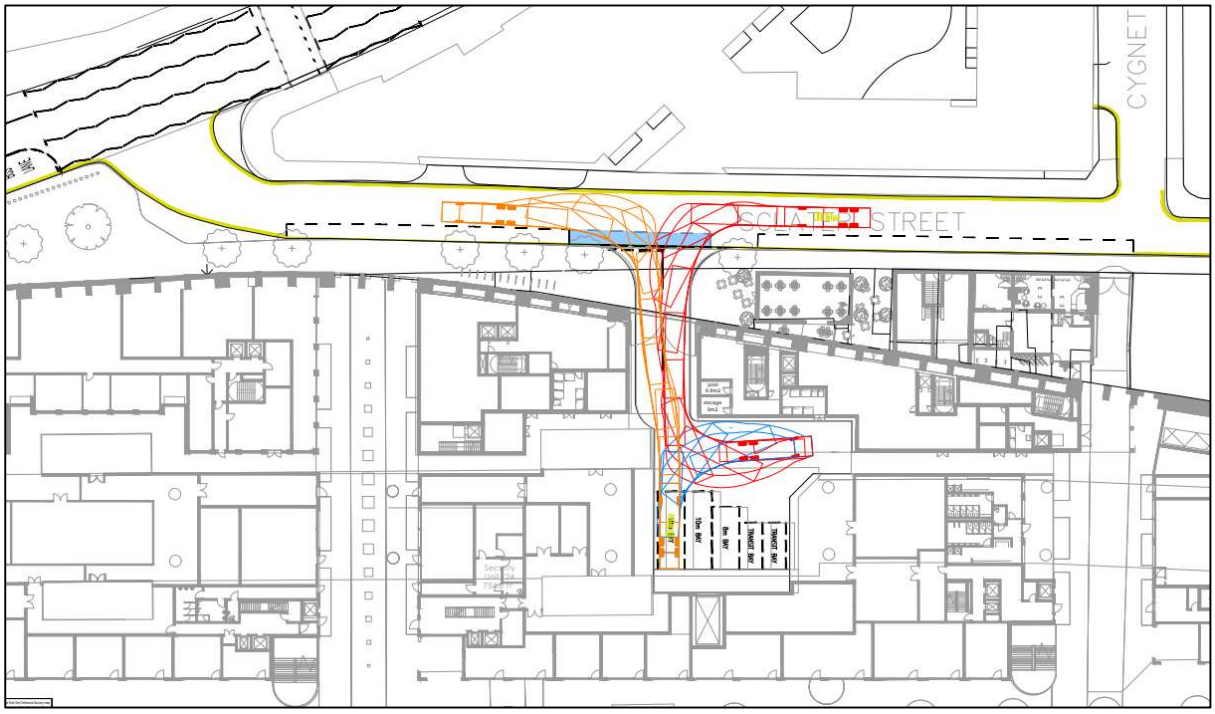
18.7.10 The Sclater Street service yard will serve Plots 4, 5 and 10, a maximum of 5,156m2 of retail use, 521m2 of office, and 362 residential units.

18.7.11 The servicing vehicles will access the yard via a new vehicle access on Sclater Street. The new access is approximately 70m east of the junction with Bethnal Green Road, on the two-way section of Sclater Street.

18.7.12 The proposed vehicle access will require the removal of on-street parking bays, approximately two parallel parking spaces on the south edge of the road, as shown in Figure 18.3.

18.7.13 Figure 18.3 shows the proposed Sclater Street layout showing vehicles entering and exiting the service yard in a forward gear.

Figure 18.2: Sclater Street Service Yard Layout



18.7.14 The Sclater Street service yard shows five loading bays on-site, with an estimated peak hour demand of 13 vehicle arrivals.

18.7.15 Appendix M shows the delivery and servicing vehicle swept path assessments.

Middle Road

18.7.16 Middle Road will be a new pedestrian route running east-west through the site, between Brick Lane to the east and Braithwaite Street to the west.

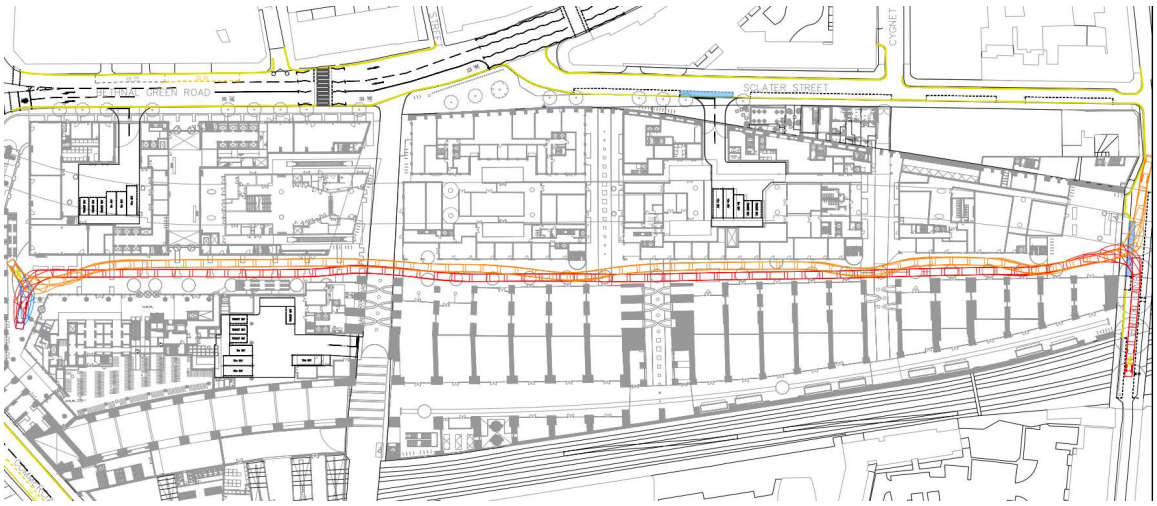
18.7.17 The new Middle Road route will provide service vehicle access for Plots 7A, 7B, 7D, and 7C, which includes a maximum of 5,878m2 of retail use. Service vehicles will access the new Middle Road route via Brick Lane, via a new proposed vehicle access, which would require the loss of approximately three parallel parking spaces on the west edge of Brick Lane. The new access would be left-in, left-out only as Brick Lane is one-way northbound in this location.

18.7.18 It should be noted Brick Lane is closed to vehicles on Sunday between 8am and 4pm for the market, therefore alternative vehicle access arrangements would be available via Braithwaite Street.

18.7.19 Middle Road will be a pedestrian route through the site, therefore a form of vehicle access control will be required at the junction with Brick Lane and Braithwaite Street to restrict access for general traffic, however to permit access for delivery vehicles and emergency vehicles when required.

18.7.20 Figure 18.4 shows the swept path assessment for a servicing vehicle entering and exiting the new Middle Road route via Brick Lane, showing the existing parallel parking bays which will need to be removed.

Figure 18.3: Middle Road Access & Servicing Area



18.7.21 The estimated demand for the Middle Road servicing area will be 60 vehicle arrivals over a day. The arrival of servicing vehicles will need to be managed to avoid peak periods and retain the pedestrian nature of the new street.

18.7.22 Appendix M shows the delivery and servicing vehicle swept path assessments.

Braithwaite Street Servicing Yard

18.7.23 The proposed Braithwaite Street service yard will service Plots 2 and 8 only which will provide a maximum of 4,928 sq.m of retail; a maximum of 69,801 sq.m of office, up to 138 residential units; and up to 150-room hotel.

18.7.24 The servicing vehicles will access the servicing yard from Braithwaite Street, entering and exiting via Quaker Street / Wheler Street only. The proposed access will require work to the existing brick arches to increase the headroom available for service vehicles.

18.7.25 Figure 18.5 shows the proposed Braithwaite Street servicing yard layout showing vehicles accessing the bays independently and the vehicle entering and exiting the service yard in a forward gear.

Figure 18.4: Braithwaite Street Servicing Yard Layout

18.7.26 It should be noted the proposed access will need to be signal controlled as two-way vehicle movements at the access would not be possible. Therefore, it would be proposed to provide an access control to give priority for vehicles entering the site, and reduce the risk of vehicle queues on the public highway.

18.7.27 The Braithwaite Street service yard shows eight loading bays on-site, with an estimated peak hour demand of 31 vehicle arrivals.

