

# THE GOODSYARD

Environmental Statement Addendum Volume 2

September 2019 – Chapter 9 of 21

ballymore.



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# CHAPTER 9: TRAFFIC AND TRANSPORT

| 9.1 INTRODUCTION  |   |
|---|---|
| 9.1.1   | This chapter of the ES Addendum considers the likely significant effects on transport that could arise from the construction and operation of the Proposed Amendments to the Revised Scheme. It considers the amendments to the scheme described in Chapter 5 of this ES Addendum and supersedes the Transport chapter prepared by WSP from the original ES submitted for the Proposed Development in 2015. Where relevant, reference has been made to the original ES chapter submitted, so as to avoid unnecessary duplication.   |
| 9.1.2   | This ES Addendum chapter includes changes with regards to the 2015 Proposed Development. The quanta of development, design of the site and range of land uses have all been subject to change. For completeness, this ES Addendum chapter includes a reassessment of the baseline conditions as well as the effects of the Proposed Amendments to the Revised Scheme. The methods by which environmental effects of transport are assessed have not changed since the previous assessment.  |
| 9.2 SCOPE OF ASSESSMENT                                 |   |
| 9.2.1   | This chapter of this ES Addendum assesses the likely significant effects of the Revised Scheme in terms of Transport and is supported by the Transport Assessment (TA) and its appendices, also prepared by WSP and submitted as part of this planning application in support of the Revised Scheme.  |
| 9.2.2   | The chapter describes: the assessment methodology; the baseline conditions currently existing at the site and in the surrounding area; the likely significant environmental effects; the mitigation measures required to prevent, reduce or offset any significant adverse effects; the likely residual effects after these measures have been employed; and the cumulative effects associated with the Revised Scheme in combination with other committed developments (Type 2 impacts) within an agreed distance of the site.   |
| 9.2.3   | Type 1 cumulative effects ‘intra-project effects’ which are the combined effects of individual topic impacts on a particular sensitive receptor are considered in <b>ES Addendum Volume 2, Chapter 19: Effect Interactions</b> .  |
| 9.3 KEY LEGISLATION, POLICY AND GUIDANCE CONSIDERATIONS |   |
| 9.3.1   | <p>The assessment of environmental impacts relating to transport has been undertaken within the context of relevant planning policies, guidance documents and legislative instruments. These are summarised below.</p> <p><b>National Policy</b></p> <p><b>National Planning Policy Framework</b></p> <p>9.3.2 The National Planning Policy Framework<sup>1</sup> (NPPF), issued in its latest form in February 2019, sets a presumption favouring sustainable development, safe and healthy communities, making effective use of land and achieving well-designed spaces.</p> <p>9.3.3 The NPPF supports the provision of additional housing explaining the importance of providing a sufficient amount and variety of land that meets specific housing requirements and allows planning permission to be developed without unnecessary delay.</p> <p>9.3.4 It states planning policies and decisions should aim to achieve healthy, inclusive and safe places which promote social interaction, for example through mixed-use developments and the creation of easy pedestrian and cycle connections within as well as between neighbourhoods.</p> <p>9.3.5 With regards to transport, the document states that the potential impacts of development on transport networks should be addressed at the earliest stages of planning, including opportunities arising from transport infrastructure and the impacts which the Revised Scheme will have.</p> <p>9.3.6 The environmental impacts of the development proposals should be identified, together with opportunities for mitigation and net benefits associated with traffic and transport.</p> |

<sup>1</sup> National Planning Policy Framework, February 2019 - [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/779764/NPPF\\_Feb\\_2019\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf)

Regional Policy

The London Plan<sup>2</sup>

|        |  |
|--------|--|
| 9.3.7  | The London Plan aims to ensure that London’s transport is easy, safe and convenient for everyone. It states that London should be a city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities with an efficient and effective transport system which actively encourages more walking and cycling and makes better use of the Thames.   |
| 9.3.8  | <p>Policy 6.1 states the importance of closer integration of transport and development and hopes to encourage this by (inter alia):</p> <ul style="list-style-type: none"> <li>• “Encouraging patterns of development that reduce the need to travel, especially by car;</li> <li>• Seeking to improve the capacity and accessibility of public transport, walking and cycling, particularly in areas of greatest demand;</li> <li>• 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;</li> <li>• Improving interchange between different forms of transport, particularly around major rail and underground stations, especially where this will enhance connectivity in outer London;</li> <li>• Facilitating the efficient distribution of freight whilst minimising its impacts on the transport network;</li> <li>• Supporting measures that encourage shifts to more sustainable modes and appropriate demand management;</li> <li>• Promoting greater use of low carbon technology so that CO2 and other contributors to global warming are reduced;</li> <li>• Promoting walking by ensuring an improved urban realm; and</li> <li>• 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.”</li> </ul> |
| 9.3.9  | Policy 6.3, regarding the effects of development on transport capacity, states that new developments that 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.  |
| 9.3.10 | Policy 6.7 considers improvements to streets and surface transport. At the strategic level it is stated that the Mayor will work with the boroughs to implement improvements to the quality of bus, bus transit and tram services. At the local level the Development Planning Documents should promote these transport systems through a number of measures including ensuring direct, secure, accessible and pleasant walking routes to bus stops.   |
| 9.3.11 | Policy 6.13 states that an appropriate balance must be struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use. New developments should not only adhere to maximum parking standards, but also meet the minimum disabled and cycle parking standards specified.   |
| 9.3.12 | Cycle parking standards relevant to this planning application, as set out within the New Draft London Plan, are provided in <b>Table 9.1</b> .   |

<sup>2</sup> The London Plan, 2016 - <https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-2016-pdf>

Table 9.1 New Draft London Plan – Minimum Cycle Parking Standards

| Land Use Class           | London Plan (March 2015)   |  |
|--------------------------|--|--|
|                          | Long Stay  | Short Stay   |
| C3 Residential           | 1 space per studio or 1 person 1-bedroom dwelling;<br>1.5 spaces per 2 person 1-bedroom dwelling;<br>2 spaces per all other dwellings. | 5 to 40 dwellings: 2 spaces;<br>Thereafter: 1 space per 40 dwellings   |
| A1 Retail (Food)         | 1 space per 175 sqm gross external area (GEA)  | Areas with higher cycle parking standards:<br>first 750 sqm: 1 space per 20 sqm;<br>thereafter: 1 space per 150 sqm (GEA)  |
| A1 Retail (Non-Food)     | First 1000 sqm: 1 space per 250 sqm thereafter: 1 space per 1000 sqm (GEA)   | Areas with higher cycle parking standards:<br>first 1000 sqm: 1 space per 60 sqm;<br>thereafter: 1 space per 500 sqm (GEA) |
| A3 Restaurants and Cafes | 1 space per 175 sqm (GEA)  | Areas with higher cycle parking standards: 1 space per 20 sqm (GEA)  |
| B1 Office                | 1 space per 75 sqm (GEA)   | First 5,000 sqm: 1 space per 500 sqm<br>thereafter: 1 space per 5,000 sqm (GEA)  |
| C1 Hotels                | 1 space per 20 bedrooms  | 1 space per 50 bedrooms  |

### The Mayor's Transport Strategy<sup>3</sup>

- 9.3.13 The Mayor's Transport Strategy was published in 2018 and sets out the Mayor's policies and proposals to reshape transport in London over the next two decades. It replaces the 2010 Transport Strategy and supports the London Plan and Economic Development Strategy. A key part of the strategy is a target for 80% of all journeys to be made on foot, by cycle or using public transport.

### Transport for London Healthy Streets Approach<sup>4</sup>

- 9.3.14 The Healthy Street Approach is a system of policies and strategies adopted by TfL to help people use cars less and walk, cycle and use public transport more. It is a long-term plan for improving people's experiences of London streets, helping everyone to be more active and enjoy the health benefits of being on our streets.

### Local Policy – London Borough of Hackney (LBH)

#### LBH Local Plan<sup>5</sup>

- 9.3.15 Hackney's existing Local Plan comprises the Core Strategy (adopted in November 2010); the Development Management Local Plan (adopted July 2015); the Site Allocations Local Plan (adopted July 2016).
- 9.3.16 The Hackney Local Plan 2033 was submitted to the Planning Inspectorate in January 2019 for examination in public.

### LBH Local Development Framework Core Strategy<sup>6</sup>

- 9.3.17 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 Development Management Local Plan<sup>7</sup>

- 9.3.18 LBH's Development Management Local Plan was adopted by the Borough in July 2015. The document sets out the proposed planning policies which the Borough uses to assess planning applications. Chapter 8 of the document details transport policies.
- 9.3.19 Policy DM44 states all development proposals should prioritise transport-related users in line with the movement hierarchy set out in the policy, which priorities pedestrians and those with mobility difficulties; cyclists; and public transport users at the top. Proposals for development on large sites in particular 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.
- 9.3.20 Policy DM45 states the Council will require Transport Assessments/Statements and Travel Plans for developments. The Council seeks through this policy to encourage the closer integration of transport and development in order to reduce the need to travel and to achieve sustainable development.
- 9.3.21 Policy DM46 states all development must take full account of the needs of pedestrians, cyclists and other users, including those with disabilities, meeting mobility requirements. Development proposals must provide for generous levels of cycle parking in accordance with London Plan standards.
- 9.3.22 Policy DM47 refers to parking, with Hackney expecting most sites in the Borough to be car free or car capped, but particularly sites which have a high PTAL of 4-6; or are near a wide range of amenities including shops and leisure activities or are within an operational controlled parking zone.

### Local Policy - London Borough of Tower Hamlets (LBTH)

#### LBTH Local Plan<sup>8</sup>

- 9.3.23 The Tower Hamlets Local Plan underwent an independent public examination following submission to the Government in February 2018. As part of the examination process, the government appointed inspector has proposed changes to the Local Plan, which are currently under consultation, which runs up to May 2019. Whilst still under consultation, the Local Plan still has material planning weight, and is therefore being considered as part of the policy review.

