

NEW CITY COURT

Health Impact Assessment

Volterra Partners

New City Court

Health Impact Assessment

GPE (St. Thomas Street) Limited

A report by Volterra Partners, April 2021

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1 INTRODUCTION

1.1 This Health Impact Assessment (HIA) has been prepared by Volterra Partners on behalf of GPE (St. Thomas Street) Limited ('the Applicant') and is submitted in support of a full planning application for New City Court ('the Proposed Development'), within the London Borough of Southwark (LBS). The Proposed Development consists primarily of Use Class E designated office space, with some supporting Class E flexible space for retail and office uses and food & drink space.

1.2 The development description is as follows:

"Redevelopment to include demolition of the 1980s office buildings and erection of a 26-storey building (plus mezzanine and two basement levels), restoration and refurbishment of the listed terrace (nos. 4-16 St Thomas Street), and redevelopment of Keats House (nos. 24-26 St Thomas Street) with removal, relocation and reinstatement of the historic façade on a proposed building, to provide office floorspace, flexible office/retail floorspace, restaurant/café floorspace and a public rooftop garden, associated public realm and highway improvements, provision for a new access to the Borough High Street entrance to the Underground Station, cycling parking, car parking, service, refuse and plant areas, and all ancillary or associated works."

The Site

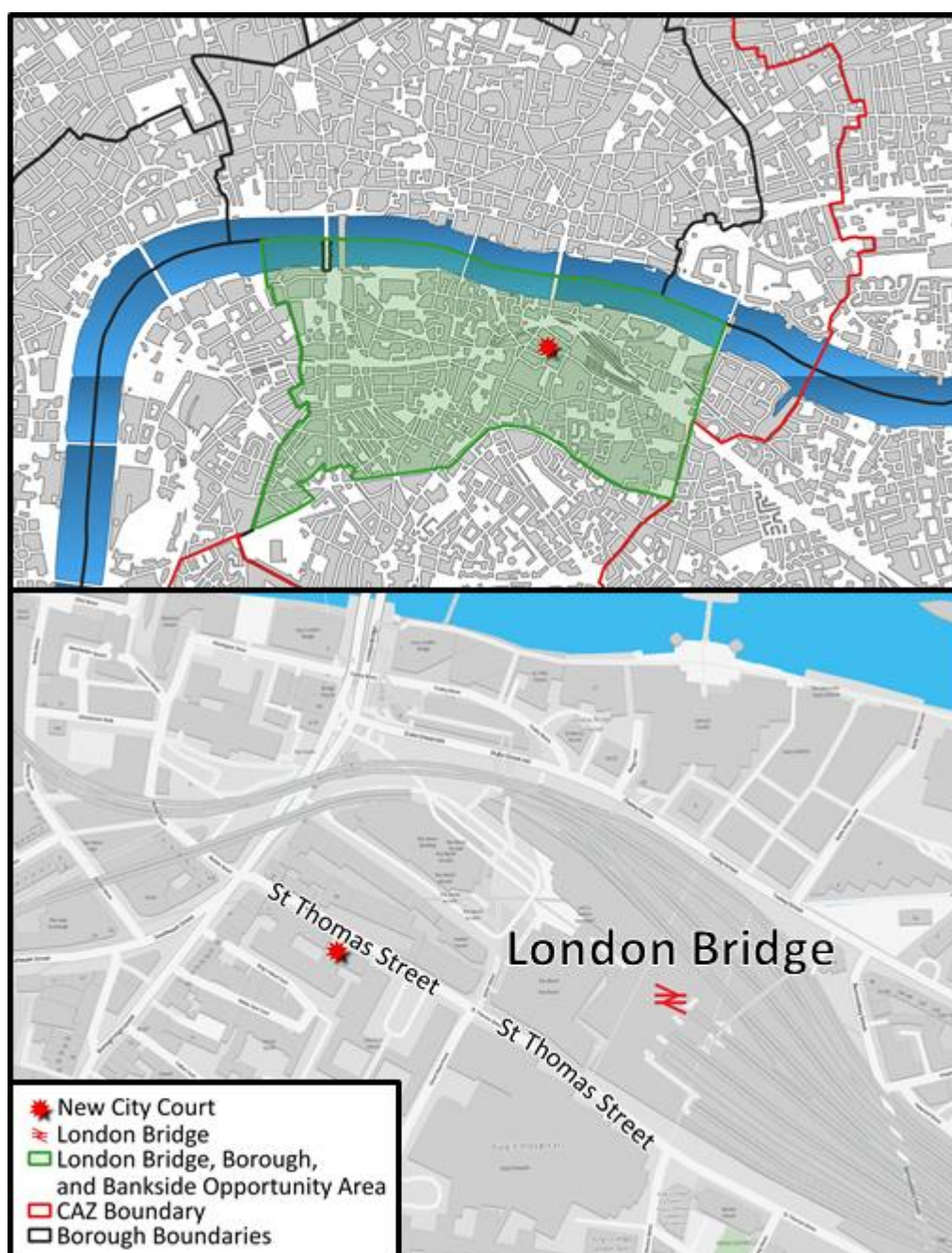
1.3 The Site is currently occupied by various buildings, including Georgian terraced townhouses at Nos. 4, 6, 8, 12, 14 and 16 St Thomas Street, the New City Court office building at No. 20 St Thomas Street, and Keats House at Nos. 24 to 26 St Thomas Street. The existing Site consists of 12,763 sqm gross internal area (GIA) of office floorspace. New City Court occupies the majority of the Site and is a part two, four and part five storey office building constructed in the 1980s.

