



THE GOODSYARD

Environmental Statement Addendum Volume 2

September 2019 – Chapter 2 of 21

ballymore.



CHAPTER 2: THE SITE

2.1 INTRODUCTION

- 2.1.1
- This chapter describes the site, its location and its context as well as providing an overview of its existing land uses and features. It also identifies the key receptors which are considered potentially sensitive to the construction and operation of the Revised Scheme. More detailed description and analysis is available (in the form of the individual baseline assessments) within the technical assessments of the ES Addendum (**Volume 2, Chapters 6 to 18, and Volume 3: Townscape Visual Impact Assessment (TVIA)**).

2.2 SITE CONTEXT

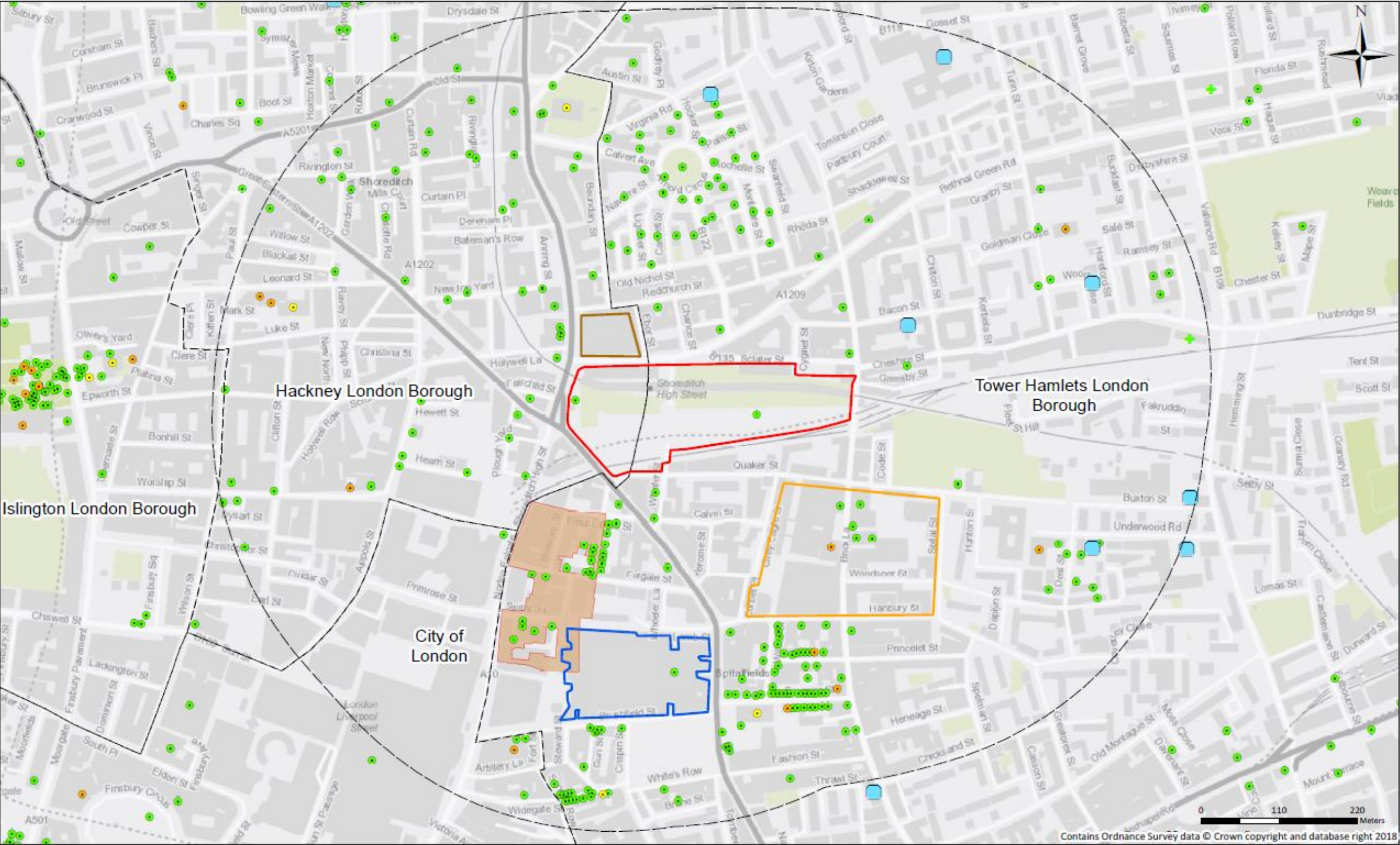
- 2.2.1
- The site is located in Shoreditch, east London. It straddles the boundary of two London Boroughs: Tower Hamlets (LBTH) and Hackney (LBH). The western part of the site lies within Hoxton and East Shoreditch Ward of LBH, whilst the central and eastern section of the site is situated in the Weavers Ward of LBTH. The location of the site in its wider geographical context can be seen in **Figure 2.1**.
- 2.2.2
- The site is bounded by transportation infrastructure in the form of road and rail. The site boundaries and surrounding areas are described in **Table 2.1**.