#### LBTH Local Plan Core Strategy 2025<sup>9</sup>

- 9.3.24 The LBTH Core Strategy is the current adopted strategy which 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

<sup>3</sup> Mayor's Transport Strategy, 2018 - <https://www.london.gov.uk/what-we-do/transport/our-vision-transport/mayors-transport-strategy-2018>

<sup>4</sup> <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets>

<sup>5</sup> London Borough of Hackney Local Plan 2033, 2019 - <https://www.hackney.gov.uk/LP33-exam>

<sup>6</sup> London Borough of Hackney Local Development Plan Core Strategy, 2010 - <https://www.hackney.gov.uk/core-strategy>

<sup>7</sup> London Borough of Hackney Development Management Local Plan, 2015 - <https://www.hackney.gov.uk/development-management-DPD>

<sup>8</sup> London Borough of Tower Hamlets Local Plan draft (2018) - [https://www.towerhamlets.gov.uk/ignl/council\\_and\\_democracy/consultations/Local\\_Plan.aspx](https://www.towerhamlets.gov.uk/ignl/council_and_democracy/consultations/Local_Plan.aspx)

<sup>9</sup> London Borough of Tower Hamlets Local Plan Core Strategy 2025, 2010 - <https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Core-Strategy-and-MDD/Core-Strategy-low-resolution.pdf>

- Delivering place making (page 10).
- 9.3.25 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.
- 9.3.26 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)<sup>10</sup> (April 2013)**

- 9.3.27 LBTH MDD is the current adopted policy which 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.
- 9.3.28 Policy DM9 'Improving Air Quality' states that LBTH will expect Revised Schemes to consider a range of measures designed to improve air quality, including reducing vehicle movements and enhancing the public realm.
- 9.3.29 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.
- 9.3.30 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.
- 9.3.31 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.
- 9.3.32 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.
- 9.3.33 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.
- 9.3.34 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.
- 9.3.35 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.

<sup>10</sup> London Borough of Tower Hamlets Local Plan Managing Development Document, 2013 - <https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Neighbourhood-Planning/Managing-Development-Documents/April-2013.pdf>

- 9.3.36 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.
- 9.3.37 The Bishopsgate Goodsyard site is identified as Site Allocation 1 in the MDD. The site is described as a ...
- "Comprehensive mixed-use development opportunity required to provide a strategic housing development, a local park, an Idea Store (i.e. a library) and a district heating facility."* Commercial and other compatible land uses are also envisaged as part of the development.
- 9.3.38 Specifically, the MDD guidance indicates a mixed-use development for the Bishopsgate Goods Yard site including up to 2000 homes, up to 150,000m<sup>2</sup> 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.
- 9.3.39 Appendix 2 of the adopted Local Plan MDD sets out LBTH's parking standards. Parking standards relevant to the Revised Scheme are summarised in **Tables 9.2 to 9.6**.

Table 9.2 LBTH – A1 Parking Standards

| Use Class  | Maximum Car and Motorcycle Parking**  | Minimum Cycle Parking (minimum 2 spaces) | Other Parking  |
|--|---|--|--|
| Use class A1 Non Food                              | No car parking  | 1 space per 125sqm                       | n/a  |
| Use class A1 Smaller foodstore (up to 500sqm GFA*) | No car parking  | 1 space per 125sqm                       | n/a  |
| Use class A1 Food supermarket (over 50sqm)         | 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 125sqm                       | Service parking is required above 1,000sqm and a servicing agreement must be agreed as part of the Travel Plan |



Table 9.3 LBTH – A3-A5 Parking Standards

| Use Class                          | Maximum Car and Motorcycle Parking** | Minimum Cycle Parking (minimum 2 spaces)                                | Other Parking  |
|------------------------------------|--------------------------------------|---|--|
| Use class A3 Restaurants and cafes | No Parking                           | 1 space per 20 seats for staff, and one space per 20 seats for visitors | Service parking is required above 1,000sqm and a servicing agreement is secured as part of a Travel Plan |
| Use class A5 Hot food takeaways    | No Parking                           | 1 space per 50sqm   | n/a  |

Table 9.4 LBTH – B1 Parking Standards

| Use Class                      | Maximum Car and Motorcycle Parking** | Minimum Cycle Parking (minimum 2 spaces) | Other Parking  |
|--------------------------------|--------------------------------------|--|--|
| Use class B1a Business offices | 1 space per 600-1,000sqm             | 1 space per 120sqm                       | Service parking is required above 1,250sqm and a servicing agreement is secured as part of a Travel Plan |
| Use class B1a Business offices | 1 space per 600-1,000sqm             | 1 space per 120sqm                       | Service parking is required above 1,250sqm and a servicing agreement is secured as part of a Travel Plan |

Table 9.5 LBTH – C1 Parking Standards

| Use Class          | Maximum Car and Motorcycle Parking**   | Minimum Cycle Parking (minimum 2 spaces) | Other Parking              |
|--------------------|--|--|----------------------------|
| Use class C1 Hotel | 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 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 per 10 staff; 1 per 15 residents       | 1 coach space per 50 rooms |

Table 9.6 LBTH – C3 Parking Standards

| Use Class                | Maximum Car and Motorcycle Parking**   | Minimum Cycle Parking (minimum 2 spaces)                                 | Other Parking  |
|--------------------------|--|--|--|
| Use class C3 Residential | For locations of PTAL 5-6:<br>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 pace of individual car parking spaces |

**\*\* The Council welcomes motorcycle parking as a substitute for car parking. Motorcycle parking may be 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.**

- 9.3.40LBTH requires a minimum of 2 spaces or 10% of the total parking (whichever is greater) in respect to disabled parking for development 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<sup>11</sup>
- 9.3.41This 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.
- 9.3.42The 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.
- 9.3.43Policy 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.
- 9.3.44In 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

## 9.4 CONSULTATION

- 9.4.1The following consultations summarised in below has taken place with key stakeholders regarding transport in relation to the Revised Scheme.
- 9.4.2A pre-application transport update on the Revised Scheme was held with TfL, the GLA, LBH and LBTH on March 21<sup>st</sup> 2019. Matters discussed included the servicing arrangements (specifically the numbers of vehicles and the locations where servicing will take place), swept path analysis to check movements of vehicles in and around the site, the public realm arrangements for Braithwaite Street, cycle parking provision, TfL proposals for a pedestrian crossing relocation on

<sup>11</sup> London Borough of Hackney and London Borough of Tower Hamlets Bishopsgate Goods Yard Interim Planning Guidance, 2010 - <https://hackney.gov.uk/media/3587/Bishopsgate-Goods-Yard-Interim-planning-guidance-2010/pdf/Bishopsgate-Goods-Yard-Interim-Planning-Guidance-2010.pdf?m=635896618460870000>

Commercial Street, and blue badge bay provision. At this meeting it was agreed that a lower quantity of cycle parking would be provided compared to the minimum standards, on the understanding that many retail customers will be visiting

- 9.4.3 multiple shops and therefore do not require cycle parking provision based upon standards which consider each unit in isolation.
- 9.4.4 TfL also requested that a Pedestrian Environment Review System (PERS) Audit be prepared, which now has been prepared as a separate document appended to the TA. 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
- 9.4.5 **Table 9.7** summarises the issues raised during consultation.

Table 9.7 Summary of Consultation Outcomes

| Consultee  | Point Raised                                   | Resolution   |
|------------|--|--|
| LBTH       | Braithwaite Street should not be "stopped up". | Braithwaite Street to be retained as a through route for cyclists and will not be stopped up. Considered in the ES Addendum as part of delay for cyclists. |
| LBH        | Hotel taxi arrangements.                       | Drop-off / pick-up will be on Bethnal Green Road. Considered in the ES Addendum as part of amenity.  |
| LBTH       | Pedestrian crossing on Bethnal Green Road.     | Pedestrian Crossing will be located on desire line aligned with Braithwaite Street. Considered in the ES Addendum as part of delay for pedestrians.        |
| LBH & LBTH | Cycle parking provision.                       | Explanation provided for proposed cycle parking provision. Considered in the ES Addendum as part of delay for cyclists.                                    |
| LBTH       | Blue badge parking.                            | Agreed for a small number of bays on the highway which will then be reviewed and considered for increase in future.  |
| TfL        | PERS audit.                                    | PERS audit prepared.   |

- 9.4.1 In January 2014 a Scoping Opinion was issued jointly by the LBTH (Ref: PA/14/107) and LBH (Ref: 2014/0249) on the Proposed Development (see **ES Addendum Volume 4 - Appendix A Scoping**). A review of the Scoping Opinion was requested by the Applicant in March 2019 subject to the Revised Scheme. **Table 9.8** outlines the comments received in the 2014 Scoping Opinion and the 2019 Scoping Opinion Review and where they have been addressed within the documentation.

Table 9.8 Comments received in the 2014 Scoping Opinion and 2019 Scoping Opinion Review

| Topic / Section   | Summary of Comment  | Location within the ES Addendum where comments are addressed   |
|---|---|--|
| 2014 LBH & LBTH Scoping Opinion section 6.15                              | The development should be assessed with regard to severance, delay, fear and intimidation, amenity, and accidents and safety.         | Section 9.9 considers the effects in these areas.  |
| 2014 LBH & LBTH Scoping Opinion section 6.15                              | Cycling permeability should be discussed.   | Paragraph 9.8.21 addresses this.   |
| 2014 LBH & LBTH Scoping Opinion section 6.15                              | Trip generation should be shown as a percentage increase from the baseline, and the impact on junction capacity.                      | Paragraph 9.8.32 presents traffic flow increases as percentage changes.  |
| 2014 LBH & LBTH Scoping Opinion section 6.15                              | Construction material and staff trip generation should be considered.   | Paragraphs 9.8.7 to 9.8.12 cover construction trips and their effects.   |
| 2014 LBH & LBTH Scoping Opinion section 6.15                              | Construction traffic routes should be listed.   | Paragraph 9.8.8 and the appended CLP give details.   |
| 2014 LBH & LBTH Scoping Opinion section 6.15                              | Consideration should be given to Borough parking standards.   | Section 9.3 includes a review of Borough parking standards.  |
| 2014 LBH & LBTH Scoping Opinion section 6.15                              | The report should discuss water transport.  | The CLP, appended to the ES Addendum, covers the trip generation and mode share of the construction proposals. Within the ES Addendum chapter the effects of trips generated are assessed by final mode. A |
| 2019 GLA Scoping Opinion Review – 2014 Scoping Opinion paragraph 4.68     | The TA should be appended to the ES when submitted.   | The TA has been submitted alongside the Application; it has not been appended to the ES.   |
| 2019 GLA Scoping Opinion Review – 2014 Scoping Opinion paragraph 4.69     | The scale and extent of assessment should follow best practice as set out by TfL, the Mayor of London, NPPF, LBH, LBTH, IEMA and DfT. | Policy review in section 9.3. The assessment is undertaken against these guidelines and policies.  |
| 2019 GLA Scoping Opinion Review – 2014 Scoping Opinion paragraph 4.70     | Baseline data is to be augmented by PERS and CERS audits.   | PERS audit undertaken as part of the TA which is appended to the ES Addendum which has submitted alongside the Application. A CERS audit will also be undertaken.  |
| 2019 GLA Scoping Opinion Review – 2014 Scoping Opinion paragraph 4.70     | Consider use of TfL's Pedestrian Comfort Level tool.  | PCL assessment has been undertaken; see paragraph 9.6.15 onwards.  |
| 2019 GLA Scoping Opinion Review – 2014 Scoping Opinion additional matters | Draft demolition and/or construction logistics plan to be provided.   | The CLP is appended to the TA, which has submitted alongside the Application.  |
| 2019 GLA Scoping Opinion Review – 2014 Scoping Opinion additional matters | The effects of changes to on-street car parking supply and demand should be included.   | The proposed scheme is car-free and will therefore not increase demand for on-street car parking spaces.   |
| 2019 GLA Scoping Opinion Review – LBTH comments                           | The impact of potential road closures during construction should be assessed.   | Paragraph 9.8.7 covers road closures.  |
| 2019 GLA Scoping Opinion Review – LBTH comments                           | The effects of deliveries and servicing should be considered, and a draft Delivery and Servicing Plan should be submitted.            | The DSP is appended to the TA, which has submitted alongside the Application.  |