1.4 The Site sits at the heart of London Bridge and is bound by:

- Commercial properties to the north, south-east and west including shops, restaurants, offices, hotels, public houses including The Old King's Head, banks, museums and post offices;
- Guy's Hospital to the east; and
- King's College University facilities including Guy's Campus which comprises student centre, student accommodation as well as a library, IT suite and auditoriums to the south and east.

1.5 The Site is situated towards the north of the borough in the London Bridge area, close in proximity to both Borough Market and The Shard. The Site is highly accessible by public transport, judged to have a Public Transport Accessibility Rating (PTAL) of 6b – the highest rating that can be achieved – due to its close proximity to London Bridge overground and underground stations (<0.1 mile), as well as Borough station (0.4 miles away). The PTAL scale is a measure defined by the Transport for London (TfL) that determines the access level of geographic areas to public transport. London Bridge underground station provides access to the Jubilee and Northern lines. The Site in the context of the borough and London is shown in **Figure 1**.

Figure 1 Site context

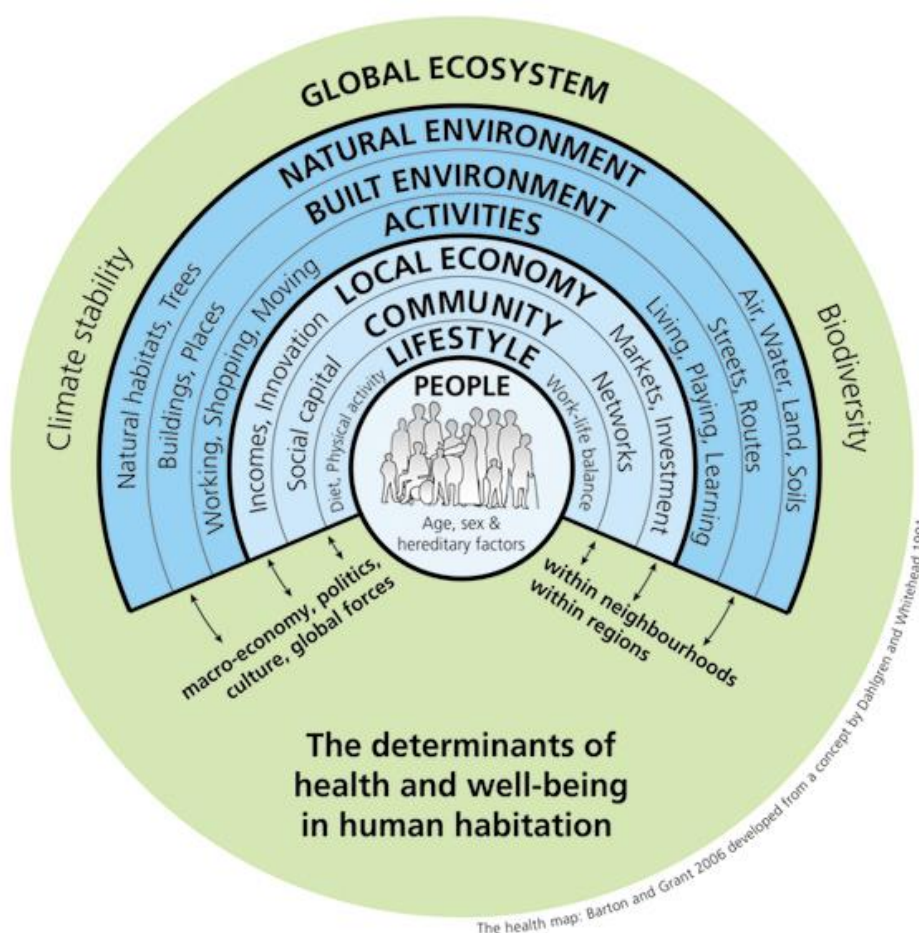


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Health impact assessment

- 1.6 Health is influenced by a combination of biological and environmental factors. Biological factors are largely inherent. However, environmental factors can be influenced through design and management of buildings and spaces which may be able to impact on health outcomes.
- 1.7 Factors that have the most significant influence on the health of the population are called ‘determinants of health’. Across a broad scale, these include, at the lowest level, an individual’s genetics and their lifestyle, broadening out to include the surrounding environment, as well as policy, cultural and societal issues. The wider determinants of health are shown in **Figure 2**.