Table 2.1. Site Boundaries and Surrounding Area

Direction from the Site	Boundary	Surrounding Area
North	A1209 Bethnal Green Road; Sclater Street	Both commercial and industrial use buildings lie north of the A1209, including the Huntingdon Estate.
South	Great Eastern Main Line and West Anglia Main Line; A1202 Commercial Street	To the south of the Great Eastern and West Anglia Main Lines, lies Quaker Street, beyond which is a mixed use area of industrial buildings (some derelict) and residential properties. To the south west of the site, beyond the A1202, is a small area of commercial use buildings with residential above.
East	Brick Lane	To the east of Brick Lane is the continuation of the Great Eastern and West Anglia Main Lines, as well as the London Overground rail line from Shoreditch High Street.
West	A10 Shoreditch High Street	To the west of the site, beyond the A10, lies an area of industrial and commercial use, some of which are derelict.

- 2.2.3
- The north east corner of the site is within the Brick Lane and Fourier Street Conservation Area. The site is surrounded by 4 further conservation areas: South Shoreditch, Redchurch Street, Elder Street and Boundary Estate. There are two Grade II listed structures on site: Braithwaite Viaduct, the Forecourt Wall and Gates to Goods Station. There are also 272 listed buildings in the vicinity of the site comprising of Grade I, Grade II and Grade II*. It is located in Tier II Archaeological Priority Areas for both LBH and LBTH.
- 2.2.4
- Part of the site is situated in the London View Management Framework Supplementary Planning Guidance (March 2012) which includes two protected vistas to St Pauls Cathedral (Protected Vistas 8A.1 and 9A.1) which impacts the site and the wider City Fringe Area. There is a further non LVMF view from the South Bastion of Tower Bridge towards the site and the city which restricts the height of buildings across the site to 142.5 m AOD to avoid negatively impacting the setting of the Tower of London World Heritage Site.
- 2.2.5
- The site is situated within Zone 1 and has excellent connectivity to the public transport network.
- 2.2.6
- There are no Sites of Special Scientific Interest (SSSI), Ramsar sites, Special Protection Areas (SPA), National Parks or Local Nature Reserves (NNR) within 1 km of the site. The site contains an area of Open Mosaic Habitat on Previously Developed Land (OMHPDL), a UK and LBTH Biodiversity Action Plan Priority Habitat.
- 2.2.7
- The site does not lie in a Groundwater Source Protection Zone (SPZ) and there are no open bodies of water within the site. The site is at low risk from tidal, fluvial and groundwater flooding. However, the site is at risk of pluvial (surface water) flooding.