18.7.28 Appendix M shows the delivery and servicing vehicle swept path assessments.

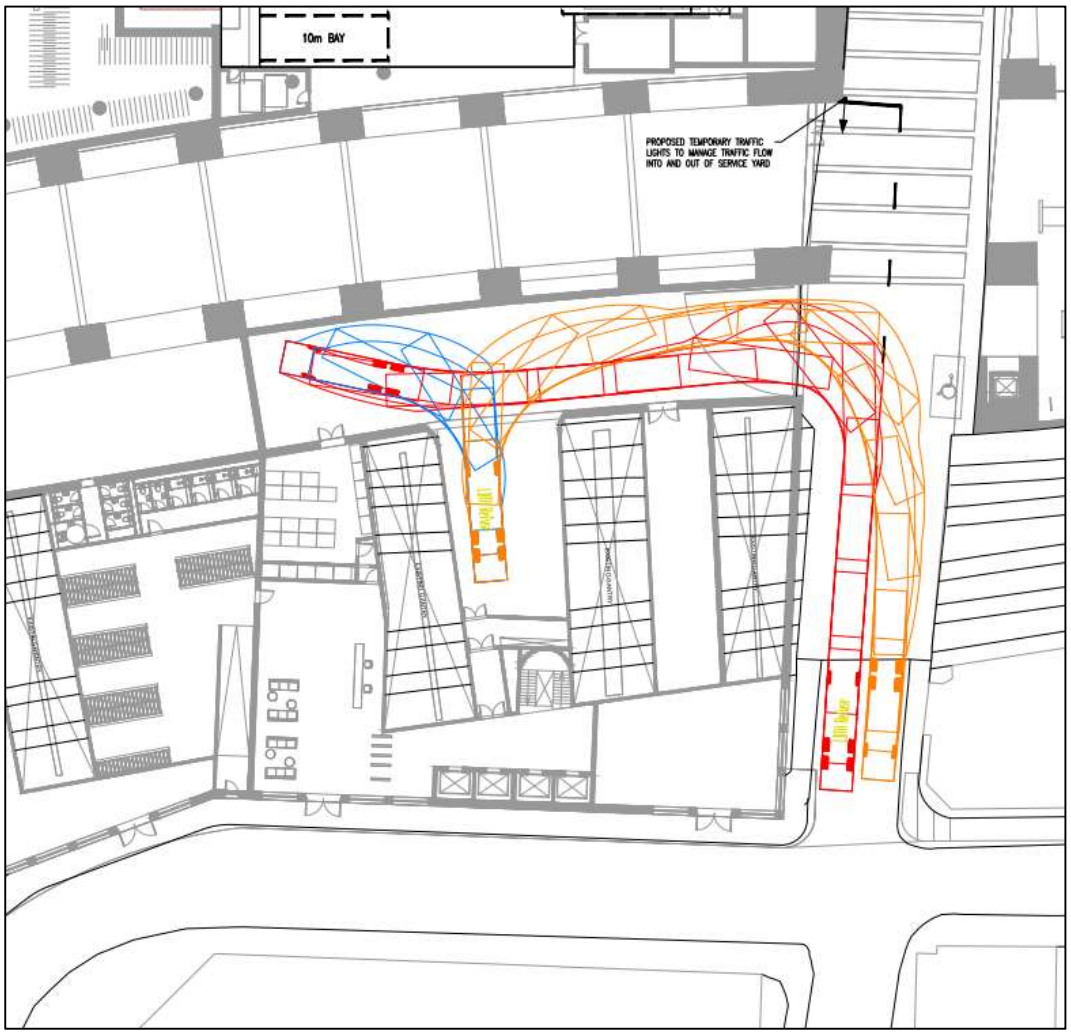
London Road

18.7.29 The London Road service yard will serve Building 3, a total of 2,183m2 of retail use, 16,895m2 of office use.

18.7.30 The servicing vehicles will access the area via Braithwaite Street, via an existing vehicle access. The existing access is located between the rail arches to the north and the rail line to the south.

18.7.31 Figure 18.6 shows the proposed London Road servicing area showing vehicles entering and exiting the service yard in a forward gear.

Figure 18.5: London Road Servicing Area



Key

Red: Inbound tracking

Blue: Reversing Manoeuvre

Orange: Exit tracking

19.0 draft travel plan**Key**

Red: Inbound tracking

Blue: Reversing Manoeuvre

Orange: Exit tracking

18.7.32 The London Road service area would have capacity for two loading bays on-site, with an estimated peak hour demand of 7 vehicle arrivals.

18.7.33 Appendix M shows the delivery and servicing vehicle swept path assessments for the site.

18.8 OBJECTIVES, MEASURES, AND INITIATIVES

Objectives

18.8.1 DSPs developed through the planning process seek to support sustainable development. They are drafted within the context of the guidance provided within the London Freight Plan and TfL's best practice guidance.

18.8.2 This DSP will therefore seek to achieve the following objectives:

- 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;
- Improve the reliability of deliveries to the site;
- Reduce the operating costs of building occupants and freight companies; and
- Reduce the impact of freight activity on local residents and the environment.

Measure and Initiatives

18.8.3 This section outlines the overarching measures and initiatives included within the DSP which are applicable to all land uses provided within the development site.

18.8.4 This DSP will specifically aim to ensure that servicing of the development can be carried out efficiently, without creating any negative impacts upon the local highway network, residents and businesses surrounding the site as well as minimising the environmental impact.

18.8.5 All servicing trip generation forecasts are prior to any DSP measures and the aim will be to measure a reduction against these forecasts or any updated forecast contained within the final DSP. Submission, approval and compliance with the final DSP will be subject to a s106 agreement or planning condition as appropriate.

18.8.6 The management measures and initiatives have been grouped into the following areas, each of which are considered in turn below:

- Design;
- Procurement Strategy;
- Operational Efficiency;

- Waste Management; and
- Road Trip Reduction.

Design

18.8.7 The London Freight Plan recognises that good design can minimise disturbance for residents at or en-route to the site. It can also minimise the impact of servicing on the surrounding highway network. The specific design related measures implemented as part of the development are set out in turn below:

- Servicing Facilities – the proposals include the provision of three service yards and two service areas, with all deliveries and waste collection undertaken on-site within these dedicated areas, and not on the public highway, minimising impact on the surrounding area.
- Secure Delivery Drop-off Facilities – the London Freight Plan states that first-time delivery efficiency to premises, including for residential deliveries, should be encouraged through the use of locker banks or agreed delivery points.
- Accommodating Special Deliveries – any special deliveries to the site, such as plant maintenance vehicles, will need to be pre-arranged and provisions made accordingly.

Procurement Strategy

18.8.8 The procurement strategy will include the use of the Freight Operator Recognition Scheme (FORS) and the Safer Lorry Scheme.

Operational Efficiency

Delivery Restriction & Enforcement

18.8.9 An online delivery booking system will be implemented to manage the timings of arrivals and prevent on site congestion. All vehicles arriving at the site (excluding postal deliveries and courier bikes) would need to be pre-booked or they will not be allowed access.

18.8.10 Deliveries would be staggered so that the risk of queuing is minimised.

Out of Peak Hours Deliveries

18.8.11 Pre-application discussions were held with the Boroughs and TfL regarding the delivery and servicing strategy for the site, in particular access to the servicing yard on Braithwaite Street.

18.8.12 The option to encourage out of hours deliveries, to avoid the weekday AM and PM peak hours was discussed, in addition to restriction on the timing of deliveries.

18.8.13 This would be discussed further with TfL and the Boroughs during the application process.

Waste Management

18.8.14 Full details of the management proposed for waste collection is available in Waste Management Strategy document submitted as part of the application.

Road Trip Reduction

18.8.15 The delivery and servicing activity is summarised in the Transport Assessment. The site has been designed to minimise the number of service vehicle trips as far as possible.

18.8.16 The site management team will be encouraged to use suppliers who are affiliated to FORS and operating green fleets complying with the emission standards set out by the London Emission Zones.

18.9 MONITORING AND ENFORCEMENT

Monitoring

18.9.1 The site management team will monitor the delivery and servicing management activity against the objectives set out in this document and make adjustments as necessary to address issues and improve upon operation.

18.9.2 Monitoring data would primarily be sourced from the delivery booking system and include:

- Number of vehicle arrivals per hour;
- Type of vehicle; and
- Delivery type i.e. hotel facilities, waste collection, maintenance, personal deliveries.

18.9.3 A programme of monitoring and review will be implemented for a period of five years (in line with the Travel Plan) to generate information by which the success of the Delivery and Servicing Plan can be evaluated.

18.9.4 Monitoring and review of deliveries to the site will be the responsibility of Building Management; this process is expected to be aligned to the monitoring of the associated Travel Plan for the Development.

18.9.5 A delivery survey will be undertaken as part of the baseline surveys linked to the Travel Plans. The delivery surveys will be undertaken in accordance with the standard TRICS Delivery Survey Methodology to allow their incorporation into the iTRACE monitoring database. The delivery surveys will be undertaken simultaneously with the travel surveys associated with the implementation of the Travel Plan, where timescales permit.

18.9.6 Building Management, (or Travel Plan Co-ordinator for the associated Travel Plan) will ensure the delivery surveys are undertaken during the first, third and fifth year after the initial survey.