9.5 ASSESSMENT METHODOLOGY

- 9.5.1

This section sets out whether each of the potential effects are scoped in or scoped out and the basis for that judgement for the updated assessment and how an updated assessment will be approached. The 'IEMA,1993' guidance sets some useful criteria for determining a study area in paragraph 3.15 which has been used for context:

  - “Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%);
  - Rule 2: Include any other specifically sensitive areas where traffic flows have increased by 10% or more.”
- 9.5.2

Current best practice has been adopted for analysis of the local area road network. The methodology is reported in the Transport Assessment appended.
- 9.5.3

In accordance with the IEMA Guidelines, the following conditions on the road network have been assessed:

  - Severance;
  - Driver Delay;
  - Pedestrian Amenity and Delay;
  - Cyclist Amenity and Delay;
  - Public transport User Amenity and Delay;
  - Fear and Intimidation; and
  - Accidents and Safety.

**Severance**
- 9.5.4

Severance is defined by the 'IEMA,1993' guidance in paragraph 4.27:

  - “Severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery. The term is used to describe a complex series of factors that separate people from places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by the road itself. It can also relate to quite minor traffic flows if they impede pedestrian access to essential facilities...”
- 9.5.5

The Revised Scheme will provide a positive contribution towards reducing severance, both in the provision of new pedestrian links such as the east-west connection as well as enhancements to existing links such as Braithwaite Street. There will be no through traffic using these links which will further reduce severance for pedestrians. A detailed quantitative assessment of severance is therefore scoped out for the assessment but a qualitative review will be included to consider and confirm any potential changes to the previous assessment conclusions. The study area will cover the development site and the pedestrian links adjacent to it.

**Delay**
- 9.5.6

Delay can reasonably be defined as a change in journey times for uses of transport networks.
- 9.5.7

The Revised Scheme is not expected to result in changes which could significantly and adversely affect delay during construction or operation. The construction of the Revised Scheme will be phased and will prioritise use of the Strategic Road Network in order to minimise delay for road users. The design of the Revised Scheme will bring a number of benefits to journey delay in the operational phase, including reduced walking times arising from the provision of more direct routes, as well as a car-free scheme which adds a minimal number of vehicle trips to the highway network. Delay is therefore scoped out of the assessment but a qualitative review will be included to consider and confirm any potential changes to the previous assessment conclusions. The qualitative assessment includes delay and amenity for public transport users, the two being interlinked insofar as an increase in passenger numbers can lead to both delays in journey times and a loss of amenity for passengers.

**Amenity, Fear and Intimidation**
- 9.5.8

Amenity is defined by the 'IEMA,1993' guidance in paragraph 4.39:

  - “...It is broadly defined as the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition, and pavement width/separation from traffic. This definition also includes pedestrian fear and intimidation, and can be considered to be a much broader category including consideration of the exposure to noise and pollution, and the overall relationship between pedestrians and traffic...”

- 9.5.9

Amenity is also considered in relation to TfL’s Healthy Streets Indicators<sup>12</sup> and Pedestrian Comfort Level<sup>13</sup> guidance.
- 9.5.10

Fear and Intimidation is defined by the 'IEMA,1993' guidance in paragraph 4.40:

  - “...The impact of this is dependent on the volume of traffic, its HGV composition, its proximity to people or the lack of protection caused by such factors as narrow pavement widths...”
- 9.5.11

The IEMA Guidelines' suggested criteria for assessing fear and intimidation are presented in **Table 9.9** below.

Table 9.9 IEMA Thresholds for Fear and Intimidation

| Degree of Hazard | Average Traffic Flow over 18 Hour Day (vehicles/hour) | Total 18 Hour Goods Vehicle Flow | Average Speed over 18 Hour Day (miles/hour) |
|------------------|---|----------------------------------|---|
| Extreme          | 1,800+  | 3,000+                           | 20+   |
| Great            | 1,200 – 1,800   | 2,000 – 3,000                    | 15 – 20                                     |
| Moderate         | 600 – 1,200   | 1,000 – 2,000                    | 10 – 15                                     |

- 9.5.12

The Revised Scheme is not expected to result in changes which could significantly and adversely affect perceptions of amenity, fear and intimidation during construction or operation. The Revised Scheme is car-free and will generate only a negligible number of additional vehicle trips. Amenity, fear and intimidation is therefore scoped out for the assessment but a qualitative review will be included to consider and confirm any potential changes to the previous assessment conclusions. This includes use of TfL’s Pedestrian Comfort Level (PCL) tool which assesses pedestrian routes' ability to provide adequate amenity based upon their width and pedestrian flows. The study area includes the internal links within the Revised Scheme area, as well as adjacent pedestrian links.

**Accidents and Safety**
- 9.5.13

The key issue in assessing accidents and safety is in understanding the potential for change. There can be some small changes in prevailing road safety conditions arising simply as a result of having a greater number of journeys being made on a network; put very simply, the more people that are travelling, the more people that are liable to become involved in an accident. By far the more important issue to consider is how travel and the design of the transport networks interrelate to affect prevailing road safety. In that context, prevailing road safety may change where:

  - Fundamental changes are proposed to the form of nature of a transport network such as changes to the geometry of a junction or changing the form of a junction; and
  - Fundamental changes are proposed to prevailing travel patterns on transport networks not designed to cater for them such as introducing a pedestrian demand on a rural road without footways or introducing a pedestrian demand across a heavily trafficked and high speed road without a suitable crossing provision.
- 9.5.14

The Revised Scheme is not expected to result in changes which could significantly and adversely affect accidents and safety during construction or operation because the previous assessment found only minor beneficial effects associated with accidents and safety. Accidents and safety is therefore scoped out for the assessment but a qualitative review will be included to consider and confirm any potential changes to the previous assessment conclusions. The broad study area for that review will remain as per the assessment undertaken on the 2015 Revised Scheme.

**Hazardous Loads**
- 9.5.15

Hazardous loads are discussed by the 'IEMA,1993' guidance in paragraph 4.43:

  - “Some developments may involve the transportation of dangerous or hazardous loads by road and this should be recognised within any Environmental Statement. Such movements should include specialist loads which might be involved in the construction or decommissioning phases of the development, in addition to movements associated with the operation of the establishment.”
- 9.5.16

The Revised Scheme is not expected to generate or attract hazardous loads either during construction or operation. Hazardous loads have therefore been scoped out of the assessment.

<sup>12</sup> <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets>

<sup>13</sup> <http://content.tfl.gov.uk/pedestrian-comfort-guidance-technical-guide.pdf>



|        |   |  |  |
|--------|---|--|--|
|        | <b>Significance Criteria</b>  |  | assumed based on the methodology applied to the trip distribution of the Revised Scheme. The assessment has been undertaken by comparing the with-development scenario to a scenario with  |
| 9.5.17 | This ES Addendum chapter has been prepared based upon the significance criteria as set out below.   | 9.5.27   | The assessment has been based upon the maximum parameter of development, since this will generate the greatest number of additional trips on the transport network. A minimum parameter of developable areas on these plots also exists, however they would not give rise to any difference in the range or significance of the effects. Consequently, the minimum development parameters are not considered further as part of this assessment. |
| 9.5.18 | Potential impacts have been assessed as follows: <ul style="list-style-type: none"> <li>• <b>Beneficial</b> – impacts that produce benefits in terms of transportation and access;</li> <li>• <b>Adverse</b> – impacts that produce a negative impact in terms of transportation and access; and</li> <li>• <b>Negligible</b> – impacts that produce insignificant change (0% to 10% magnitude of change, compared to existing traffic or pedestrian flows, or less than 5% of public transport capacity). IEA guidance (1993) (Ref 9-16) indicates that increases in traffic flow of less than 30% generally result in imperceptible changes in the environmental impacts of traffic and traffic flow changes of less than 10% create no discernible impact.</li> </ul>  | 9.5.28   | It should be noted that the minimum development scenario refers to a lower quantum of development across the entire site, and should not be confused with the limited development scenario outlined in <b>ES Addendum Volume 2, Chapter 21: Limited Development Scenario</b> .   |
| 9.5.19 | The significance of adverse or beneficial impacts have been defined as either minor, moderate or major: <ul style="list-style-type: none"> <li>• <b>Minor</b> – slight, very short or highly localised impact of no significant consequence, (10% to 30% magnitude of change compared to existing traffic or pedestrian flows, or 5% of peak hour public transport capacity, therefore the impact is considered to be ‘insignificant’);</li> <li>• <b>Moderate</b> – limited impact, (by extent, duration or magnitude) which may be considered locally significant, (30% to 60% magnitude of change compared to existing traffic or pedestrian flows, or 10% of peak hour public transport capacity.); and</li> <li>• <b>Major</b> – considerable impact, (by extent, duration and magnitude) of more than local significance or in breach of recognised acceptability, legislation, policy or standards, (greater than 60% magnitude of change compared to existing traffic or pedestrian flows, or 30% of peak hour public transport capacity).</li> </ul> | <h2>9.6 BASELINE ASSESSMENT AND IDENTIFICATION OF KEY RECEPTORS</h2>   |  |
| 9.5.20 | The duration of impacts has been reviewed based on the following criteria: <ul style="list-style-type: none"> <li>• <b>Temporary: Short term</b> – less than 6 months;</li> <li>• <b>Temporary: Medium term</b> – 6 months-2 years;</li> <li>• <b>Temporary: Long term</b> – more than 2 years; and</li> <li>• <b>Permanent</b>.</li> </ul> <p><b>Determination of Baseline</b></p>   | <p><b>Site Description</b></p> <p>9.6.1 The site is approximately 4.4 hectares and forms a large, important and strategic site in Shoreditch. Specifically, it 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.</p> <p>9.6.2 The site has been identified in existing planning documents as a major development opportunity that will help to regenerate surrounding areas.</p> <p>9.6.3 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 Boypark who uses the site on a temporary basis, providing leisure and retail uses. The site is also partly occupied by Shoreditch High Street Station. The remaining part of the site is currently vacant.</p> <p>9.6.4 Shoreditch High Street is a two-way single carriageway with a north to south alignment adjacent to the west of the site. 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 subject to a southbound direction only. Shoreditch High Street and Commercial Street form part of the TfL Road Network (TLRN).</p> <p>9.6.5 The existing vehicular access arrangement to the site is as follows: <ul style="list-style-type: none"> <li>• Braithwaite 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 south, although, a barrier is in place towards the centre of the access road. Therefore, vehicles are not permitted to travel through the site via Braithwaite Street;</li> <li>• Shoreditch High Street – a crossover is provided on Shoreditch High Street, however, access for public use is currently hoarded off; and</li> <li>• Brick Lane – a crossover is provided on Brick Lane which is also currently hoarded off for public use.</li> </ul> </p> <p><b>Pedestrian and Cycle Accessibility</b></p> <p>9.6.6 The location of the site 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.</p> <p>9.6.7 There is an extensive pedestrian network, including footways throughout all nearby streets and connections to transport nodes and other local centres. There are multiple pedestrian crossing points available on the surrounding roads, namely in the form of traffic light crossings and zebra crossings. <b>Figure 9.1</b> shows the key pedestrian routes to the site.</p> |  |
| 9.5.21 | The baseline conditions have been consistently changing over recent years due to ongoing highway works in the surrounding area. The baseline conditions have been established through desktop research, GIS analysis, site visits and traffic surveys.  |  |  |
| 9.5.22 | Traffic survey data was commissioned for the surrounding road network, together with pedestrian and cycle routes, by means of a series of automated and manual surveys undertaken in June and July 2018.  |  |  |
| 9.5.23 | Vehicle counts were undertaken along the following roads: <ul style="list-style-type: none"> <li>• Great Eastern Street west of Holywell Lane;</li> <li>• Shoreditch High Street north of Redchurch Street;</li> <li>• Bethnal Green Road east of Shoreditch High Street;</li> <li>• Sclater Street between Bethnal Green Road and Cygnet Street;</li> <li>• Brick Lane between Grimsby Street and Quaker Street;</li> <li>• Wheler Street between Quaker Street and Commercial Street;</li> <li>• Commercial Street between Quaker Street and Shoreditch High Street;</li> <li>• Shoreditch High Street between Commercial Street and Folgate Street; and</li> <li>• Shoreditch High Street between Bethnal Green Road and Commercial Street.</li> </ul>   |  |  |
| 9.5.24 | Pedestrian counts were undertaken along the links and at the junctions bordering the site, as well as the upper and lower walkways of the western side of Bishopsgate. An evaluation of the existing capacity on local footways surrounding the site has been undertaken with reference to TfL’s Pedestrian Comfort Level (PCL) guidance included as part of the TA   |  |  |
| 9.5.25 | Accident data for the local road network has been undertaken over the most recent three-year period for which data is available.  |  |  |
|        | <b>Limitations and Assumptions</b>  |  |  |
| 9.5.26 | The assessment is based upon the baseline conditions and information regarding cumulative schemes which were current at the time when the assessment was undertaken. The net change in trips across the transport network anticipated to arise from the cumulative schemes by the time of the opening of the development has been calculated. Where provided, the distribution of trips across the transport network in the study area has been taken directly from the information contained in the cumulative schemes’ transport assessments. Where unavailable, the distribution has been  |  |  |