Figure 2 The wider determinants of health



Source: NHS. Healthy Urban Development Unit (HUDU)

- 1.8 Development and planning can play a role within the wider determinants of health and wellbeing. The link between planning and development and health and wellbeing is related to the location, design and nature of uses proposed and the methods by which developments are constructed. The scope of the assessment needs to be applied proportionately to the type of development being considered.
- 1.9 The London Healthy Urban Development Unit Rapid Health Impact Assessment Matrix (HUDU Rapid HIA) tool sets out 11 broad determinants of health. For this assessment, the 'housing quality and design' determinant has been scoped out because the Proposed Development includes no residential units.
- 1.10 This HIA assesses the following remaining 10 health determinants:
- Access to healthcare services and social infrastructure;
 - Access to open space and nature;
 - Air quality, noise, and neighbourhood amenity;
 - Accessibility and active travel;
 - Crime reduction and community safety;
 - Access to healthy food;
 - Access to work and training;
 - Social cohesion and lifetime neighbourhoods;
 - Minimising the use of resources; and
 - Climate change.

- 1.11 This HIA assesses the potential impact of the scheme on the health and wellbeing of the population, taking each determinant in turn. The link between the determinant and health is summarised at the beginning of each section. Information contained in this document is intended as supporting and explanatory which is to be viewed alongside the relevant parts of the Rapid HIA matrix, which are also given in each section. Where appropriate, the sections consider the impact in the construction and operational phases separately, e.g. access to work and training, and others (where relevant) just consider the operational phase in isolation, e.g. accessibility and active travel.
- 1.12 This assessment seeks to outline the areas where the Proposed Development may impact on health and identify the areas where negative impacts require mitigation and health related benefits are maximised.

Spatial scope

- 1.13 Study areas for the baseline and potential effects are considered at varying spatial levels, according to the nature of the effect and the aspect of the Proposed Development that gives rise to the effect. The technical assessments of the EIA highlighted above influence the study area for the health impacts relating to each relevant technical area.
- 1.14 The study areas considered in this HIA are presented in **Table 1**. These are: local area (Middle Super Output Areas¹ surrounding the Proposed Development, borough (LBS), regional (London) and national (England).

Table 1 Geographical definitions

Geographical Level	Definition
Local area	The MSOAs of: Southwark 002 and 006
Borough	London Borough of Southwark (LBS)
Regional	London
National	England

¹ MSOAs are small area geographic boundaries defined for England and Wales for which regular statistical data is provided by the ONS and other UK statistical authorities.

2 HEALTH IMPACT ASSESSMENT

Access to healthcare services and social infrastructure

HUDU HEALTH LINK

Strong, vibrant, sustainable and cohesive communities require good quality, accessible public services and infrastructure. Access to social infrastructure and other services is a key component of Lifetime Neighbourhoods. Encouraging the use of local services is influenced by accessibility, in terms of transport and access into a building, and the range and quality of services offered. Access to good quality health and social care, education (primary, secondary and post-19) and community facilities has a direct positive effect on human health. Opportunities for the community to participate in the planning of these services has the potential to impact positively on mental health and wellbeing and can lead to greater community cohesion.

Primary healthcare provision

- 2.1 In assessing effects on local primary healthcare provision, a study by Deloitte found that across Great Britain, patients on average travel 2.1 miles to their nearest GP practice, although on average, a patient's nearest GP practice is only 1.2 miles away.² Due to the density of the LBS as an inner London borough, this would be expected to be slightly lower, and therefore 1-mile has been used as a catchment area, considered to be typical walking distance to a GP surgery in London.
- 2.2 There are nine surgeries within a 1-mile catchment area of the Site. However, data was only available for seven of these, listed below in **Table 2**.³ These seven GP surgeries had a total list size of 64,284 patients, supported by 28 FTE GPs. This yields an average ratio of registered patients per GP across these practices of 2,296, which is significantly above the benchmark patient list size of 1,800 per GP, as recommended by the NHS Healthy Urban Development Unit (HUDU) Planning Contribution Model.⁴