18.9.7 The monitoring reports will be prepared to summarise the result of each survey for submission to TfL, LBH, and LBTH, as set out below.

Enforcement

18.9.8 The Site Management Team will review and monitor the survey results within one month of the survey being undertaken. The monitoring process will however be an ongoing exercise which will generate information by which the success of the Plan can be evaluated. Monitoring activity will include recording deliveries and collections made via the on-site service area, recording feedback and comments received from tenants and noting any incidents and problems with delivery and servicing activity.

18.9.9 The contents of this DSP have been prepared in order to inform TfL and the Boroughs of the developer's intent for the operation of the site. Submission, approval and compliance with the final DSP will be a matter for a s106 agreement or planning condition as appropriate.

18.9.10 A site-wide Delivery and Servicing Plan will be secured through the Section 106 agreement with detailed plans submitted for individual plots / phases, subject to approval by TfL, LBH and LBTH.

19.0 DRAFT TRAVEL PLAN

19.0 DRAFT TRAVEL PLAN

19.1 INTRODUCTION

19.1.1 This Draft Travel Plan has been prepared by WSP on behalf of Bishopsgate Goodsyard Regeneration Limited (the Applicant) to accompany the Detailed Application and Outline Application for the proposed development at the Goodsyard site in Shoreditch, London.

19.1.2 Full Travel Plans will be secured by planning condition/Section 106.

Existing Site

The site is located next to the A10 Shoreditch High Street and sits on the Borough boundary between the London Borough of Hackney and the London Borough of Tower Hamlets. A detailed site description is included in the Transport Assessment. Development Proposals

19.1.3 The 2015 Amended Scheme proposed the comprehensive mixed-use redevelopment of the site comprising of up to 1,356 residential units (Class C3), up to 65,859 m2 Gross Internal Area (GIA), retail (Class A1, A2, A3 and A5) up to 17,499 m2 GIA, assorted uses (Class D1, D2, sui generis) and 22,642 m2 of new public open space and landscaping.

19.1.4 Following further consultation with the GLA, LBTH and LBH, the Applicant now submits the Proposed Amendments which consist of: a comprehensive redevelopment of the site which will include the provision of up to 138,623 m2 Gross External Area (GEA) of commercial floorspace (B1 use), up to 19,260 m2 GEA of retail floorspace (A1, A2, A3 and A5 use) the provision of up to 500 residential homes and the provision for up to a 150-room hotel and public realm.

Report

19.1.5 This Draft Framework Travel Plan has been prepared in accordance with TfL's Travel Plan Guidance. The Draft Framework Travel Plan is structured as follows:

- Relevant Planning Policy;
- Baseline conditions and site assessment
- Travel Plan Strategy
- Residential Travel Plan
- Objectives and Targets

- Travel Plan measures – details the details the sustainable travel principles incorporating range of ‘hard’ (engineering) and ‘soft’ (marketing and management) measures that will be implemented; and
- Monitoring and review.;
- Hotel Travel Plans
- Objectives and Targets
- Travel Plan measures – details the sustainable travel principles incorporating range of ‘hard’ (engineering) and ‘soft’ (marketing and management) measures that will be implemented; and
- Monitoring and review.
- Workplace Travel Plans
- Objectives and Targets
- Travel Plan measures – details the sustainable travel principles incorporating range of ‘hard’ (engineering) and ‘soft’ (marketing and management) measures that will be implemented; and
- Monitoring and review.

19.2 PLANNING POLICY AND GUIDANCE

19.2.1 The national and local transport policies relevant to this development are well documented and this section does not seek to replicate them. Instead, the key themes in the relevant national and local policies are summarised briefly below, and where relevant, policies which relate directly to the development are addressed.

National Policy

National Planning Policy Framework (February 2019)

19.2.2 The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

19.2.3 Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways, (so that opportunities can be taken to secure net gains across each of the different objectives):

- An economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
- A social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed

and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

- An environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and
- mitigating and adapting to climate change, including moving to a low carbon economy.

19.2.4 Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- The potential impacts of development on transport networks can be addressed;
- Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- Opportunities to promote walking, cycling and public transport use are identified and pursued;
- The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximisesustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

19.2.5 Planning policies should:

- Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;
- Be prepared with the active involvement of local highway authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

- Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;
- Provide for high quality walking and cycling networks and supporting facilities such as cycle parking, (drawing on Local Cycling and Walking Infrastructure Plans); and
- Provide for any large-scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements.

19.2.6 If setting local parking standards for residential and non-residential development, policies should take into account: a) the accessibility of the development; b) the type, mix and use of development; c) the availability of and opportunities for public transport; d) local car ownership levels; and e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

19.2.7 Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.

19.2.8 Applications for development should:

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

National Planning Practice Guidance 2018

19.2.9 The National Planning Practice Guidance was published in 2012 and revised in 2018, offering updated and revised guidance on planning where necessary.

19.2.10 The online version allows stakeholders to be altered in real time when future amendments to individual policies are made, thereby ensuring that the most up-to-date guidance documents are available. The NPPG provides additional guidance to supplement the planning policies contained in the NPPF.

19.2.11 The NPPG provides clarity on the role, function and structure of the Transport Assessments and Travel Plans:

> Transport Assessments and Statements are ways of assessing the potential transport impacts of developments and they may propose mitigation measures to promote sustainable development. Where that mitigation relates to matters that can be addressed by management measures, the mitigation may inform the preparation of Travel Plans.

19.2.12 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.

19.2.13 They 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.

Good Practice Guidelines: Delivering Travel Plans through the Planning Process (DfT, 2009)

19.2.14 The DfT guidelines are intended to assist all stakeholders in determining when a Travel Plan is required, how it should be prepared and what it should contain within the context of an integrated planning and transport process. The guidelines also set out how Travel Plans should be evaluated, secured, implemented, monitored and managed in the longer term as part of this process. Travel Plans are important for major new developments in order to:

- “Support increased choice of travel modes;
- Promote and achieve access by sustainable modes;

- Respond to the growing concern about the environment, congestion, pollution and poverty of access; and
- Promote a partnership between the authority and the developer in creating and shaping 'place'."

19.2.15 The document recognises that it can be helpful to view a Travel Plan for a new development as a pyramid of measures and actions, which is constructed from the ground up, with each new layer building on the last all set within the context of the outcomes sought. This Travel Plan Pyramid is shown in Figure 19.1.

19.2.16 The DfT's Travel Plan Pyramid helps demonstrate how successful plans are built on the firm foundations of a good location and site design. Additional hard and soft measures should be integrated into the design, marketing and occupation of the site. In addition, parking restraint is often crucial to the success of the plan in reducing car use.

Figure 19.1: Travel Plan Pyramid

Regional Policy

The Draft London Plan

19.2.17 A new Draft London Plan was issued in December 2017 for consultation ahead of Examination in Public. It is not expected to be adopted until Autumn 2019. In the meantime, the current 2016 London Plan remains adopted. The Draft London Plan provides useful context for the direction of future policy although no material weight is attached to its policies at this stage.

19.2.18 Policy T2 relates to Healthy Streets and seeks development that delivers patterns of land use that facilitate residents making shorter, regular trips by walking or cycling. The Healthy Streets approach recognises the importance of promoting and facilitating active modes of travel by making developments permeable and highly connected by foot and cycle with reduced vehicle dominance.

19.2.19 Policy T4 identifies that development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity. Travel plans are noted as being able to help reduce negative impacts and bring about positive outcomes and are required in accordance with relevant Transport for London guidance.

19.2.20 Policy T5 sets out that development should encourage cycling and provides new cycle parking standards. Cycle parking and cycle parking areas should allow easy access and provide facilities for disabled cyclists. In places of employment, supporting facilities are recommended, including hanging rooms, maintenance facilities, lockers and shower facilities (at least one per ten long-stay spaces is recommended).

The London Plan (March 2016)

19.2.21 The London Plan was initially published in July 2011 with subsequent alterations since adopted; Revised Early Minor Alterations to the London Plan in October 2013, Further Alterations to the London Plan (FALP) in March 2015 and Minor Alterations to the London Plan in March 2016 with a fix version in January 2017.

19.2.22 The London Plan sets out to ensure that London's transport is easy, safe and convenient for everyone and encourages cycling, walking and use of electric vehicles.

19.2.23 Policy 6.1 stresses the importance of closer integration of transport and development and hopes to encourage this by (inter alia):

- "Encouraging patterns of development that reduce the need to travel, especially by car;
- Seeking to improve the capacity and accessibility of public transport, walking and cycling, particularly in areas of greatest demand;
- Supporting development that generates high levels of trips only at locations with high levels of public transport accessibility, either currently or via committed, funded improvements;

- Improving interchange between different forms of transport, particularly around major rail and underground stations, especially where this will enhance connectivity in outer London;
- Facilitating the efficient distribution of freight whilst minimising its impacts on the transport network;
- Supporting measures that encourage shifts to more sustainable modes and appropriate demand management;
- Promoting greater use of low carbon technology so that CO2 and other contributors to global warming are reduced;
- Promoting walking by ensuring an improved urban realm; and
- Seeking to ensure that all parts of the public transport network can be used safely, easily and with dignity by all Londoners, including by securing step-free access where this is appropriate and practicable."