Figure 9.1 Principal pedestrian routes to the site

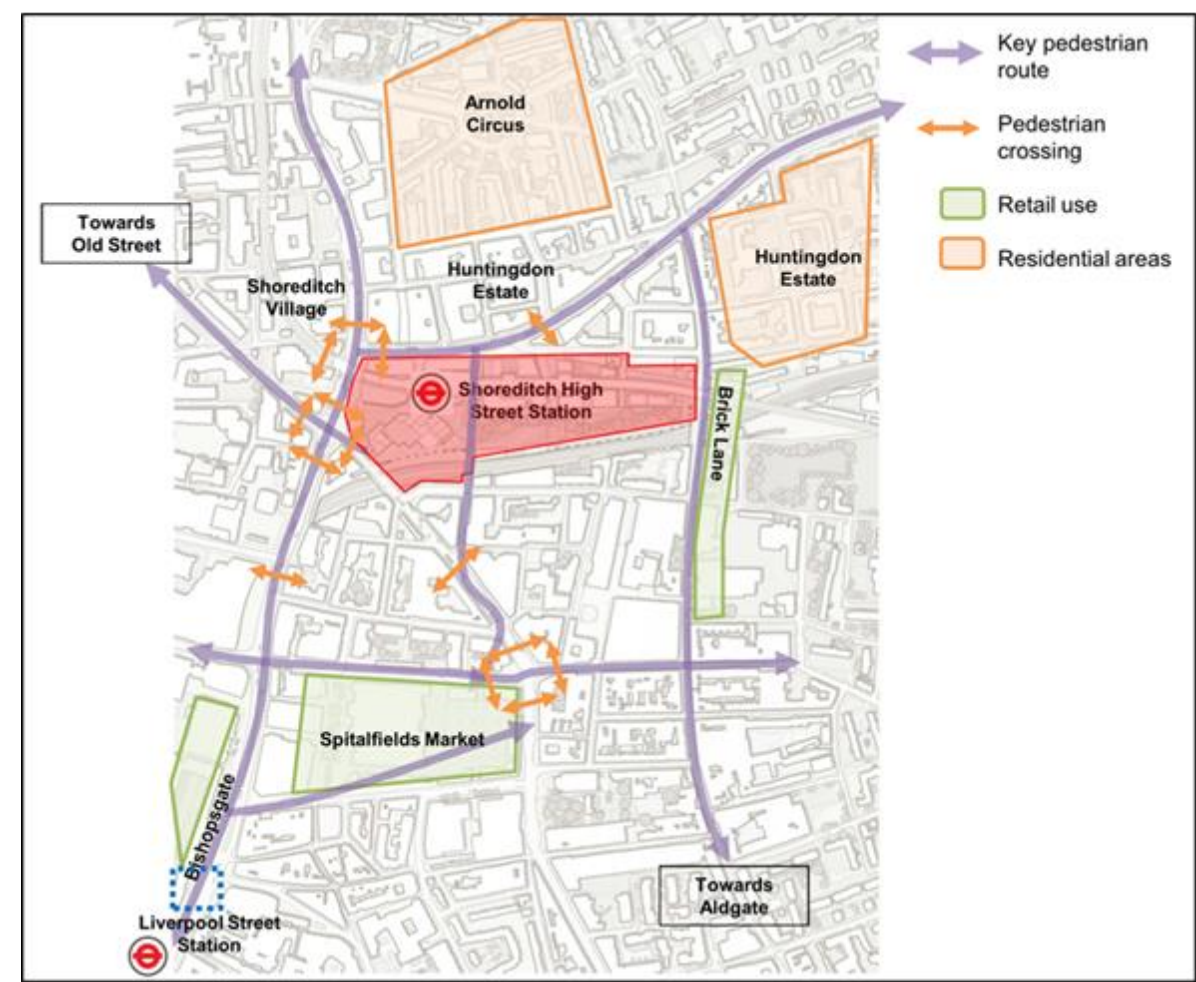
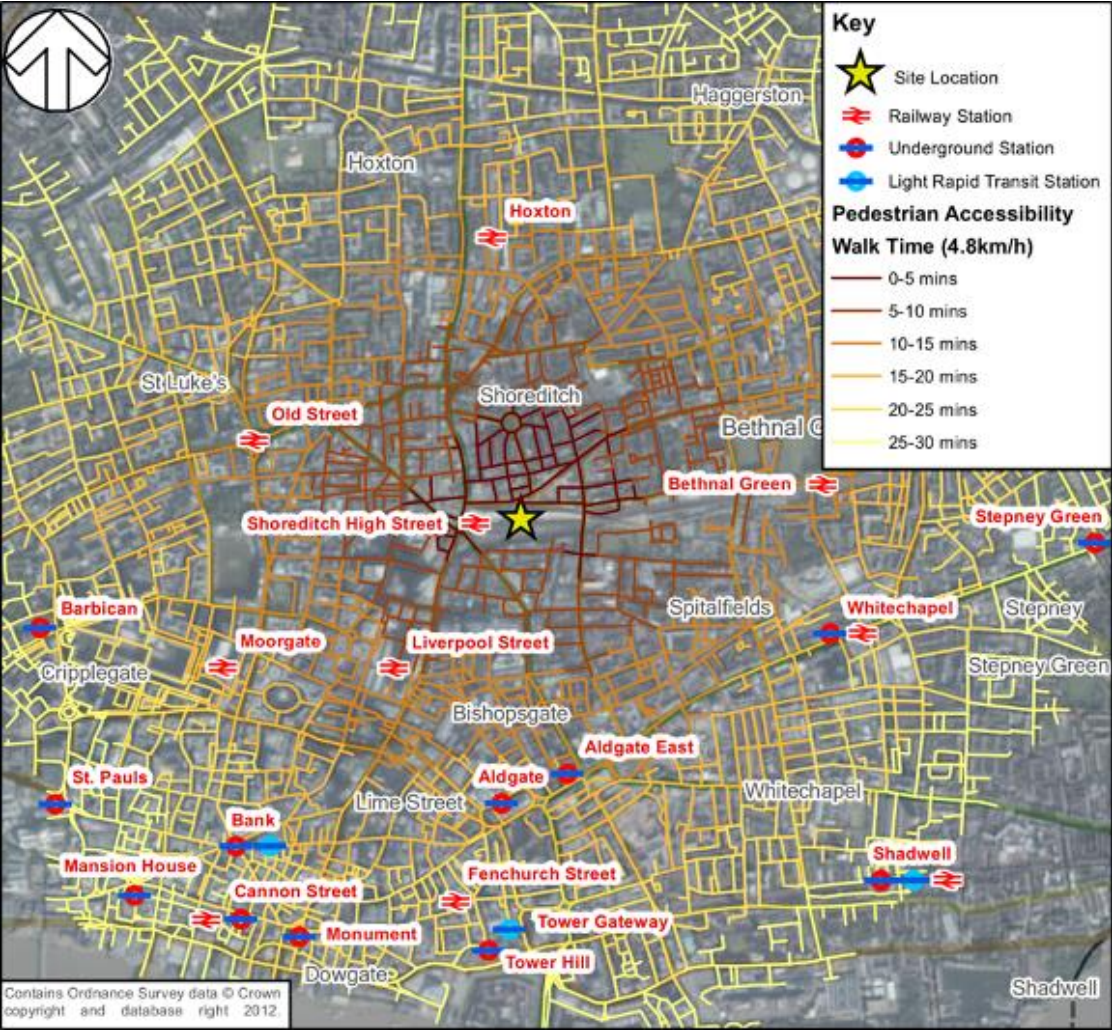


Figure 9.2 Pedestrian Isochrones



- 9.6.8 In terms of the internal layout, there are two main routes across the site. 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, an internal route runs in an east to west alignment towards the southern boundary of the site; however, this route does not provide a public through route across the site at present.
- 9.6.9 Footways are provided adjacent to the site along Bethnal Green Road, Sclater Street, Brick Lane, Commercial Street and Shoreditch High Street.
- 9.6.10 Pedestrian crossing facilities are provided at the Shoreditch High Street/Bethnal Green Road/Holywell Lane and Shoreditch High Street/Commercial Street/Great Eastern Street signal controlled junctions 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 would need to do so in sections, stopping on two pedestrian islands along the route (two signal stages).
- 9.6.11 A pedestrian crossing facility is also provided on Bethnal Green Road, just to the east of its junction with Sclater Street. It is acknowledged that this crossing is not currently situated on the desire line between Shoreditch High Street Station and the eastbound bus stop on Bethnal Green Road.
- 9.6.12 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.
- 9.6.13 Existing walking isochrones for the immediate vicinity of the site are shown in **Figure 9.2**.