Figure 2.1. Site constraints



Project: Bishopsgate Goods yard
Client: Bishopsgate Goods Yard Regeneration Ltd

Designations Surrounding the Application Site

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- Legend**
- Site Boundary
 - 500m Site Buffer
 - Borough Boundary
 - Scheduled monuments
 - Brick Lane Market
 - Spitafields Market
 - The Tea Building
 - GP Surgeries
 - Primary & Secondary Schools
 - Listed buildings
 - Grade I
 - Grade II*
 - Grade II



2.3 SITE DESCRIPTION

- 2.3.1

The site is approximately 4.4 hectares (ha) and is centred at Ordnance Survey (OS) National Grid Reference (NGR) TQ 336822.
- 2.3.2

The site has been derelict since a fire on the site in the December of 1964 and demolition of the majority of the buildings in 2004. The new Shoreditch High Street Rail Station on the London Overground has opened up in the centre of the site in April 2010, with the 'boxed' London Overground line in the centre of the site providing services to the south east, north London and Canary Wharf.
- 2.3.3

In the north of the site, adjacent to Bethnal Green Road, are number of Power League temporary football pitches and the temporary Box Park Shopping Mall, comprising of shops and cafes, in refurbished shipping containers.
- 2.3.4

The southern section of the site including the listed arches and viaduct is vacant and overgrown with scrub-like vegetation and several low value trees.
- 2.3.5

Aside from the Shoreditch High Street Rail Station building and associated elevated London Overground rail line, there are currently no other permanent buildings within the boundary wall. The Weavers' Cottages and former Mission Room are situated on the site to the north of the boundary wall.
- 2.3.6

There are a number of below ground constraints including a BT tunnel, the Central Line, the suburban line and existing basements between the main line and suburban line.
- 2.3.7

The Braithwaite Viaduct, Forecourt Wall (to the west), gates and Oriel are Grade II listed. The Boundary Wall has a medium to high level of significance for historic interest. The Weavers' Cottages and former Mission Room have a medium to high level of significance for historic interest.

2.4 POTENTIAL KEY SENSITIVE RECEPTORS

- 2.4.1

The key receptors which are considered potentially sensitive to the construction and operation of the Revised Scheme have been identified and are summarised in **Table 2.2**.

Table 2.2. Potential Key Sensitive Receptors

Category	Potential Sensitive Receptor / Land Use
Residential	Future residents within the site (as part of the phased development); Surrounding residential areas such as Quaker Street and Brick Lane; Users of the site and the surrounding roads / footpaths / cycleways.
Commercial	Commercial operations on the site at the Boxpark and Power League; Surrounding commercial units such as those on the A1209 and A10 and the surrounding area; and Users of the Great Eastern Main Line and West Anglia Main Line.
Community	Receptors and their approximate distances to the site: Schools (62 primary schools within 2.7 km and 32 secondary schools within 4 km); Health facilities (6 GP practices within 1 km); and Parks and open spaces (3 pocket parks and 3 small open spaces within 0.4 km; 5 local parks within 1.2 km; 1 metropolitan park within 3.2 km; and the Lee Valley Regional Park within 2.5 km).
Ecological	The site does not fall within the boundaries of any statutory or non-statutory designated sites. There are no sites with European or National statutory designations within a 2 km radius and no Local Nature Reserves (LNRs) were identified within 2 km of the site.
Geological	The site is located upon the London Clay formation, which is overlain by river terrace deposits, alluvium and made ground. The site overlays a Secondary Aquifer, a receptor of moderate sensitivity to pollutants. There is a potential risk to construction workers from lead contamination within the made ground on site.