19.2.24 Policy 6.3 states that: "workplace and / or residential travel plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with the relevant TfL guidance".

TfL Travel Planning Guidance (November 2013)

19.2.25 In November 2013 TfL published a guidance document to combine and simplify the previous Travel Plan document 'Travel Planning for New Development in London: Incorporating Deliveries and Servicing' (January 2012).

19.2.26 One of the purposes of the guidance is to ensure that deliveries and servicing are taken into account from the earliest stage in the planning process. However, the document recognises that the level of detail provided in a Travel Plan about goods / servicing aspects will depend on the nature and scale of the development.

19.2.27 The guidance document sets out the core elements of a Travel Plan that are deemed essential. The essential elements are as follows: Objectives, Targets, Measures, Management, Action Plan, Securing, and Monitoring and Review.

Local Policy

19.2.28 This section of the Travel Plan will not repeat the Local Policy section provided in the Chapter 3 of the Transport Assessment, however identifies the following relevant documents from LBH and LBTH:

- LBH Local Development Framework Core Strategy (November 2010-2025)
- LBH Local Development Framework Development Management Local Plan Publication Version (July 2015)
- Sustainable Transport Strategy Supplementary Planning Document (SPD) (2015-2025)
- LBH Local Development Framework South Shoreditch Supplementary Planning Document (SPD) (February 2006)

- LBTH Local Plan Core Strategy (September 2010)
- LBTH Local Plan Managing Development Document (MDD) (April 2013)
- LBH and LBTH Bishopsgate Goods Yard Interim Planning Guidance (2010)

19.3 BASELINE CONDITIONS

19.3.1 The baseline conditions for the site and surrounding area are outlined in Chapters 4 – 8 in the Transport Assessment and will not be repeated in this section of the Travel Plan.

19.4 TRAVEL PLAN STRATEGY

Management

19.4.1 The structure of how the Travel Plans will be managed is set out in Figure 19.3

Figure 19.2: Travel Plan Management

Sustainable Travel Manager

19.4.2 A Sustainable Travel Manager (STM) will be appointed to take responsibility for the Site Wide management of the plan, and for ensuring its delivery. The Sustainable Travel Manager role for the site will be fulfilled by an appointed consultant or the site management company. It will be the responsibility of the developer to ensure that a Sustainable Travel Manager is appointed prior to the first occupation of the site. The roles and responsibilities of the STM are set out below:

- Ensuring the structures for the ongoing management of the plan are set up and running effectively;
- Liaising with public transport operators and other service providers such as car club operators;

- Overseeing the monitoring and reporting of the Travel Plan including liaising with the Local Authority where appropriate;
- Monitoring and where necessary revising Travel Plan targets; and
- Administration of the Travel Plan, involving the maintenance of necessary systems, data and paperwork, consultation and promotion. These duties are permanent for the duration of the Travel Plan.

Travel Plan Co-ordinators

19.4.3 To ensure that there is Site-wide adoption of the Travel Plan, the STM will be assisted in delivering the measures by Travel Plan Co-ordinators (TPCs). The STM will facilitate the appointment of TPCs for the residential land use, the Hotel and the office land uses. They will work with together jointly to promote the Travel Plan. The TPCs role will involve:

- Giving a 'human face' to the Travel Plan, explaining its purpose and the opportunities on offer;
- Giving advice and information on transport-related subjects to residents and visitors;
- On-site co-ordination of data collection for the plan;
- Helping establish and promoting the individual measures in the plan;
- Providing on-site support to the STM, as required; and
- Implementing any additional measures.

Marketing

19.4.4 It is recognised that a marketing and communication strategy is key to the success of the Travel Plan. The marketing strategy will aim to raise awareness of the key services and facilities implemented as part of the Travel Plan and disseminate travel information and notification of facilities provided.

19.4.5 Residents and tenants will be made aware of the Travel Plan, including its purpose and objectives, along with specific measures. Marketing will be undertaken between the point of sale and first occupation of each dwelling. Sales staff will be fully briefed on the Travel Plan.

19.4.6 Full details of the marketing strategy for the Site are contained within the individual measures chapters for the Travel Plan.

Securing the Travel Plan and Funding

19.4.7 The Travel Plan will be secured by s106 agreement or by a planning condition.

19.4.8 Funding for the monitoring and management of the Travel Plan is to be secured by the developer, including compliance with agreed Travel Plan measures. The costs will relate to the implementation of measures outlined within the Travel Plan and also for surveys and monitoring.

Monitoring

19.4.9 It is proposed that Travel Plan monitoring is coordinated between both elements of the Site, in order that the Sustainable Travel Manager will be able to manage the process and report findings in a single Monitoring Report. The coordination of travel plan monitoring will also assist the Local Authority in assessing the performance of the overall site-wide Travel Plan. The travel surveys for each element will therefore be carried out at the same time as each other, once trigger points have been reached.

19.5 RESIDENTIAL TRAVEL PLAN

Residential Trip Generation

19.5.1 The detailed methodology used to forecast the trip generation is provided within the Transport Assessment. The estimated travel demand for the residential Maximum Build Out is shown in Table 19.1.

Table 19-1: Weekday Residential Trip Generation – Maximum Build Out (500 units)

Mode	Weekday AM Peak (0800-0900 hours)			Weekday PM Peak (1730-1830 hours)			Weekday Daily		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
LUL/Rail	22	93	115	60	28	88	454	470	924
Bus	15	60	75	39	18	57	295	305	599
Motorcycle	1	3	4	2	1	3	15	16	31
Car Driver	1	4	4	2	1	3	17	18	35
Car Passenger	0	1	2	1	0	1	7	7	13
Taxi/Minicab	0	2	2	1	1	2	10	10	20
Bicycle	8	34	42	22	10	32	166	172	338
Walk	17	69	85	45	20	65	336	347	683
Total	64	266	330	173	79	252	1302	1346	2644

Objectives

19.5.2 The objectives and principles for this Travel Plan have been drafted in the context of Department for Transport (DfT) guidance on residential Travel Plans, Mayoral policy and strategic guidance, local borough policy and guidance as follows:

- To raise residents' awareness of sustainable modes of travel available at the development;
- To raise residents' awareness of the health and fitness benefits of walking and cycling for short journeys; and
- To facilitate and encourage travel by sustainable modes.

Targets

19.5.3 Targets are tailored to deliver the objectives of the Travel Plan, and must be Specific; Measurable; Achievable; Realistic; and Timed (SMART).

19.5.4 Two types of targets could be considered. 'Action' type targets are physical actions that can be achieved by a set date, for example appointing a Travel Plan Co-ordinator (TPC), whilst 'Aim' type targets are those which relate to outcomes achieved through implementation of measures, for example, achieving a change in mode split compared to a baseline. It is proposed to set both 'Action' type target and 'Aim' type targets.

Action Target

19.5.5 The following Action type targets are proposed:

- Appoint a Travel Plan Coordinator (TPC) prior to occupation;
- Cycle parking spaces will be provided prior to occupation;
- A travel pack will be produced, promoting the range of sustainable transport modes available, health benefits of active travel and the key services provided through the travel plan; and
- Travel surveys to be undertaken in years one, three and five after occupation.

Aim Target

19.5.6 Given the location of the site, it is expected that residents will naturally travel to and from the site via sustainable modes of transport.

19.5.7 The following Aim target is proposed:

- Achieve an AM and PM peak hour car driver mode share for residential uses not materially greater than that which is agreed through the planning application for the residential uses within five years of first occupation of the final phase of the development.

19.5.8 The mode split and the associated trip generation has been agreed as being realistic and achievable through the pre-application discussion process. This is therefore an appropriate target for the Travel Plan in the context of planning policy and practice. The target will be reviewed after the initial travel surveys have been undertaken at the Site, however indicative targets are set out in Table 19.2.

Table 19-2: Residential Mode Share Targets

Mode	Year 1 Target	Year 2 Target	Year 3 Target
LUL/Rail	35%	32%	30%
Bus	23%	21%	19%
Motorcycle	1%	1%	1%
Car Driver	1%	1%	1%
Car Passenger	1%	1%	1%
Taxi/Minicab	1%	1%	1%
Bicycle	13%	15%	17%
Walk	26%	28%	30%
Total	101%	100%	100%

Measures

19.5.9 This section outlines the measures which will be implemented on site to achieve the objectives. These measures form the core of the Travel Plan. The measures have been grouped into three types as follows and considered in turn in the following sections:

- 'Hard' engineering measures incorporated into the design;
- 'Key services and facilities' provided; and
- 'Soft' marketing and management measures which ensure that sustainable travel behaviour is maximised.