- 9.6.14 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 9.10** below summarises key amenities and associated approximate walking distances.

Table 9.10 Key Amenities and Associated Approximate Walking Distances from the site

| Local Amenity        | Location               | Approximate Walking Distance from Centre of Site (metres) |
|----------------------|------------------------|---|
| Foodstore            | Shoreditch High Street | 350   |
| 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   |



9.6.15 With reference to the pedestrian count survey data (described earlier in the chapter) and footway widths obtained by topographical survey measurements, baseline PCLs have been identified on key links by the TfL PCL spreadsheet. This exercise is summarised in the tables below.

Table 9.11 Baseline PCL Link Audit – Weekday

| Link |   | Width (metres) | 2019 PCL        |                        |                 |
|------|---|----------------|-----------------|------------------------|-----------------|
|      |   |                | 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               |

Table 9.12 Baseline PCL Link Audit – Weekend

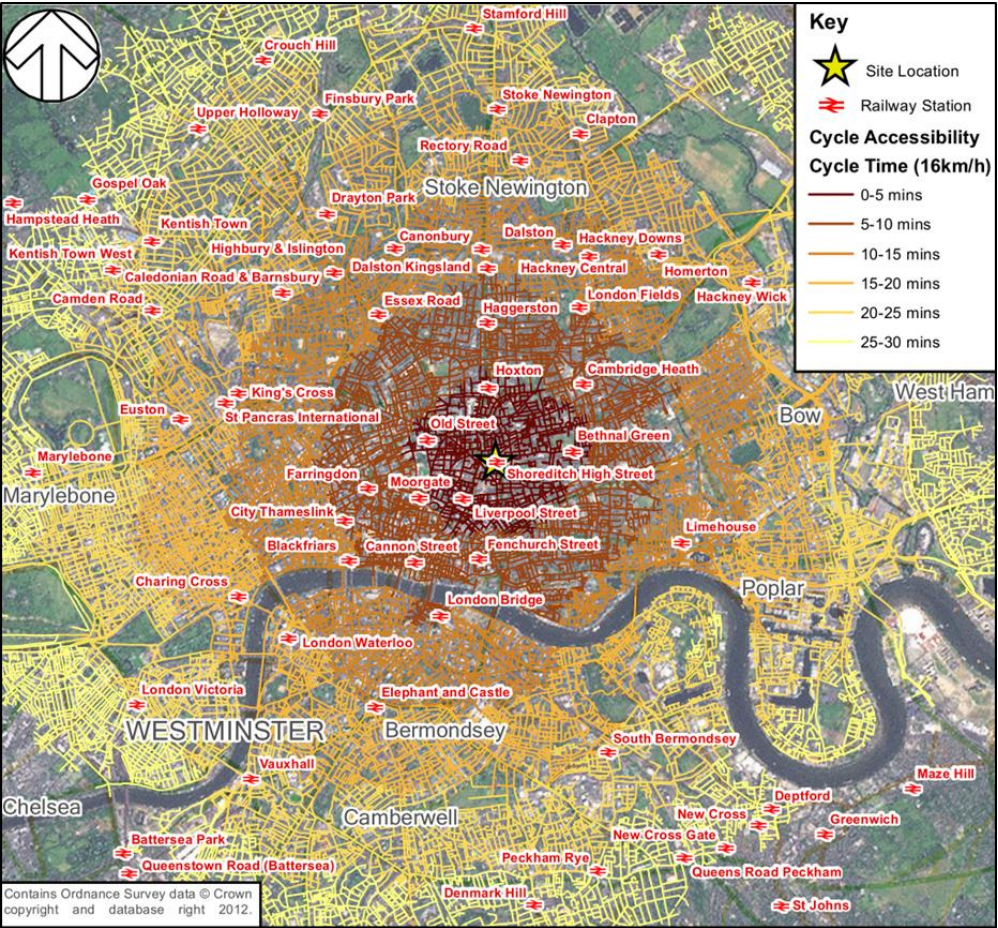
| Link |                                    | Width (metres) | 2019 PCL      |             |
|------|------------------------------------|----------------|---------------|-------------|
|      |                                    |                | Saturday Peak | Sunday Peak |
| 1a   | Bethnal Green 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*

Cycle Network and Facilities

9.6.16 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 in **Figure 9.3** below. The isochrones demonstrate that much of central London is accessible within a 15 minute journey.

Figure 9.3 Cycle Isochrones



- 9.6.17 A signed route for cyclists runs in a north to south alignment directly through the site via Braithwaite Street. In addition, a signed route for cyclists (London Cycle Network (LCN) 9) is provided adjacent to the west of the site on Shoreditch High Street. This cycle route provides access towards Stoke Newington to the north and central London to the south, including access to Liverpool Street underground and rail station.
- 9.6.18 Brick Lane, adjacent to the east of the site, offers a north to south ‘quieter’ cycle route recommended by cyclists. Brick Lane provides access towards Bethnal Green to the north, and the junction of Whitechapel Road/Vallance Road to the south where Cycle Superhighway 2 (CS2) is located. Cycle Superhighway CS2 is provided on Whitechapel Road, Whitechapel High Street, Mile End Road, Bow Road and Stratford High Street, connecting Stratford to the east with Aldgate East to the west.
- 9.6.19 A ‘quieter’ cycle route recommended by cyclists is located adjacent to the north of the site on 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 ‘quieter’ 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.
- 9.6.20 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.
- 9.6.21 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.
- 9.6.22 Covered cycle parking for 20 bikes is provided adjacent to the north of the entrance to Shoreditch High Street station. In addition, eight Sheffield stands (suitable for parking 16 bikes) 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.
- 9.6.23 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 24 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.
- 9.6.24 Local cycling infrastructure in close proximity includes two Santander Cycles station on the A1209 and at Brick Lane Market.

**Public Transport Services**

- 9.6.24.1 Access is readily available to the site via public transport through bus, Overground, underground and rail. This is reflected by the centre of the site having a Public Transport Accessibility Level (PTAL) of 6b, the highest rating possible, as demonstrated below. The majority of the site has a PTAL of 6b or 6a, with the southeastern corner having a PTAL of 5.

**Bus**

- 9.6.25 Bus stops are located adjacent to the site on Bethnal Green Road and Commercial Street. Specifically, a bus stop is located on the southern side of Bethnal Green Road in close proximity to Shoreditch High Street Station. The bus stop provides access to eastbound services for bus routes 8, 388 and N8. A bus stop for westbound services is located on the opposite side of the carriageway.
- 9.6.26 A bus stop is also located on the northern side of Commercial Street, providing access to southbound services for bus route 67. A bus stop for northbound services is located on the southern side of Commercial Street. Further bus stops are located 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, N205.
- 9.6.27 The site is served by approximately 97 buses per hour in both directions during a weekday, as summarised in **Table 9.13** below.

Table 9.13 Table 9.13 Weekday Bus 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                                  |



| Stop   | Route | Direction          | AM Peak Frequency (buses per hour) | PM Peak Frequency (buses per hour) |
|--|-------|--------------------|------------------------------------|------------------------------------|
| 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  | 5                                  | 5                                  |
| Bethnal Grn Rd Shoreditch High St (Stop J) - E-bound | 388   | Stratford New Town | 5                                  | 5                                  |
| Commercial Street Worship St (Stop D) - S-bound      | 388   | Elephant & Castle  | 5                                  | 5                                  |
| Shoreditch High Street Station (Stop K) - W-bound    | A8    | St Pancras         | 2                                  | 2                                  |
| Bethnal Grn Rd Shoreditch High St (Stop J) - E-bound | A8    | Stansted Airport   | 1                                  | 2                                  |

#### London Overground

9.6.28 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 both directions.

Figure 9.4 Local Overground, Underground and Rail Stations



9.6.29 The ticket hall of Shoreditch High Street 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 both directions. **Table 9.14** below contains details of train frequencies during peak hour periods.

Table 9.14 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  |

9.6.30 Specifically, 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. Eight trains per hour continue to Highbury and Islington to the north, whilst to the south there are four trains per hour to New Cross and eight trains per hour on the common section to New Cross Gate and Sydenham.

9.6.31 There are numerous Underground and National Rail interchange opportunities available along the Overground network, as detailed in **Table 9.15** below. 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 Overground to or from Shoreditch High Street are likely to be attractive to site users.

#### Underground

9.6.32 The nearest 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. 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. Trains run northbound towards Edgware, High Barnet and Mill Hill East, and southbound towards Morden.

Table 9.15 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           |

9.6.33 Old Street station is located approximately 1 kilometre to the northwest of the site, and is served by the Bank branch of the Northern line. Trains run northbound towards Edgware, High Barnet and Mill Hill East, and southbound towards

Morden. **Table 9.16** below details the frequency of underground services from Old Street station.

Table 9.16 Table 9.16 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          |

National Rail

9.6.34 The nearest National Rail station to the site is Liverpool Street station, which is managed by Network Rail. In addition to the underground, 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 9.17 National Rail Services Operating from London Liverpool Street Station

| Destinations      | Weekday AM | Weekday PM |
|-------------------|------------|------------|
| Cambridge         | 2          | 1          |
| Cambridge North   | 1          | 0          |
| Cheshunt          | 2          | 1          |
| Chingford         | 2          | 2          |
| Clacton On Sea    | 1          | 1          |
| Enfield Town      | 2          | 2          |
| Gidea Park        | 3          | 3          |
| Hertford East     | 1          | 1          |
| Ipswich           | 2          | 1          |
| Norwich           | 1          | 2          |
| Shenfield         | 4          | 2          |
| Southend Victoria | 2          | 3          |
| Stansted Airport  | 2          | 2          |
| Braintree         | 0          | 1          |
| Kings Lynn        | 0          | 1          |
| Southminster      | 0          | 1          |
| Witham            | 0          | 1          |

9.6.35 In addition to the underground, Old Street station is also served by Great Northern trains to a number of destinations north of the site including Finsbury Park, Hertford North and Welwyn Garden City. **Table 9.18** below provides a summary of the frequency of National Rail services operating from Old Street station.