Category	Potential Sensitive Receptor / Land Use
	There is a potential risk to construction workers and future residents from land contamination caused by buried infrastructure associated with the historical use of the site.
Archaeological assets	The site is located within Tier II Archaeological Priority Areas as defined by LBTH (Spitalfields and Brick Lane) and LBH (Shoreditch) Potential archaeological remains (buried assets): The site has a low potential to contain archaeological remains dated to the prehistoric period. Roman and early medieval periods. The site has a moderate potential to contain archaeological remains dated to the later medieval period. The site has a high potential to contain archaeological remains dated to the post-medieval period. The site has a very high potential to contain archaeological remains of 19 th century railways structures.
Heritage assets	Listed buildings within and close to the site: 2 Grade II listed structures are on-site: Braithwaite Viaduct and the Forecourt Wall, Oriel and Gates to Goods Station. There are 272 listed buildings or heritage assets in close proximity to the site, including the Tower of London World Heritage Site. Conservation Areas close to the site: The north east corner of the site is within the Brick Lane and Fourier Street Conservation Area. there are 4 further conservation areas in close proximity to the site: South Shoreditch; Redchurch Street, Boundary Estate and Elder Street.
Townscape and views	Potential impacts upon townscape receptors including: Local townscape character areas, such as Shoreditch and Bethnal Green Road. Views towards the site; London View Management Framework views, such as Alexandra Palace LVMF; and LBTH and LBH Designated views and landmarks.
Utilities	Existing and proposed utilities within and close to the site such as Thames Water infrastructure (sewers, water mains, existing drainage) and electrical utilities such as the existing UKPN substation and high voltage (HV) cable which runs across the north-western corner of the site. A BT Tunnel runs north-south through the centre of the site, beneath Braithwaite Street.
Transport Infrastructure	Shoreditch Hight Street Station lies within the site. The London Underground Central Line runs beneath the western part of the site. The Great Eastern Main Line and West Anglia Main Line run to the south of the site. Liverpool Street Station and Old Street Station are within 1km of the site.

2.5 SITE CONTEXT BY TOPIC

- 2.5.1

The sections below provide a summary of the baseline conditions at the site and the site context by topic. More detailed description and analysis is available (in the form of individual baseline assessments) within the technical chapters (**Volume 2, Chapters 6 to 18 and Volume 3: Townscape Visual Impact Assessment (TVIA)**).

WASTE AND RECYCLING

- 2.5.2

The authorities responsible for waste collection on the site will be LBTH and the North London Waste Authority (NLWA – on behalf of LBH).

- 2.5.3 The draft New London Plan¹ has released forecast arisings of Household, Commercial and Industrial Waste by borough.
- 2.5.4 Furthermore, to meet the self-sufficient targets for waste (as outlined by the London Plan), each London Borough has been assigned a volume of household, commercial and industrial waste that it needs to manage; this is known as the apportionment target.
- 2.5.5 Forecast arisings, apportionment targets and indicative shortfalls for 2021 and 2041 are summarised in **Table 2.3**.

Table 2.3. Forecast arisings (in 000s tonnes) and apportionment targets (in 000s tonnes) for LBH and LBTH for 2021 and 2041

Borough	2021			2041		
	Forecast	Target	Shortfall	Forecast arisings	Target	Shortfall
LBH	183	110	66%	196	118	66%
LBTH	260	195	33%	273	207	32%

- 2.5.6 **Table 2.3** identifies that both boroughs will generate more waste than that which is apportioned to them.
- 2.5.7 In order to achieve the NLWA borough targets, the NLWA have pooled their individual apportionment targets and have identified additional sites to manage waste produced in these boroughs.
- 2.5.8 The site is anticipated to produce a minimal amount of waste associated with the current uses, which are Shoreditch High Street Station, 'Power League' football pitches and 'Box Park' temporary shopping mall.