Hard Measures

19.5.10 It should be recognised that many physical aspects of the design of the site will influence travel patterns, and will have a significant impact upon reducing dependence upon car. The hard engineering measures that will be incorporated into the design of the development are set out below.

19.5.11 It should be noted that appropriate hard engineering measures will be provided during the construction of each building and landscaping within the development prior to occupation and will be funded by the developer.

19.5.12 The provision for alternative transport modes within the Site focus on making walking and cycling realistic alternatives to the private car for short journeys by ensuring good facilities and direct routes for each are provided.

Permeability

19.5.13 Within the site, the pedestrian environment will be of high quality with the provision of attractive pedestrian routes including the link around the northern side of the Site to join the existing cycle / pedestrian provision with a new crossing across the A40. Pedestrians will feel safe and secure with a mixture of uses and ground level frontage ensuring the area is active both day and night, thus providing natural surveillance.

19.5.14 The pedestrian accesses are provided in suitable locations, connecting to convenient routes towards local facilities and public transport service access points, as outlined within Section 3 of this Travel Plan. The proximity of the site to local shops, services and facilities will provide the opportunity for residents within the Site to meet most of their daily needs on foot or bicycle, therefore reducing dependence upon the private car.

Car Parking Provision

19.5.15 The proposed residential development will be car-free with the exception of disabled parking provision. This is in line with the emerging London Plan standards.

Cycle Parking Provision

19.5.16 Safe and secure cycle parking will be within the Proposed Development to meet the demands of residents and visitors to the Site in line with both TfL standards. The usage of cycle parking will be monitored as part of the overall monitoring strategy on the site.

Key Services & Facilities

19.5.17 A number of key services and facilities to compliment the location and physical design of the Site will also be implemented to further encourage the use of sustainable transport modes.

Provision of Broadband Access in Homes

19.5.18 All residential units within the development will be broadband ready providing residents with the opportunity to sign up to an internet service provider. This will provide opportunities for both home working and home shopping, reducing the need to travel.

SOFT MEASURES

19.5.19 The location of the site, its design and proximity to public transport services within the surrounding area will create all of the conditions to make sustainable travel choices a natural option. However, it is also recognised that a communication strategy is key to the success of the Travel Plan. Details of the communication strategy for the site are set out below.

Travel Pack

19.5.20 Residents of new dwellings will be provided with a Travel Pack upon first occupation. The key role of the Travel Pack is to raise awareness of sustainable travel opportunities and initiatives available to occupants including:

- Promotion of local sustainable travel networks: including:
- the bus services which are available; and
- the rail services which are available;
- Links to relevant public transport travel information websites will be provided such as the TfL journey planner or the Citymapper app.
- Promotion of local amenities: The Travel Pack will include the locations of many of the nearby key amenities which can facilitate many trips by foot.
- Promotion of the cycle parking: Making residents aware of the cycle parking which is available to them;
- Promote membership to the London Cycling Campaign (LCC): Promote the LCC which is a cyclist organisation with local groups throughout London. Local LCC groups promote cycling locally, improve conditions for cyclists in their borough and organise leisure rides and social events and provide support for cyclists. The benefits on offer to LCC members include discounts at bike shops in London; exclusive cycle theft insurance packages; free third-party insurance for damage or injury up to the value of £1 million; access to local LCC borough groups; and free legal advice. The details of the local LCC group together with membership information will be included within the residential Travel Pack.
- Promotion of health benefits associated with alternative modes of transport:
- The travel pack will provide details of the health benefits associated with walking and cycling regularly;
- Details of carbon foot-printing: provision of details of the established ‘Act on CO2 carbon calculator’ and provision of information to raise awareness of the environmental and cost saving benefits associated with sustainable travel and reducing car usage;
- Promotion of car share schemes: Details of car sharing websites will be included within the Travel Pack;
- Promotion of key services and facilities: Full details of the key services and facilities provided by the Travel Plan will be included on the Travel Pack including:

- The availability of broadband internet and the benefits of home working and home shopping;
- The availability of the car club spaces nearby and where to find information about using the service;
- The car parking management regime in place; and
- The availability of the Site management office to accept small, non-perishable deliveries during the day.

19.5.21 The Travel Pack also invites those persons wishing to raise specific transport-related matters to discuss them with the TPC for consideration.

Monitoring & Review

19.5.22 A programme of monitoring and review will be implemented to generate information by which the success of the Travel Plan will be evaluated. This will establish whether the agreed targets are being met. Monitoring and review will be the responsibility of the Sustainable Travel Manager with assistance from the Travel Plan Co-ordinator.

Monitoring

Action Target Monitoring and Reporting

19.5.23 To measure progress against the Action target, the following monitoring regime is proposed:

- Annual reporting
- The number of dwellings completed and first occupied in each year will be reported to the approving authority together with confirmation that each occupier has been provided with a copy of the Travel Pack.

Aim Target Monitoring and Reporting

19.5.24 To measure progress against the Aim target, the following monitoring regime is proposed, unless agreed in writing to curtail:

- Year 0 Survey
- A TRICS SAM (Standard Assessment Methodology) compliant monitoring survey will be undertaken during the first reasonably practicable neutral month following 75% occupation and a monitoring report setting out the surveyed results will be submitted to the Boroughs and TfL.
- Years 1, 3 and 5 Surveys

- A TRICS SAM compliant monitoring survey will be undertaken during the same neutral month as the year 0 survey in years 1, 3 and 5 and a monitoring report setting out the surveyed results will be submitted to the approving authority.

19.5.25 The monitoring surveys will allow the approving authority to understand emerging travel behaviour at the development and to make an informed decision about what, if any, actions should be taken.

Review

19.5.26 The STM will report the results on monitoring to the approving authority within three months of monitoring being triggered. The approving authority, relevant stakeholders and the STM will then review the results and, if appropriate, revise targets accordingly. The results of the travel survey and revised targets will be included in subsequent revisions of this Travel Plan as required.

19.5.27 It is not anticipated that any remedial measures will be required following review of the travel plan after monitoring reports are provided to the approving authority. Any such remedial measures (if required necessary) should be secured and funded through a s106 agreement.

Action Plan

19.5.28 The programme for the implementation of the Travel Plan measures is set out in Table 19-3 including intended implementation dates and responsibilities.

Table 19-3: Residential Action Plan

Action	Target (values)	Target Date	Funding	Indicator / measured by	Responsibility
Appointment of STM & TPC	N/A	Prior to occupation	Developer	Appointment of STM & TPC	Developer
Agree Travel Plan Objectives, Targets and Measures with Boroughs / TfL	N/A	Prior to occupation	Developer	Agreement being reached with Boroughs / TfL	STM/TPC
Provision of cycle parking	In line with emerging London Plan	Prior to occupation	Developer	Installation of cycle parking	Developer
Availability of broadband access in homes	N/A	Prior to first occupation off each dwelling	Developer	Availability of broadband access in homes	Developer
Provision of the Travel Pack to each dwelling	One Travel Pack per employee	As part of induction	Developer	Dissemination of the Travel Pack to each dwelling	Developer
Undertake initial travel surveys	N/A	Within 3 months of occupation of	Developer	Receipt of survey results	STM/TPC

		75% occupation			
Agree target values for mode split with Boroughs / TfL	Target subject to negotiations with Boroughs / TfL	1 month after initial travel survey	Developer	Receipted of written agreement of targets	STM/TPC
Undertake travel survey and analysis years 1, 3 and 5 and discuss results with Boroughs / TfL	N/A	Every other anniversary of the initial travel survey	Developer	Receipt of survey results	STM/TPC

19.6 HOTEL TRAVEL PLAN

Hotel Trip Generation

19.6.1 The detailed methodology used to estimate trip generation for the proposed hotel use is provided within the Transport Assessment. The forecast travel demand is summarised in Table 19-4

Table 19-4: Hotel Travel Demand

Mode	0800-0900			1700-1800		
	In	Out	Total	In	Out	Total
London Underground / Rail	0	2	2	1	3	4
Bus, minibus or coach	3	1	4	0	0	1
Motorcycle	0	0	0	0	0	0
Car/Van	1	0	1	0	0	0
Passenger	0	0	0	0	0	0
Taxi	5	8	13	5	5	9
Bicycle	0	0	0	0	0	0
Walk	16	55	71	41	44	85
Total	**26**	**71**	**96**	**51**	**53**	**104**

Objectives

19.6.2 The objectives and principles for this Travel Plan have been drafted in the context of Department for Transport (DfT) guidance on Travel Plans, Mayoral policy and strategic guidance, local borough policy and guidance as follows:

- To raise employees' and visitor's awareness of sustainable modes of travel available at the development;
- To raise employees' and visitor's awareness of the health and fitness benefits of walking and cycling for short journeys; and
- To facilitate and encourage travel by sustainable modes.