Table 9.18 National Rail Services Operating from Old Street

| Destinations              | Weekday AM | Weekday PM |
|---------------------------|------------|------------|
| Gordon Hill               | 2          | 3          |
| Hertford North            | 3          | 3          |
| Moorgate (Great Northern) | 12         | 11         |
| Stevenage                 | 1          | 1          |
| Watton At Stone           | 1          | 1          |
| Welwyn Garden City        | 4          | 4          |

Public Transport Accessibility Level (PTAL)

9.6.36 Site specific PTAL calculations have been undertaken by TfL based on the currently contracted public transport service frequencies during the AM peak period between 08:15 and 09:15. 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**. It is acknowledged that PTAL does not take into account pedestrian and cycle facilities or public transport interchange opportunities.

Local Road Network

9.6.37 Shoreditch High Street is a two-way single carriageway with a north to south alignment adjacent to the west of the site. 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 subject to a southbound direction only.

9.6.38 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. Shoreditch High Street and Commercial Street form part of the TfL Road Network (TLRN).

9.6.39 As mentioned, traffic flow survey data was collected in 2018 local links and at local junctions to determine baseline highway conditions. This is presented in detail within the Transport Assessment submitted as part of this planning application.

Road Safety

9.6.39.1 Personal injury accident (PIA) records for the area surrounding the site have been obtained for the most recent five-year period for which data is available. They are summarised in **Table 9.19** below.

Table 9.19 Summary of PIA Data

| Location   | Slight Serious |         |       | 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

- 9.6.40A 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.
- 9.6.41Of 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”.
- 9.6.42Of the 22 slight PIAs across all modes, there were:
  - 10 records citing “not known how collision occurred”;
  - 3 records where a pedestrian stepped into the road into vehicles path;
  - 2 records which were attributed to sharp breaking; and
  - 7 records which were attributed to turning collisions, undertaking, overtaking or cutting across the adjacent vehicle path.

Shoreditch High Street/Bethnal Green Road/Holywell Lane junction

- 9.6.43A 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.
- 9.6.44Of 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.
- 9.6.45Of 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

- 9.6.46A 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.
- 9.6.47For the pedestrian and the pedal cycle incidents, the records state that it was not known how this collision occurred.
- 9.6.48For the vehicular accident, a vehicle collided into the back of the vehicle in front, resulting in a crash

Commercial Street/Quaker Street/Elder Street Junction

- 9.6.49A 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).
- 9.6.50The pedestrian accident was caused by the pedestrian crossing the road in-between stationary parked cars, thus limiting visibility to the oncoming vehicle.
- 9.6.51The two cyclist accidents were a result of vehicles turning right and crossing the path of the cyclists. (George/Allan, this is the only detail provided but would further inferences need to be made here either about cyclist failing to see right turn or driver failing to clock cyclist in nearside mirrors?) GB – you’re right, the PIA records don’t label ‘V1’ etc so no way to know
- 9.6.52For 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.
- 9.6.53It is considered that the analysis of PIA data does not identify a pattern which suggests an underlying issue with highway safety. Notwithstanding this, it is acknowledged that TfL is currently investigating cycle improvements along Shoreditch High Street/Commercial Street and WSP is working alongside TfL to accommodate these within the Revised Scheme where possible. It is therefore concluded that the existing highway and pedestrian infrastructure in the vicinity of the site is operating satisfactorily.

Car Clubs

- 9.6.54Two 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.

Conclusions

- 9.6.55Based on the assessment of baseline transport conditions, the main receptors of relevance to the Revised Scheme are pedestrians, cyclists and public transport users.

9.7 IDENTIFICATION AND DESCRIPTION OF CHANGES LIKELY TO GENERATE EFFECT

Identification and Description of Changes Likely to Generate Effect

- 9.7.1The following changes to the baseline arising from the Revised Scheme are likely to generate effects of relevance to the assessment:

Construction Phase

  - Impacts of construction traffic on the local and wider highway network, including the routing of construction traffic during the different phases of construction, along with the consequential effects on pedestrian routes and access to the site in general; and
  - Impacts on pedestrian and cycle routes requiring temporary closure to facilitate construction works.

Operational Phase

  - additional pedestrian and cycle movements during operation, particularly during the peak AM and PM hours;
  - additional movements on public transport networks during operation, particularly during the peak AM and PM hours; and
  - additional traffic movements attributable to deliveries and servicing.

9.8 ASSESSMENT OF LIKELY SIGNIFICANT EFFECT

Construction phase

Embedded Mitigation Measures

- 9.8.1Embedded mitigation measures of relevance to the construction phase include the phased opening of the site, such that the internal pedestrian routes are not conflicting with construction activity.



- 9.8.2 All construction contractors will be required to register under the Considerate Constructors Scheme. They will adhere to the CLOCS (Construction Logistics and Community Safety) standard, thereby ensuring that the contractors, together with their suppliers and sub-contractors, follow safe practices.
- 9.8.3 No car parking for construction staff will be provided on site, but cycle parking will be provided which, together with the site's excellent public transport accessibility, will promote sustainable travel by construction workers.
- 9.8.4 Construction vehicle operators will be required to be accredited with the Fleet Operator Recognition Scheme (FORS), confirming 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.
- 9.8.5 The Principal Contractor will be responsible for coordinating all deliveries and collections to and from the site, ensuring that all drivers are aware of the mandated routes. Deliveries will be made on a 'just in time' basis, and larger vehicles would be scheduled to travel on the road network outside of peak hours. The Principal Contractor will manage the delivery slot booking process, and will also take responsibility for keeping local residents and other stakeholders informed of upcoming construction and logistics activity in and around the site.

**Anticipated Effects**

- 9.8.6 During the construction of the Revised Scheme there is anticipated to be a direct, reversible, temporary, short term, minor adverse effect on bus delay, cyclist delay and driver delay arising from the movement of construction traffic on the road network around the site. The volume of traffic generated by construction is low as a proportion of existing traffic volumes (including heavy vehicles).
- 9.8.7 The turning movements of construction vehicles into and out of the construction site accesses present a direct, reversible, temporary, short term, **minor adverse** effect on cyclist safety since a conflict may arise when vehicles turn left into the construction site entrances. The effect is less severe upon exit since construction traffic will be stationary before pulling out of the construction site egress.
- 9.8.8 The turning movements of construction vehicles into and out of the construction site accesses present a direct, reversible, temporary, short term, **minor adverse** effect on pedestrian delay as it may be necessary to close the footway for a brief amount of time in order to avoid conflict when vehicles are turning across it. Given that such closures are likely to last for less than a minute, this will be below 30% of the journey length and thus gives a negligible impact on delay.
- 9.8.9 There may be a direct, reversible, temporary, short term, negligible adverse effect on pedestrian amenity arising from the adjacent construction. In the event of the temporary erection of hoarding to close the footway (i.e. not just a temporary interruption to pedestrian flow), the presence of nearby crossing facilities means that diversion from the desire line can be kept to a minimum, and thus there would still only be a **negligible** impact on pedestrian delay as well as amenity since journeys would not increase in length by more than 30%.
- 9.8.10 Delay to public transport users may arise from increases in HGV movements and turning movements. Volumes of HGVs would increase by less than 10% relative to current levels and would lead to **negligible** effect on public transport user delay.
- 9.8.11 The low (<10%) increase in HGV volumes also means that delay to existing car drivers on the road network will be subject to a **negligible** effect.

**Operational Phase**

**Embedded Mitigation Measures**

- 9.8.12 The Revised Scheme includes significant improvements to pedestrian facilities around the area of the site, in particular a new east-west thoroughfare and improvements to the public realm along Braithwaite Street. This will also serve to spread the new footfall across a wider range of routes and thus reduce congestion at pinch points.
- 9.8.13 The site surrounds a London Overground station and has a cycle route (Braithwaite Street) running through it. Consequently the location and design of the site is ideal for distribution of trips across a range of routes. Building 2 has a rear entrance onto Commercial Street which will further assist in the distribution of pedestrian movements.
- 9.8.14 No on-site car parking will be provided, thereby minimising car usage associated with the Revised Scheme, and instead promoting transport by sustainable modes. A blue badge parking bay on Sclater Street on the northern side of the development will provide for the needs of site users requiring an accessible parking space.

**Anticipated Effects**

- 9.8.15 Cyclists will experience a **minor beneficial** effect in terms of amenity thanks to the enhancements to Braithwaite Street as a through route. The provision of additional public cycle parking will add to this benefit.
- 9.8.16 A **negligible** impact on pedestrian delay may be experienced at certain locations such as the western end of Bethnal

Green Road and the crossings with Shoreditch High Street, as a result of increases in pedestrians crossing the road. The magnitude is negligible since journey distance and time would increase by less than 30%.

- 9.8.17 **Tables 9.20** and **9.21** below shows the comparison of Pedestrian Comfort Levels (PCLs) during weekdays and weekends respectively.