SOCIO-ECONOMICS

- 2.5.9 The LBH LP33 and LBTH Local Plan 2031 recognise the development potential of the site in delivering commercial, residential and open space.
- 2.5.10 The site is situated in a mixed-use area of commercial, retail, light industrial and residential buildings. Buildings in closest proximity to the site are typically four to five storeys in height.
- 2.5.11 According to the most recent statistics at ward level, the population of both LBTH and LBH were around 254,096 and 246,270, respectively in 2011². The proportion of the population aged 16-64 is higher for LBH and LBTH than London as a whole, and the proportion of the population aged 65 or over was lower for LBTH and LBH than London as a whole.
- 2.5.12 Data from the Annual Population Survey³ indicates that for the year October 2017-September 2018 the economic activity rate of both LBTH and LBH was 74 % compared to 79 % for London as a whole.
- 2.5.13 There are 16 nurseries within 1 km of the site. There are 62 publicly funded primary schools within 2.7 km travelling distance of the site, and 32 publicly funded secondary schools within 4 km.
- 2.5.14 Nearby healthcare facilities include six GP surgeries within 1 km of the site and the Royal London hospital, 1 km away.
- 2.5.15 There are 6 open spaces within 400 m of the Revised Scheme and 5 local parks within 1.2 km. The nearest library, Shoreditch Library, is 1.1 km away. The closest sports and leisure centres are Whitechapel Sports Centre (1.2 km), Finsbury Leisure Centre *1.7 km) and Ironmonger Row Baths (1.7 km).

GROUND CONDITIONS AND LAND CONTAMINATION

- 2.5.16 The ground conditions on the site are predominantly made ground of variable thickness above an underlying geology of superficial deposits (Taplow Gravel) overlying the London Clay, with Thanet Sands and Upper Chalk below.
- 2.5.17 Potential historic sources of contamination on the site include the Made Ground on the site, the use of the site as a rail depot, the former location of fuel tanks and bottling works on site and the current electrical transformer. Former building work on the site may have included asbestos.
- 2.5.18 In 2008, Concept undertook a comprehensive ground investigation of the site, including the chemical analysis of soils, leachate, and groundwater samples, and ground gas monitoring. The results of the ground investigation were compared to commercial screening criteria, which showed that there was no significant or widespread contamination identified on site.

¹ GLA (2018) Draft New London Plan – Policy S18 Waste capacity and net waste self sufficiency. Available at: <https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/draft-new-london-plan/chapter-9-sustainable-infrastructure/policy-si8-waste-capacity>

- 2.5.19 Subsequent assessments have included a ground contamination risk assessment and outline remediation strategy by Arup, and a desktop ground condition assessment by AECOM.
- 2.5.20 The site lies in an area which was bombed during the Second World War. There may therefore be a risk of discovering unexploded ordnance (UXO) during any ground works.

TRAFFIC AND TRANSPORT

- 2.5.21 According to Transport for London (TfL)'s WebCAT, the site has a Public Transport Access Level (PTAL) ranging from 5 and 6b PTAL. PTAL is a measure which rates locations by distance from frequent public transport services. The best possible rating is 6b. High PTAL levels suggest excellent connectivity to the public transport network. In particular, Shoreditch High Street station on the London Overground is on site.
- 2.5.22 The site is bordered by the following roads: Brick Lane, Quaker Street, the A1209 Bethnal Green Road, the A1202 Commercial Street and the A10 Shoreditch High Street. The A10 is a main arterial road through London, providing access from The City up to the North Circular Road and ultimately the M11 at Cambridge. The A1209 and A1202 provide access to Bethnal Green, Wapping and Old Street.
- 2.5.23 The site is located within Zone 1 of TfL's travel zones, the site has excellent links to a variety of sustainable travel networks. These include the London Overground network, London Underground network, London Buses, DLR, cycling infrastructure as well as high quality pedestrian network.

WIND MICROCLIMATE

- 2.5.24 Winds for the London area are predominantly from the southwest, with a secondary peak from the north east during spring. Winds are typically stronger in the winter season, and lighter throughout the summer. The site is situated in a predominantly commercial area, with retail and office use buildings of varied heights. To the north east of the site are low rise industrial buildings up to two storeys in height, whilst to the north west lies the eight storey 'Tea Building'. Buildings to the west, east and south of the site are typically four to five storeys in height.

DAYLIGHT, SUNLIGHT, OVERSHADOWING, SOLAR GLARE AND LIGHT POLLUTION

- 2.5.25 The site is partly occupied by permanent structures associated with the current London Overground use. Temporary structures present on-site include a row of shipping containers along the northern boundary (the Boxpark) of a maximum two storeys in height.