19.6.3 In relation to the hotel, the Travel Plan is designed to focus on employee travel choices as this is a repeated daily activity. Travel behaviour of visitors to the hotel has also been considered however it is noted that there are fewer opportunity to influence travel choices of visitors. Table 19.5 shows the mode share targets for both staff and visitors.

Table 19-5 Hotel Mode Share Targets

Mode	Year 1% Split	Target Split – Year 3	Target Split – Year 5
London Underground / Rail	6%	7%	8%
Bus, minibus or coach	3%	3%	3%
Motorcycle	0%	0%	0%
Car/Van	1%	1%	1%
Passenger	0%	0%	0%
Taxi	11%	8%	5%
Bicycle	1%	3%	5%
Walk	78%	78%	78%
Total	100%	100%	100%

Targets

19.6.4 Targets are tailored to deliver the objectives of the Travel Plan, and must be Specific; Measurable; Achievable; Realistic; and Timed (SMART).

19.6.5 Two types of targets could be considered. 'Action' type targets are physical actions that can be achieved by a set date, for example appointing a Travel Plan Co-ordinator (TPC), whilst 'Aim' type targets are those which relate to outcomes achieved through implementation of measures, for example, achieving a change in mode split compared to a baseline. It is proposed to set both 'Action' type target and 'Aim' type targets.

Action Target

19.6.6 The following Action type targets are proposed:

- Appoint a Travel Plan Coordinator (TPC) prior to occupation;
- Provide cycle parking spaces prior to occupation;
- A travel pack will be produced, promoting the range of sustainable transport modes available, health benefits of active travel and the key services provided through the travel plan; and
- Travel surveys to be undertaken in years one, three and five after occupation.

Aim Target

19.6.7 Given the location of the site, it is expected that employees and visitors will naturally travel to and from the site via sustainable modes of transport.

19.6.8 The following Aim target is proposed:

- Achieve an AM and PM peak hour car driver mode share for hotel uses not materially greater than that which is agreed through the planning application for the hotel uses within five years of first occupation of the final phase of the development.

19.6.9 The mode split and the associated trip generation has been agreed as being realistic and achievable through the pre-application discussion process. This is therefore an appropriate target for the Travel

19.6.10 Plan in the context of planning policy and practice. The target will be reviewed after the initial travel surveys have been undertaken at the Site.

19.6.11 Achieving this specific and timed target will be measured through monitoring travel surveys the results of which will be reported to the Local Planning Authority. This target links directly to all three objectives of the residential travel plan.

Measures

19.6.12 This section outlines the measures which will be implemented on site in order to achieve the objectives. These measures form the core of the Travel Plan. The measures have been grouped into three types as follows and considered in turn in the following sections:

- 'Hard' engineering measures incorporated into the design;
- 'Key services and facilities' provided; and
- 'Soft' marketing and management measures which ensure that sustainable travel behaviour is maximised.

Hard Measures

19.6.13 It should be recognised that many physical aspects of the design of the site will influence travel patterns, and will have a significant impact upon reducing dependence upon car. The hard engineering measures that will be incorporated into the design of the development are set out below.

19.6.14 It should be noted that appropriate hard engineering measures will be provided during the construction of each building and landscaping within the development prior to occupation and will be funded by the developer.

19.6.15 The provision for alternative transport modes within the site focus on making walking and cycling realistic alternatives to the private car for short journeys by ensuring good facilities and direct routes for each are provided.

Permeability

19.6.16 Within the Site, the pedestrian environment will be of high quality with the provision of the attractive garden square, which will provide well-maintained and legible pedestrian routes; and the use of quality materials. Pedestrians will feel safe and secure with a mixture of uses and ground level frontage ensuring the area is active both day and night, thus providing natural surveillance.

19.6.17 The pedestrian accesses are provided in suitable locations, connecting to convenient routes towards local facilities and public transport service access points. The proximity of the site to local shops, services and facilities will provide the opportunity for residents within the Site to meet most of their daily needs on foot or bicycle, therefore reducing dependence upon the private car.

Car Parking Provision

19.6.18 The hotel will be car-free with no on-site provision, with the possible exception of disabled parking provision.

Cycle Parking Provision

19.6.19 Safe and secure cycle parking will be within the Proposed Development to meet the demands of residents and visitors to the Site in line with both TfL and the Boroughs minimum standards. The usage of cycle parking will be monitored as part of the overall monitoring strategy on the site.

Key Services & Facilities

19.6.20 A number of key services and facilities to compliment the location and physical design of the Site will also be implemented to further encourage the use of sustainable transport modes. Details of each of the proposed key services are set out in turn below:

Deliveries

19.6.21 Sustainable delivery initiatives will be pursued where reasonably practicable. Such initiatives could include the synchronisation of deliveries from common suppliers therefore reducing both the number of deliveries to the Site whilst simultaneously reducing the economic and environmental costs associated with Light Goods Vehicle (LGV) and Heavy Goods Vehicle (HGV) deliveries.

Cycle to Work Scheme

19.6.22 The national Cycle to Work Scheme enabling employees who wish to cycle to work to purchase a bike on a tax-free basis will be promoted to all workplace occupiers for the benefit of their staff. The hotel operator will be encouraged to provide support for this scheme.

Cycle to Work Week

19.6.23 A cycle to work week will be organised by the Travel Plan Coordinator. The event will be held within 12 months of the opening of the hotel. The event will be co-ordinated with the National Bike Week, where timescales permit.

Interest Free Season Ticket Loans for Employees

19.6.24 The hotel operator would be encouraged to provide and promote the availability of employee interest free loans for the purchase of public transport season tickets. The provision of interest free season ticket loans will be publicised (if appropriate) within the Travel Pack.

Soft Measures

19.6.25 The location of the site, its design and proximity to public transport services within the surrounding area will create all of the conditions to make sustainable travel choices a natural option. However, it is also recognised that a communication strategy is key to the success of the Travel Plan. Details of the communication strategy for the site are set out below.

Travel Pack

19.6.26 Employees will be provided with a Travel Pack as part of their induction. A copy of the Travel Pack will also be made available to visitors either as part of the information available in each room or at a central, public location in the hotel (e.g. reception) and travel information will be available on the hotel website, encouraging sustainable travel choices where possible. The key role of the Travel Pack is to raise awareness of sustainable travel opportunities and initiatives available to occupants including:

- Promotion of local sustainable travel networks: including:
- The bus services which are available; and
- The rail services which are available.
- Links to relevant public transport travel information websites will be provided such as the TfL journey planner or citymapper.

- Promotion of local amenities: The Travel Pack will include the locations of many of the nearby key amenities which can facilitate many trips by foot.
- Promotion of the cycle parking: Making residents aware of the cycle parking which is available to them;
- Promotion of health benefits associated with alternative modes of transport: The travel pack will provide details of the health benefits associated with walking and cycling regularly;
- Details of carbon foot-printing: provision of details of the established 'Act on CO2 carbon calculator' and provision of information to raise awareness of the environmental and cost saving benefits associated with sustainable travel and reducing car usage;
- Promotion of key services and facilities: Full details of the key services and facilities provided by the Travel Plan will be included on the Travel Pack including:
- The availability of the car club on the site and where to find information about using the service;
- Cycle to work schemes and national cycle to work week;
- Taxi pooling for hotel guests;
- Interest free season ticket loans for employees; and
- The car parking management regime in place.

19.6.27 The Travel Pack also invites those persons wishing to raise specific transport-related matters to discuss them with the TPC for consideration.

Hotel Website

19.6.28 In addition to the Travel Pack, travel advice on walking, cycling and public transport routes to the site would be published on the hotel website and a link to this page included in booking confirmation for visitors.

Monitoring & Review

19.6.29 A programme of monitoring and review will be implemented to generate information by which the success of the Travel Plan will be evaluated. This will establish whether the agreed targets are being met. Monitoring and review will be the responsibility of the Sustainable Travel Manager with assistance from the Travel Plan Co-ordinator.

Monitoring

Action Target Monitoring and Reporting

19.6.30 To measure progress against the Action target, the following monitoring regime is proposed:

- Annual reporting:
- A copy of the Travel Pack will be provided to the approving authority.

Aim Target Monitoring and Reporting

19.6.31 To measure progress against the Aim target, the following monitoring regime is proposed, unless agreed in writing to curtail:

- Year 0 Survey:
- A TRICS SAM (Standard Assessment Methodology) compliant monitoring survey will be undertaken during the first reasonably practicable neutral month following occupation and a monitoring report setting out the surveyed results will be submitted to TfL / Boroughs.
- Years 1, 3 and 5 Surveys:
- A TRICS SAM compliant monitoring survey will be undertaken during the same neutral month as the year 0 survey in years 1, 3 and 5 and a monitoring report setting out the surveyed results will be submitted to the approving authority.