Table 9.20 Future PCL Link Audit – Weekday

| Link |   | Future Width (metres) | With Development PCL |                        |                 |
|------|---|-----------------------|----------------------|------------------------|-----------------|
|      |   |                       | Weekday AM Peak      | Weekday Lunchtime Peak | Weekday PM Peak |
| 1a   | Bethnal Green Road (north side)           | 3.6                   | B+                   | B+                     | B+              |
| 1b   | Bethnal Green Road (south side)           | 5                     | B+                   | A                      | B-              |
| 2a   | Sclater Street (north side)               | 2.3                   | A+                   | A+                     | A               |
| 2b   | Sclater Street (south side)               | 4.5                   | A+                   | A+                     | A               |
| 3a   | Brick Lane (east side)                    | 2                     | A                    | A-                     | B               |
| 3b   | Brick Lane (west side)                    | 2.1                   | A+                   | A+                     | A+              |
| 4a   | Quaker Street (north side)                | 2                     | A-                   | A                      | A-              |
| 4b   | Quaker Street (south side)                | 2.3                   | A+                   | A+                     | A+              |
| 5a   | Commercial Street (north side)            | 2.5                   | B                    | A-                     | B               |
| 5b   | Commercial Street (south side)            | 2.7                   | A-                   | A-                     | B+              |
| 6a   | Shoreditch High Street (east side)        | 3.5                   | A                    | A+                     | A               |
| 6b   | Shoreditch High Street (west side)        | 3                     | A-                   | B                      | B               |
| 7a   | Middle Road (East of Braithwaite)         | 9.5                   | A                    | B+                     | A-              |
| 7b   | Middle Road (West of Braithwaite)         | 13                    | A                    | A-                     | A               |
| 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-                   | C-                     | D               |
| 9b   | Bishopsgate West side (upper walkway)     | 4.5                   | A                    | A-                     | A               |

Table 9.21 Future PCL Link Audit – Weekend

| Link |                                    | Future Width (metres) | With Development PCL |             |
|------|------------------------------------|-----------------------|----------------------|-------------|
|      |                                    |                       | Saturday Peak        | Sunday Peak |
| 1a   | Bethnal Green Road (north side)    | 3.6                   | A                    | A-          |
| 1b   | Bethnal Green Road (south side)    | 5                     | A-                   | B+          |
| 2a   | Sclater Street (north side)        | 2.3                   | A                    | A-          |
| 2b   | Sclater Street (south side)        | 4.5                   | A                    | A           |
| 3a   | Brick Lane (east side)             | 2                     | B-                   | B+          |
| 3b   | Brick Lane (west side)             | 2.1                   | A+                   | A+          |
| 6a   | Shoreditch High Street (east side) | 3.5                   | A+                   | A           |
| 6b   | Shoreditch High Street (west side) | 3                     | A-                   | B+          |

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

- 9.8.18 In comparison to the baseline scenario, the Revised Scheme 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. Using the existing distribution of pedestrians between the upper and lower walkways, the latter would be projected to experience a reduction in PCL to C- in the weekday morning and lunchtime peaks, and to D in the afternoon peak. All other links would experience a PCL of C+ or better.
- 9.8.19 **Table 9.22** below compares the volumes of weekday pedestrian flow at the locations where the PCL assessment has been undertaken.

Table 9.22 Pedestrian Flows on Selected Links

| Link |                                 | AM base flow | AM future flow | AM % increase | Lunchtime base flow | Lunchtime future flow | Lunchtime % increase | PM base flow | PM future flow | PM % increase |
|------|---------------------------------|--------------|----------------|---------------|---------------------|-----------------------|----------------------|--------------|----------------|---------------|
| 1a   | Bethnal Green Road (north side) | 1716         | 1894           | 10%           | 1209                | 2147                  | 78%                  | 1822         | 2027           | 11%           |
| 1b   | Bethnal Green Road (south side) | 2300         | 2539           | 10%           | 726                 | 1288                  | 78%                  | 3670         | 4083           | 11%           |
| 2a   | Sclater Street (north side)     | 102          | 103            | 1%            | 148                 | 160                   | 8%                   | 501          | 506            | 1%            |

| Link |   | AM base flow | AM future flow | AM % increase | Lunchtime base flow | Lunchtime future flow | Lunchtime % increase | PM base flow | PM future flow | PM % increase |
|------|---|--------------|----------------|---------------|---------------------|-----------------------|----------------------|--------------|----------------|---------------|
| 2b   | Sclater Street (south side)               | 493          | 499            | 1%            | 455                 | 492                   | 8%                   | 745          | 752            | 1%            |
| 3a   | Brick Lane (east side)                    | 384          | 397            | 3%            | 518                 | 596                   | 15%                  | 1340         | 1374           | 2%            |
| 3b   | Brick Lane (west side)                    | 599          | 620            | 3%            | 773                 | 889                   | 15%                  | 1316         | 1349           | 2%            |
| 4a   | Quaker Street (north side)                | 605          | 637            | 5%            | 193                 | 330                   | 71%                  | 650          | 718            | 10%           |
| 4b   | Quaker Street (south side)                | 172          | 181            | 5%            | 80                  | 136                   | 71%                  | 152          | 168            | 10%           |
| 5a   | Commercial Street (north side)            | 545          | 1494           | 174%          | 415                 | 1063                  | 156%                 | 856          | 1474           | 72%           |
| 5b   | Commercial Street (south side)            | 331          | 908            | 174%          | 311                 | 796                   | 156%                 | 692          | 1191           | 72%           |
| 6a   | Shoreditch High Street (east side)        | 1921         | 2941           | 53%           | 1108                | 2484                  | 124%                 | 2918         | 3752           | 29%           |
| 6b   | Shoreditch High Street (west side)        | 784          | 1201           | 53%           | 812                 | 1819                  | 124%                 | 1662         | 2137           | 29%           |
| 8a   | Braithwaite Street (North of Middle Road) | 1259         | 1752           | 39%           | 1668                | 5299                  | 218%                 | 2554         | 3674           | 44%           |
| 8b   | Braithwaite Street (South of Middle Road) | 1541         | 2765           | 79%           | 1903                | 4361                  | 129%                 | 2785         | 3997           | 43%           |
| 9a   | Bishopsgate West side (lower walkway)     | 1608         | 2515           | 56%           | 639                 | 2958                  | 363%                 | 1369         | 2430           | 78%           |
| 9b   | Bishopsgate West side (upper walkway)     | 582          | 837            | 44%           | 137                 | 517                   | 278%                 | 438          | 670            | 53%           |

9.8.20 As shown in **Table 9.22**, on certain links there is expected to be a noticeable increase in pedestrian flow. However, it

should be noted that in several cases these are due to the baseline footfall being lower than might be expected for a street of this nature, such as the north side of Commercial Street with just 366 pedestrians per hour. In future the flow will be much higher but there will also be an active frontage, improved public realm and a relocated pedestrian crossing to improve connectivity.

9.8.21 Furthermore, as demonstrated in the PCL analysis, even links experiencing a high percentage increase in footfall will still be able to offer a high level of pedestrian comfort. An increase (absolute or relative) in pedestrian flow does not in itself give rise to a negative effect, and given the additional pedestrian capacity being created on certain routes there are areas where pedestrian delay will be reduced thanks to the creation of more direct routes on desire lines, resulting in a minor positive effect to delay.

9.8.22 At locations where localised increases in pedestrian flow are not fully offset by increases in capacity, there may be a permanent **minor adverse** effect on amenity arising from the increased footfall. At several locations there will be a permanent, **major beneficial** effect in amenity arising from the high-quality public realm.

9.8.23 Delay to public transport users on the road (bus passengers) may arise from increases in HGV movements and turning movements due to servicing. Volumes of HGVs would increase by less than 10% relative to current levels and would lead to negligible additional delay.

9.8.24 The additional public transport trips generated by the Revised Scheme are anticipated to generate additional journeys leading to a direct, permanent, long-term, minor adverse impact on comfort for rail and Underground passengers as well as bus passengers. **Tables 9.23 to 9.26** below quantify the change in passenger numbers for rail/Underground and buses respectively.

Table 9.23 Additional passengers per rail/Underground train – AM peak

| Rail corridor                            | Additional passengers – AM peak hour inbound | Additional passengers – AM peak hour outbound | Additional passengers – AM peak per train inbound | Additional passengers – AM peak per train 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  |

Table 9.24 Additional passengers per rail/Underground train – PM peak

| Rail corridor                  | Additional passengers – AM peak hour inbound | Additional passengers – AM peak hour outbound | Additional passengers – AM peak per train inbound | Additional passengers – AM peak per train outbound |
|--------------------------------|--|---|---|--|
| Shoreditch High Street (North) | 21   | 98  | 1.3   | 6.1  |
| Shoreditch High Street (South) | 30   | 226   | 1.9   | 14.1   |

| Rail corridor                            | Additional passengers – AM peak hour inbound | Additional passengers – AM peak hour outbound | Additional passengers – AM peak per train inbound | Additional passengers – AM peak per train outbound |
|--|--|---|---|--|
| 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   |

Table 9.25 Additional Passengers per bus - AM

| Route | Direction | Additional passengers – AM peak hour inbound | Additional passengers – AM peak hour outbound | Additional passengers – AM peak per bus inbound | Additional passengers – AM peak per bus 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  |

| Route | Direction | Additional passengers – AM peak hour inbound | Additional passengers – AM peak hour outbound | Additional passengers – AM peak per bus inbound | Additional passengers – AM peak per bus outbound |
|-------|-----------|--|---|---|--|
| 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 9.26 Additional Passengers per bus - PM

| Route | Direction | Additional passengers – AM peak hour inbound | Additional passengers – AM peak hour outbound | Additional passengers – AM peak per bus inbound | Additional passengers – AM peak per bus 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  |

| Route | Direction | Additional passengers – AM peak hour inbound | Additional passengers – AM peak hour outbound | Additional passengers – AM peak per bus inbound | Additional passengers – AM peak per bus outbound |
|-------|-----------|--|---|---|--|
| 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  |

9.8.25 It can be seen that in all cases the increase in passenger numbers arising from the Revised Scheme is less than 5% of the existing ridership. The greatest increase in ridership is six passengers per bus on route 67 in the AM peak hour. Consequently, the Revised Scheme will have a minor adverse impact on passenger delay and amenity with regards to public transport, due to a short addition to dwell time at stops.

9.8.26 The small (<10%) increase in road traffic arising from the Revised Scheme will have a negligible impact on car driver delay.

Anticipated Effects of Applying the Minimum Development Parameter

9.8.27 The application of the minimum parameter is not considered to represent a change in effects compared to the assessment of the maximum build-out scenario. Public transport trip generation will be lower – and therefore passenger delay and amenity will still experience a minor effect – while the increase in pedestrian footfall, while lower than in the maximum built-out scenario, will still lead to a major increase in footfall on certain links.

9.9 SCOPE FOR ADDITIONAL MITIGATION MEASURES

Potential Additional Mitigation Measures

Construction phase

- 9.9.1The Outline Construction Logistics Plan (OCLP) will contain details of the measures by which conflict between construction vehicles and pedestrians and cyclists will be minimised. In particular, drivers will be made aware in advance of commencing their deliveries of the principal potential conflict points where extra care should be taken. Construction vehicles can also wait at a safe place on the road until they are cleared to enter the construction site, thereby minimising pedestrian delay as the time during which the footway must be closed can be kept to a minimum.
- 9.9.2The provision of pedestrian signage, updated periodically, around the perimeter of the site can also serve to direct pedestrians onto alternative routes in the event of a footway being temporarily closed, thus minimising pedestrian delay.