AIR QUALITY

- 2.5.26 The whole of LBH and LBTH are included within Air Quality Management Areas (AQMA) declared in respect to the annual mean nitrogen dioxide (NO₂) air quality objective (and also the NO₂ one-hour objective in LBH) and the 24-Hour mean particulate matter (PM₁₀) objective. The site is partially located within a Greater London Authority (GLA) Air Quality Focus Area located in the Old Street City Road / Old Street / Great Eastern Street / Shoreditch High Street area. In addition to this, the site is also located approximately 20 m north of another focus area along Commercial Street. These focus areas identify locations where the EU NO₂ annual limit value is exceeded and are locations with high human exposure.
- 2.5.27 The existing air quality in the area is relatively poor, due predominantly to the high traffic volumes, particularly on the A10 and the A1202 (Commercial Street / Great Eastern Street). Defra background mapped concentrations of NO₂ are in the order of 38.6 µg / m³ for the present year (2018) for the 1 km x 1 km grid square encompassing the site and surrounding area. Local monitoring in the vicinity of the Revised Scheme has historically exceeded the annual mean objective for NO₂.

NOISE AND VIBRATION

- 2.5.28 The site has a varied noise environment and is exposed to noise from sources such as road, rail and/or other mixed noise sources.
- 2.5.29 The sources of road traffic noise include: Great Eastern St (A1202), Commercial Street (A1202), Shoreditch High Street (A10), Bethnal Green Road (A1209), Sclater Street and Quaker Street.
- 2.5.30 The sources of rail noise include: the London Overground line passing through Shoreditch High Street Station, National Rail entering and departing Liverpool Street Station, and the London Underground Central Line. Rail sources operate around 22 hours a day including freight.

² Census (2011).

³ ONS (2018) annual population survey: October 2017-September 2018

2.5.31 Commercial and mechanical plant noise from surrounding restaurants, pubs and clubs.

WATER RESOURCES AND FLOOD RISK

- 2.5.32 No surface waterbodies are present on the site and the nearest major surface water body is the River Thames, approximately 1.7 km south of the site and Regents Canal, approximately 1.5 km north east of the site. The River Thames is tidal in this location.
- 2.5.33 There is an indirect pathway to the River Thames via the TWUL sewer network, which discharges into the River Thames via combined sewer overflows (CSOs). The Middle Thames water body is classified as heavily modified, of Moderate Ecological Potential and failing to meet Good Chemical Potential. The tidal section of the River Thames as a whole is not expected to meet Good Ecological Potential.
- 2.5.34 The site is located within Flood Zone 1 and is therefore at low risk of flooding from fluvial and tidal sources, with an annual exceedence probability (AEP) of <0.1 % (1 in 1000) from fluvial or tidal flooding in any year.
- 2.5.35 The site is at risk of pluvial (surface water) flooding, with surface water run off observed to pond behind the natural ridge within the site.
- 2.5.36 The site does not lie in a groundwater Source Protection Zone (SPZ).

ARCHAEOLOGY

- 2.5.37 The site is currently located within Tier II Archaeological Priority Areas as defined by LBTH (Spitalfields and Brick Lane) and LBH (Shoreditch), and abuts the Fournier Street, Elder Street and Shoreditch High Street Conservation Areas. There are no scheduled monuments on the site.
- 2.5.38 In 2011, the Museum of London Archaeology Service (MoLAS) carried out a programme of archaeological and built heritage mitigation for the recently completed East London Line development. As a result of its location and historic development, the site has a low potential to contain archaeological remains of the prehistoric and early medieval periods. Prehistoric objects have been found during excavation of later features, but there was no evidence of their original context. No archaeological remains dated to the early medieval period have been found on site, and it seems probable that the site was in open fields during this period.
- 2.5.39 The site has a low potential to contain archaeological remains dated to the prehistoric period, Roman and early medieval periods, a moderate potential to contain archaeological remains dated to the later medieval period, and a high potential to contain archaeological remains dated to the post-medieval period. Evidence of all these periods has been recovered from the site, although material from the later medieval and post-medieval period is more prevalent and extensive than earlier remains. Some evidence of later medieval agricultural uses, including drainage works, and post-medieval brickmaking has been located. Extensive evidence of successive phases of post-medieval urbanisation has been recovered including well-preserved buildings, yards, roadways and associated pits and industrial features, with some elements being identifiable on early maps.
- 2.5.40 The site has a very high potential to contain archaeological remains of 19th century railway structures, including both listed and unlisted structures which survive below ground. They include well preserved remains of one of the Worlds first operational passenger railways – the Eastern Counties Railway of c 1840, and subsequent developments including the 1890s structures of the Bishopsgate Goods Yard, the major depot for produce supplying the London markets.