19.6.32 The monitoring surveys will allow the approving authority to understand emerging travel behaviour at the development and to make an informed decision about what, if any, actions should be taken.

Review

19.6.33 The STM will report the results on monitoring to the approving authority within three months of monitoring being triggered. The approving authority, relevant stakeholders and the STM will then review the results and, if appropriate, revise targets accordingly. The results of the travel survey and revised targets will be included in subsequent revisions of this Travel Plan as required.

19.6.34 It is not anticipated that any remedial measures will be required following review of the travel plan after monitoring reports are provided to the approving authority. Any such remedial measures (if required necessary) should be secured and funded through a s106 agreement on terms which accord with the statutory tests in respect of S106 obligations.

Action Plan

19.6.35 The programme for the implementation of the Travel Plan measures is set out in Table 19.6 including intended implementation dates and responsibilities.

Table 19-6 Hotel Action Plan

Action	Target (values)	Target Date	Funding	Indicator / measured by	Responsibility
Appointment of STM & TPC	N/A	Prior to occupation	Developer	Appointment of STM & TPC	Developer
Agree Travel Plan Objectives, Targets and Measures with Boroughs / TfL	N/A	Prior to occupation	Developer	Agreement being reached with Boroughs / TfL	STM/TPC
Provision of cycle parking	In line with emerging London Plan	Prior to occupation	Developer	Installation of cycle parking	Developer
Provision of the Travel Pack to each employee	One Travel Pack per employee	As part of induction	Developer	Dissemination of the Travel Pack to each employee	Developer
Publishing of Travel Pack to each employee	N/A	Prior to occupation	Developer	Creation of website	Developer
Undertake initial travel surveys	N/A	Within 3 months of occupation	Developer	Receipt of survey results	STM/TPC
Agree target values for mode split with Boroughs / TfL	Target subject to negotiations with Boroughs / TfL	1 month after initial travel survey	Developer	Receipted of written agreement of targets	STM/TPC
Undertake travel survey and analysis years 1, 3 and 5 and discuss results with Boroughs / TfL	N/A	Every other anniversary of the initial travel survey	Developer	Receipt of survey results	STM/TPC

19.7 OFFICE TRAVEL PLAN

19.7.1 The detailed methodology employed to forecast the trip generation is provided within the Transport Assessment. Table 19.7 shows the estimated travel demand forecast for the proposed office.

Table 19-7 Proposed Office Action Plan

Mode	0800-0900			1700-1800			Daily		
	In	Out	Total	In	Out	Total	In	Out	Two-Way
LUL/Rail	3303	96	3398	68	2365	2434	10621	9138	19758
Bus	193	6	199	4	138	142	622	535	1157
Motorcycle	57	2	59	1	41	42	183	157	340
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0

Taxi/Minicab	27	1	28	1	19	20	86	74	160
Bicycle	39	1	41	1	28	29	127	109	236
Walk	100	3	103	2	72	74	322	277	598
Total	3719	108	3827	77	2663	2740	11959	10289	22248

Objectives

19.7.2 TfL's guidance identifies that Travel Plans should include targets to reduce single occupancy vehicle trips but should also consider and relate to targets specified in the Mayor's Transport Strategy (e.g. to increase cycling). In addition, they should support objectives set out in a borough's local policy documents.

19.7.3 The strategy for this Framework Travel Plan therefore has the following general objectives for the dwellings:

- Establish sustainable travel principles;
- Support car free lifestyles;
- Increase the attractiveness and use of cycling;
- Encourage healthy and active travel; and
- Raise awareness of sustainable modes of transport available for residents and visitors travelling to and from the Site.

Travel Plan Targets

19.7.4 The achievement of Travel Plan objectives should be measurable using targets. In accordance with TfL's Travel Planning Guidance, all targets identified will be SMART (Specific; Measurable; Achievable; Realistic and Time-Bound). Therefore, appropriate SMART targets are proposed by type as follows:

- 'Aim' type targets are those which relate to outcomes achieved through implementation of measures; and
- 'Action' type targets are physical actions that can be achieved by a set date (e.g. appointing a Travel Plan Co-ordinator).

Aim Targets

19.7.5 Given the 'car free' nature of the proposals it is not necessary to formulate specific 'aim type' targets for single occupancy vehicle trips as all employees will naturally travel to and from the Site via sustainable modes of transport. Instead, given the significant proposed cycle parking provision, it is proposed that the target will focus primarily on cycling to and from the Site. The mode shift targets are shown in Table 19.8.

Table 19-8: Office Mode Share Targets

Mode	Year 1% Split	Target Split – Year 3	Target Split – Year 5
London Underground/Rail	34%	29%	24%
Bus, minibus or coach	54%	54%	54%
Taxi	5%	6%	7%
Motorcycle	2%	2%	2%
Car/Van	0%	0%	0%
Passenger	0%	0%	0%
Bicycle	1%	1%	1%
On Foot	1%	3%	5%
Total	**100%**	**100%**	**100%**

19.7.6 The interim targets will be reviewed after the initial travel surveys have been undertaken at the Site.

Action Targets

19.7.7 The following action type targets are potentially set for the commercial elements:

- Appointment of a Travel Plan Coordinator (TPC) by the Facilities Management company prior to occupation of the development;
- Produce a Travel Leaflet promoting alternative modes of transport and the key services provided through the Travel Plan, to be distributed electronically to all employees;
- Provide cycle parking spaces;
- Provide changing facilities, showers and lockers;
- Promote to occupiers the benefits of offering cycle to work schemes to employees;
- Organise a cycle to work-week to promote cycling within one month of full occupation, and annually thereafter for a minimum period of five years;
- Promote to occupiers the benefits of flexible working practices; and
- Undertake travel surveys at years one, three and five after initial occupation.

Measures

19.7.8 This section outlines the measures which will be implemented on site in order to achieve the objectives. These measures form the core of the Travel Plan. The measures have been grouped into three types as follows and considered in turn in the following sections:

- 'Hard' engineering measures incorporated into the design;
- 'Key services and facilities' provided; and
- 'Soft' marketing and management measures which ensure that sustainable travel behaviour is maximised.

Hard Measures – Site Design

19.7.9 It should be recognised that many physical aspects of the design of the site will influence travel patterns, and will have a significant impact upon reducing dependence upon the car. The hard engineering measures that will be incorporated into the design of the proposed development are set out below. It should be noted that appropriate hard engineering measures will be provided during the construction of the building and landscaping within the proposed development prior to occupation and will be funded by the Applicant.

Car Parking Provision

19.7.10 The proposed office development will be car-free with the exception of disabled parking provision.

Cycle Parking Provision

19.7.11 Safe and secure cycle parking will be provided within the proposed development to encourage cycle ownership and travel.

Facilities for Active modes

19.7.12 Changing facilities, showers and lockers will be provided to encourage active travel modes.

Key Services & Facilities

19.7.13 A selection of key services and facilities to complement the location and physical design of the Site will also be sought to further encourage the use of sustainable transport modes. Details of possible key services are set out below:

Cycle Maintenance and Repair Facilities

19.7.14 Two cycle hubs have been proposed along with a number of facilities that could be provided within the basement to encourage cycling to work:

- Bicycle mechanic visits to provide basic maintenance sessions and check bikes; and
- Maintenance facilities for general use including bicycle pumps and repair tools.

Cycle to Work Scheme

19.7.15 The national Cycle to Work Scheme enabling employees who wish to cycle to work to purchase a bike on a tax-free basis could be promoted to all workplace occupiers for the benefit of their staff.

19.7.16 Administration of this could be provided by the workplace occupiers.

Cycle to Work Week

19.7.17 A cycle to work week could be organised by the Travel Plan Coordinator. The cycle to work week could be funded by the workplace occupiers to promote cycling to staff. The event could be co-ordinated with the National Bike Week, where timescales permit.

Interest Free Season Ticket Loans for Employees

19.7.18 Occupiers could be encouraged to provide employee interest free loans for the purchase of public transport season tickets. If offered, the provision of interest free season ticket loans could be communicated with employees through the travel leaflet.

Encouraging Physical Activity as Part of Daily Travel

19.7.19 The Travel Leaflet will detail the cycle facilities available on Site and could include details of the local sports facilities and discounts with different outlets (gymnasiums and sports shops).

Sustainable Delivery Initiatives

19.7.20 Off-site delivery consolidation is proposed which will reduce the number of service vehicles that need to access the Site, and therefore minimise potential pedestrian / cyclist conflict with vehicles, as well as environmental impacts.