Operational phase

- 9.9.3Enhanced pedestrian wayfinding can contribute to a more efficient distribution of pedestrians across the wider network and therefore reduce congestion at pinch points.
- 9.9.4Provision of maps within the public realm and via online sources of information can also encourage site visitors to arrive and depart via a wider range of entry points across the public transport network, and not just those closest to the site: thus, as an example, alternatives to Shoreditch High Street Overground station would include a short walk from Whitechapel station. This will assist in reducing overcrowding on principal public transport routes.
- 9.9.5A Travel Pack for occupiers of the office space in Plot 2 will encourage workers travelling to and from Liverpool Street station to use the rear entrance on Commercial Street and then to cross Commercial Street by means of the pedestrian crossing which will be relocated northwards by TfL. This will reduce delay at the Shoreditch High Street / Commercial Street junction.
- 9.9.6Signage can also be provided at both ends of the Bishopsgate upper walkway to direct pedestrians to use it in place of the lower walkway, thereby making better use of the available capacity. Furthermore, Travel Packs and pedestrian wayfinding can also encourage pedestrians travelling to and from Liverpool Street to use the eastern side of Bishopsgate, which again will lead to improved amenity and reduced delay if pedestrians are more evenly distributed.
- Likely Effectiveness of Additional Mitigation Measures
- 9.9.7The measures in the OCLP are anticipated to represent effective mitigation against adverse impacts during construction, and therefore there are not considered to be significant residual effects during the construction period.
- 9.9.8The provision of improved wayfinding and information for visitors accessing the site is expected to reduce overcrowding to a degree at pedestrian pinch points, though some will remain where there are fewer alternative routes and/or a large number of visitors remain unfamiliar with them. While this may not reduce the severity of the impact, it is nevertheless considered to be a minor effect which is not significant.
- 9.9.9Mitigation is not likely to have a noticeable impact on transport overcrowding since the key routes (Central line and Overground) will be subject to increases in patronage. Nevertheless, it is considered that this effect will remain minor and not significant.

9.10 RESIDUAL EFFECTS

9.10.1 **Table 9.27** provides a summary of the residual effects resulting from the Revised Scheme after effective implementation of the embedded and additional mitigation measures proposed above.

Table 9.27 Significant Residual Effects

| Phase        | Resource or Receptor Affected  | Residual Effect                   |
|--------------|--|-----------------------------------|
| Construction | Pedestrians - delay  | Temporary negligible effect       |
|              | Cyclists - delay   | Temporary negligible effect       |
|              | Cyclists – fear and intimidation   | Temporary negligible effect       |
|              | Public transport users - delay   | Temporary negligible effect       |
|              | Car drivers - delay  | Temporary negligible effect       |
| Operation    | Pedestrians – amenity (at locations where increase in footfall is not offset by public realm improvements) | Permanent minor adverse effect    |
|              | Pedestrians – amenity (at other locations)   | Permanent major beneficial effect |



| Phase | Resource or Receptor Affected              | Residual Effect                        |
|-------|--|--|
|       | Pedestrians - delay                        | Permanent negligible beneficial effect |
|       | Cyclists - amenity                         | Permanent minor beneficial effect      |
|       | Public transport users - delay and amenity | Permanent minor adverse effect         |
|       | Car drivers - delay                        | Permanent negligible effect            |

## 9.11 CUMULATIVE EFFECTS

- 9.11.1 Cumulative effects are the combined effects of several development schemes (in conjunction with the Revised Scheme) which may, on an individual basis be insignificant but, cumulatively, have a significant effect.
- 9.11.2 The ES Addendum chapter has given consideration to 'Cumulative 'Effects' for schemes agreed as part of the scoping exercise.
- 9.11.3 The transport assessments submitted as part of these planning applications have been reviewed in order to derive the additional trips generated by the cumulative schemes. Where unavailable, trip generation has been estimated using the floorspaces in the application to which the trip generation method for Bishopsgate Goodsyards has been applied.
- 9.11.4 The principal cumulative scheme of relevance to the transport scope of the ES Addendum chapter is the Shoreditch Highgate Hotel proposed at 201-207 Shoreditch High Street. The development is expected to generate up to 301 inbound and 289 outbound pedestrian trips during the AM and PM peak hours respectively. However this additional volume of footfall is projected to have a negligible additional impact when compared to the assessment without cumulative schemes, insofar as the presence of a second pedestrian route from the Shoreditch High Street / Bethnal Green Road junction to the Overground station will reduce the pressure on the southern footway of Bethnal Green Road. The negligible increase in passenger numbers on public transport routes has a negligible effect on public transport amenity.
- 9.11.5 Not all of the cumulative schemes are located within a distance as to generate pedestrian trips which enter the study area. Of those that do, it has been determined that the combined cumulative schemes will generate no more than 367 additional pedestrian movements per hour on links within the study area; the figure of 367 additional pedestrian movements in the AM peak hour is predicted along Shoreditch High Street between the Commercial Street and Bethnal Green Road junctions. Consequently, a portion of this footfall will also divert via the new pedestrian network of the Revised Scheme, thereby further reducing the pedestrian impact of cumulative schemes. The cumulative schemes are therefore considered to have a negligible impact on pedestrian receptors.
- 9.11.6 The cumulative schemes are calculated to generate an additional 32 two-way vehicle movements per hour along Commercial Street during the AM peak hour, with lower flows on other links and at other times of day. The addition of one vehicle every two minutes is considered to have a negligible impact on the traffic impacts with respect to those already assessed as part of the Revised Scheme.
- 9.11.6.1 The total net trip generation by the cumulative schemes across all public transport modes is 4,275 two-way total movements during the AM peak hour, of which 770 by bus and 3,505 by rail-based modes. Not all of the cumulative schemes' TAs provide details of the trip distribution, and it is impractical to apply the methodology of the Revised Scheme TA which uses ward-specific origin-destination data. However if one were to take the robust position that all these trips are assigned to routes which the Revised Scheme's trips are also assigned, and distributed by route in the same way, this would equate to a maximum of 11 additional passengers per train on the Central line. This is an extremely robust estimate and serves to demonstrate that the cumulative schemes are not considered likely to change the effects arising from the Revised Scheme with regards to public transport.
- 9.11.7 It is therefore concluded that the cumulative schemes do not present any difference in the assessment of effects compared to the assessment of just the baseline plus development.

## 9.12 QUALITATIVE COMPARISON BETWEEN THE 2015 PROPOSED DEVELOPMENT AND THE 2019 REVISED SCHEME

- 9.12.1 A qualitative review of the revised scheme compared to the 2015 Proposed Development has been undertaken.
- 9.12.2 The 2015 ES concluded that there were no significant transport impacts arising from the Proposed Development. The present ES Addendum has also concluded that the Revised Scheme will not give rise to significant effects. Considering also that the Revised Scheme is car-free, it is concluded that there are no greater effects arising from the Revised Scheme with regard to traffic and transport.

## 9.13 SUMMARY AND CONCLUSIONS

- 9.13.1 The Bishopsgate Goodsyards site is located within an area of excellent accessibility by all modes of transport. With Shoreditch High Street station at its heart, plus numerous bus, Underground and National Rail stops a short walk away, the Revised Scheme not only maximises the potential for sustainable transport but also delivers significant improvements to pedestrian permeability, cycling and public realm.
- 9.13.2 This ES Addendum chapter has assessed the impacts of the Revised Scheme against the baseline, in terms of both physical design and the movement of people and goods, thereby incorporating both qualitative and quantitative methods. Impacts have been reviewed against industry standards and methodologies.
- 9.13.3 It is concluded that the Revised Scheme will lead to negligible increases in delay to pedestrians, cyclists and public transport users during construction. During operation, many pedestrians will benefit from an increase in amenity, while a minor adverse effect in amenity may be experienced by pedestrians at certain locations as well as public transport users on the routes with the highest patronage.
- 9.13.4 Following application of proposed mitigation measures such as improvements to wayfinding and the provision of Travel Packs for the occupants of Building 2, it is concluded that there are no significant adverse impacts arising with regards to Traffic and Transport associated with the Revised Scheme
- 9.13.5 With the Revised Scheme now differing from the previous application insofar as it is car-free, whilst delivering significant public realm enhancements, the scheme is anticipated to make a positive contribution towards transport in the area.
- 9.13.6 **Table 9.28** summarises the residual effects resulting from the Revised Scheme.

Table 9.28      Summary of Residual Effects

| Receptor/<br>Affected Group              | Value or Sensitivity<br>(Significance) of<br>Receptor | Activity or<br>Impact    | Embedded Design<br>Mitigation | Magnitude/ Spatial Extent/ Duration/<br>Likelihood of Occurrence | Significance of<br>effect | Additional<br>Mitigation                                      | Residual Magnitude of<br>Impact | Significance of Residual effect |
|--|---|--------------------------|-------------------------------|--|---------------------------|---|---------------------------------|---------------------------------|
| <b>Construction</b>                      |   |                          |                               |  |                           |   |                                 |                                 |
| Pedestrians                              | High  | Delay                    | None                          | Minor Temporary  | Minor adverse             | Phased opening to<br>minimise conflict;<br>pedestrian signage | Negligible Temporary            | Negligible                      |
| Cyclists                                 | High  | Delay                    | None                          | Minor Temporary  | Minor adverse             | None  | Negligible Temporary            | Negligible                      |
| Cyclists                                 | High  | Fear and<br>Intimidation | None                          | Minor Temporary  | Minor adverse             | Construction<br>Logistics Plan                                | Negligible Temporary            | Negligible                      |
| Public transport<br>users                | Low   | Delay                    | None                          | Minor Temporary  | Minor adverse             | None  | Negligible Temporary            | Negligible                      |
| Drivers                                  | Low   | Delay                    | None                          | Negligible Temporary   | Negligible                | None  | Negligible Temporary            | Negligible                      |
| <b>Operation</b>                         |   |                          |                               |  |                           |   |                                 |                                 |
| Pedestrians<br>(some locations)          | High  | Amenity                  | Public realm design           | Minor  | Minor beneficial          | Pedestrian<br>wayfinding; travel<br>pack                      | Major                           | Major beneficial                |
| Pedestrians<br>(some locations)          | High  | Amenity                  | Public realm design           | Minor  | Minor adverse             | Pedestrian<br>wayfinding; travel<br>pack                      | Minor                           | Minor adverse                   |
| Pedestrians                              | High  | Delay                    | Public realm design           | Negligible   | Negligible<br>beneficial  | Public realm design   | Negligible                      | Negligible                      |
| Cyclists                                 | High  | Amenity                  | Public realm design           | Minor  | Minor beneficial          | None  | Minor                           | Minor beneficial                |
| Public transport<br>users                | Low   | Delay and<br>Amenity     | None                          | Minor  | Minor adverse             | None  | Minor                           | Minor adverse                   |
| Drivers                                  | Low   | Delay                    | None                          | Negligible   | Negligible                | None  | Negligible                      | Negligible                      |
| <b>Cumulative Effects - Construction</b> |   |                          |                               |  |                           |   |                                 |                                 |
| As per above                             |   |                          |                               |  |                           |   |                                 |                                 |
| <b>Cumulative Effects - Operation</b>    |   |                          |                               |  |                           |   |                                 |                                 |
| As per above                             |   |                          |                               |  |                           |   |                                 |                                 |

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