TOWNSCAPE AND VISUAL IMPACT ASSESSMENT

- 2.5.41 Part of the site is situated in the London View Management Framework Supplementary Planning Guidance (March 2012) which includes two protected vistas to St Pauls Cathedral (Protected Vistas 8A.1 and 9A.1) which impacts the site and the wider City Fringe Area.
- 2.5.42 The site is surrounded by 5 conservation areas: South Shoreditch, Fourier Street, Redchurch Street, Elder Street and the Boundary Estates. There are two Grade II listed structures on site: Braithwaite Viaduct, the Forecourt Wall and Gates to Goods Station. There are also 272 listed buildings in the vicinity of the site comprising of Grade I, Grade II and Grade II*.

BUILT HERITAGE

- 2.5.43 There are numerous designated and non-designated heritage assets within the site and within in its vicinity, indicating that the Revised Scheme has the potential to affect their heritage significance and heritage setting of the surrounding area.
- 2.5.44 There are two Grade II listed structures on-site, the Braithwaite Viaduct and the Forecourt Wall and Gates to Goods Station.

2.5.45 There are 272 listed buildings or heritage assets in close proximity to the site, including the Tower of London World Heritage Site. The north east corner of the site is within the Brick Lane and Fourier Street Conservation Area. there are 4 further conservation areas in close proximity to the site: South Shoreditch; Redchurch Street, Boundary Estate and Elder Street.

ECOLOGY

- 2.5.46 No statutory designated sites were identified within 2 km of the site boundary. Six Sites of Importance for Nature Conservation (SINCs) were recorded within 1 km of the site boundary.
- 2.5.47 The habitat on-site is varied, consisting of scattered trees, scrub, ephemeral / short perennial vegetation, bare ground, hardstanding, and buildings and walls. Japanese knotweed has been recorded within the upper level of site. Therefore, the site has the potential to support a number of species.
- 2.5.48 In 2017 common pipistrelle, soprano pipistrelle and Nathusius' pipistrelle bats were recorded during activity surveys and automated detector surveys. The arches to the east of Braithwaite Street have moderate suitability to support roosting bats, however, no bats were recorded during emergence surveys undertaken in 2017.
- 2.5.49 In 2013 a single sub-adult black redstart was recorded within the site, but no singing or breeding activity was recorded. No black redstart were recorded in 2017.
- 2.5.50 Invertebrate surveys have identified a total of 58 species of invertebrate, including nine noteworthy species that are typical of urban brownfield sites. The site is assessed as having a medium biodiversity interest for this species group.
- 2.5.51 Surveys in 2013 confirmed the likely absence of common reptile species on the site and given the isolation of the site from suitable habitat, this assessment was retained during the 2017/2018 assessment.
- 2.5.52 This baseline conditions were confirmed in an updated survey in May 2019.

CLIMATE CHANGE

- 2.5.53 The site is subject to climatic conditions as are currently observed. The site is also currently undeveloped, and houses a number of temporary use such as the Box Park and the Power League, therefore baseline GHG emissions are considered to be negligible.
- 2.5.54 Areas in proximity to and surrounding the site are residential and industrial in nature and will have associated GHG emissions. Since GHG emissions have global impacts, there will be localised cumulative effects from other schemes nearby upon the Revised Scheme which are generating GHG.

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