Soft Measures – Communication & Promotion

19.7.21 The location of the Site, its design and proximity to public transport services within the surrounding area should create all of the conditions to make sustainable travel choices a natural option. However, it is also recognised that a communication strategy is key to the success of the Travel Plan. Details of possible elements of the communication strategy for the Site are set out below.

Travel Leaflet

19.7.22 Travel Leaflets could be made available electronically to employees of the retail units, restaurant, viewing gallery, and office land uses within the Site, and to visitors. The leaflets could be produced by the TPC.

19.7.23 A key role of the Travel Leaflet would also be to raise awareness of the sustainable travel initiatives being implemented through the travel plan including:

- Access initiatives: The Travel Leaflet could contain a high-quality map showing walking, cycling and public transport routes to/ from the Site, together with the locations of key local facilities such as shops services and restaurants – all of which will be accessible on foot. Additional sources of further information such as TfL's Journey Planner website and mobile applications could also be provided;
- Promotion of key services and facilities: Details of the key services and facilities such as the location and access arrangements for cycle parking and maintenance facilities. Sources of more detailed further information could also be included;
- Promotion of membership to the London Cycling Campaign (LCC): Promote the LCC, a cycle organisation with local groups throughout London. Details of the local LCC group together with membership information could be included within the Travel Leaflet.
- Promotion of employee initiatives: Details of the national cycle to work scheme and the availability of interest free season ticket loans (subject to occupier agreement).
- Promotion of off peak travel: The Travel Leaflet could contain information regarding the benefit of off-peak travel, especially avoiding public transport services at the busiest times.

19.7.24 The Travel Leaflet could also invite those persons wishing to raise specific transport-related matters to engage in discussions with the TPC.

19.7.25 A copy of the Travel Leaflet could be available electronically via the TPC and will be updated regularly.

Notice Boards

19.7.26 Notice boards providing travel information to employees within the Site will be placed in prominent locations.

19.7.27 The notice boards will include information such as locations of on-site and off-site cycle parking; public transport service access points, and upcoming travel initiatives or events organised by the TPC, such as Bike Week and the Cycle to Work Scheme.

Flexible Working Hours

19.7.28 Individual occupiers could be encouraged to introduce a practice of flexible working hours amongst employees. This would provide employees with greater workplace and travel choice and the potential to avoid the busiest peaks.

Monitoring & Review

19.7.29 A programme of monitoring and review will be implemented to generate information by which the success of the Travel Plan will be evaluated. This will establish whether the agreed targets are being met. Monitoring and review will be the responsibility of the Sustainable Travel Manager with assistance from the Travel Plan Co-ordinator.

Monitoring

Action Target Monitoring and Reporting

19.7.30 To measure progress against the Action target, the following monitoring regime is proposed:

- Annual reporting:
- The amount of office space completed and first occupied in each year will be reported to the approving authority together with confirmation that each occupier has been provided with a copy of the Travel Pack.

Aim Target Monitoring and Reporting

19.7.31 To measure progress against the Aim target, the following monitoring regime is proposed, unless agreed in writing to curtail:

- Year 0 Survey
- A TRICS SAM (Standard Assessment Methodology) compliant monitoring survey will be undertaken during the first reasonably practicable neutral month following 75% occupation and a monitoring report setting out the surveyed results will be submitted to the Boroughs / TfL.

- Years 1, 3 and 5 Surveys
- A TRICS SAM compliant monitoring survey will be undertaken during the same neutral month as the year 0 survey in years 1, 3 and 5 and a monitoring report setting out the surveyed results will be submitted to the approving authority.

19.7.32 The monitoring surveys will allow the approving authority to understand emerging travel behaviour at the development and to make an informed decision about what, if any, actions should be taken.

Review

19.7.33 The STM will report the results on monitoring to the approving authority within three months of monitoring being triggered. The approving authority, relevant stakeholders and the STM will then review the results and, if appropriate, revise targets accordingly. The results of the travel survey and revised targets will be included in subsequent revisions of this Travel Plan as required.

19.7.34 It is not anticipated that any remedial measures will be required following review of the travel plan after monitoring reports are provided to the approving authority. Any such remedial measures (if required necessary) should be secured and funded through a s106 agreement on terms which accord with the statutory tests in respect of S106 obligations.

Action Plan

19.7.35 The programme for the implementation of the Travel Plan measures is set out in Table 19.9 including intended implementation dates and responsibilities.

Table 19.9: Workplace Action Plan

Action	Target (values)	Target Date	Funding	Indicator / measured by	Responsibility
Appointment of STM & TPC	N/A	Prior to occupation	Developer	Appointment of STM & TPC	Developer
Agree Travel Plan Objectives, Targets and Measures with Boroughs / TfL	N/A	Prior to occupation	Developer	Agreement being reached with Boroughs / TfL	STM/TPC
Provision of cycle parking	In line with emerging London Plan	Prior to occupation	Developer	Installation of cycle parking	Developer
Provision of the Travel Pack to each employee	One Travel Pack per employee	As part of induction	Developer	Dissemination of the Travel Pack to each employee	Developer
Publishing of Travel Pack to each employee	N/A	Prior to occupation	Developer	Creation of website	Developer
Undertake initial travel surveys	N/A	Within 3 months of occupation	Developer	Receipt of survey results	STM/TPC

Agree target values for mode split with Boroughs / TfL	Target subject to negotiations with Boroughs / TfL	1 month after initial travel survey	Developer	Receipted of written agreement of targets	STM/TPC
Undertake travel survey and analysis years 1, 3 and 5 and discuss results with Boroughs / TfL	N/A	Every other anniversary of the initial travel survey	Developer	Receipt of survey results	STM/TPC

20.0 SUMMARY AND CONCLUSIONS

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20.1.1 WSP has been commissioned by BGYRL to prepare the Transport Assessment in respect of the amended Proposed Development at The Goodsyard site located in Shoreditch. The site straddles the boundary of LBH and LBTH.

20.1.2 This TA demonstrates the following:

- The site location benefits from excellent accessibility by non-car modes of travel including on foot, by cycle, bus, London Overground, London Underground and rail networks (PTAL of 6b when measured from the centre of the site);
- The proposed development will be car-free with the exception of disabled parking provision;
- It is proposed to provide on-site cycle parking for the development in accordance with the New Draft London Plan;
- The proposed layout of the site has been designed to accommodate the delivery and servicing needs of the development, with all delivery and servicing on-site. A site-wide Delivery and Servicing Plan will be secured through the Section 106 agreement;
- The Proposed Development could be accommodated on the local pedestrian infrastructure and this has been demonstrated by a PCL Audit assessment on key links in and around the site, as well as a PERS Audit of the local pedestrian environment;
- In terms of cycling the scheme offers a strategy of providing a high degree of accessibility to the surrounding cycle infrastructure, through the placement of resident, employee and visitor cycle parking, and an increase provision of cycle hire facilities, thereby supporting predicted cycle trips of the Proposed Development.
- Given the surrounding supporting public transport infrastructure, and choice and frequency of services, it is not expected that the Proposed Development will cause harm to the existing operation of the bus, London Overground, London Underground and mainline rail. There is planned rail provision within the vicinity of the site (i.e. Crossrail, which is expected to open prior to the opening of the development), which will further enhance the already excellent public transport facilities within the area;
- The effect of the Proposed Development is expected to be low on the local highway network. It has been demonstrated to TfL that the Proposed Development with Maximum Build Out will result in a low level of vehicle trips in the context of the volume of traffic on the local highway network;
- The Proposed Development includes alterations to the existing highway arrangement in support of new access points;
- The effect of vehicular movements associated with demolition and construction activity has been considered. Any impact is expected to be negligible. A site-wide Construction Logistics Plan will be secured and monitored by the Section 106 agreement; and

- A Travel Plan has been prepared for the proposed residential, office and hotel uses, with the overall objective being to increase modes of walking and cycling. The Travel Plan will be secured and monitored by the Section 106 agreement;

20.1.3 The Proposed Development offers a number of transport improvements to the local area, including the following.

- The development proposals are car-free with only disabled parking provided;
- Provision of a new routes through the site to increase permeability and improve the street density;
- Within the site, space is designed for pedestrian use, with servicing vehicle access managed accordingly;
- Provision of long-stay and short-stay cycle parking, well located, accessible and of an appropriate type and quantity;
- Proposed pedestrian crossing on Bethnal Green Road;
- Widening of footways surrounding the site, including on Shoreditch High Street and Commercial Street;
- Creating of new pedestrian and landscaped area at podium level; and
- Delivery and servicing facilities are provided on-site.

20.1.4 In conclusion, the site benefits from excellent levels of public transport accessibility, pedestrian provision and cycle provision. It is considered that the Proposed Development trips generated by each mode of transport could be accommodated on the surrounding supporting transport infrastructure. The Proposed Development is considered to meet the transport aspirations of LBH, LBTH, the GLA and current Government guidance in respect of sustainable development and will encourage the use of sustainable modes of transport.