Table 2 GP surgeries within 1-mile of the Proposed Development

	No. of FTE GPs	List size	Patients / GP
Falmouth Road Group Practice	3	11,412	4,037
Blackfriars Medical Practice	5	8,597	1,714
The New Mill Street Surgery	2	6,052	2,947
Whitechapel Health Centre	5	14,082	2,821
St. Katherine's Dock Practice	2	2,163	1,352
Bermondsey Spa Medical Practice	4	11,459	2,865
Old Kent Road Surgery	8	10,519	1,315
Total	28	64,284	2,296
LBS			2,273
London			1,930
England			1,759

Source: NHS Digital, 2020. General Practice Workforce Data – December 2020

2 Deloitte, 2006. Report to NHS Employers; Adjusting the General Medical Services Allocation Formula for the unavoidable effects of geographically dispersed populations on practices sizes and locations.

3 Two of the practices not shown in the table are Decima Street Surgery and Princess Street Surgery. Both are part of the Nexus Health Group, but data for the nine practices throughout LBS that are part of this group is not available at a disaggregated practice level, and thus has been excluded from this analysis.

4 NHS Healthy Urban Development Unit (HUDU), 2020. Planning Contribution Model

Accident and Emergency

- 2.3 The closest Accident and Emergency (A&E) service to the Site is located at St Thomas' Hospital, 1.6-miles west of the Site, which is part of Guy's and St Thomas' NHS Foundation Trust. Over the period March 2019 to March 2020, the Guy's and St Thomas' NHS Foundation Trust reported a total of approximately 214,000 attendances.⁵
- 2.4 The Department of Health's standard is that 95% of patients who attend A&E departments are to be admitted to a hospital bed, discharged from the department, or transferred to another hospital within four hours of arrival. The standard recognises that for some patients it may not be clinically appropriate to manage them within four hours of arriving at the department.
- 2.5 Between March 2019 and March 2020, Guy's and St Thomas' NHS Foundation Trust achieved a maximum wait time of four hours in A&E for 84.5% of cases, falling below the targeted 95%.⁶ This was also lower than the average for London (89.8%), but higher than that of England (84.1%) over the same period, indicating that the NHS trust is more constrained than the regional average.
- 2.6 In the most recent period available (October to December 2020), which may be slightly skewed due to the COVID-19 pandemic, Guy's and St Thomas' NHS Foundation Trust achieved a maximum wait time of four hours for 90.2% of cases, which was higher than the England (82.9%) and London (89.6%) levels.⁷

Human health impacts

Construction phase

- 2.7 Individuals may register with a GP near to their work if they prefer, however the take up of this has been relatively limited and GPs are not required to accept new patients. As the construction period of the Proposed Development is temporary in nature, any impact on local primary healthcare services is expected to be limited, if not negligible. Not many workers are expected to register with a GP in the local area as a direct result of their work on the construction of the scheme, which will further limit the impact.
- 2.8 Accidents during construction would be more likely to involve workers needing access to acute health care. Between 2017/18 and 2019/20, 2.8% of construction workers in Great Britain were injured while at work, compared to 1.8% of workers injured across all industries.⁸ Based on the average of 750 construction workers on-site during the 43-month construction period, there would be expected to be approximately 20 construction-related accidents per year. In the context of Guy's and St Thomas' NHS Foundation Trust, this increase would be negligible.
- 2.9 A Construction Management Plan incorporating appropriate health and safety processes will be put in place to minimise the potential for any accidents and health risks for construction workers. Health and safety measures for construction workers include a health and safety induction to ensure awareness of on-site hazards and restrictions, and the accompaniment of all visitors on-site by a representative of the employer.
- 2.10 The Proposed Development is not expected to result in a significant negative impact on primary healthcare during the construction phase.

Operational phase

- 2.11 A relatively small fraction of workers located on-site are likely to register at local GP practices, resulting in minimal impacts on local primary healthcare. It is also estimated that there will be a maximum of 56 additional workplace related accidents per year. This would result in a less than 0.03% increase in the Guy's and St. Thomas' NHS Foundation annual A&E visits. Hence, it is also

⁵ NHS Digital, 2020. A&E Attendances and Emergency Admissions 2019-20

⁶ Ibid

⁷ NHS Digital, 2020. A&E Attendances and Emergency Admissions 2020-21

⁸ Labour Force Survey, 2017/18 – 2019/20 – self reported workplace injuries

expected that there would not be a significant negative impact on primary healthcare during the operational phase.

Table 3 Access to healthcare services and other social infrastructure – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal retain or re-provide existing social infrastructure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	There is no existing social infrastructure at the Site, yet the Proposed Development will incorporate public space for nearby residents, visitors, and workers.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal assess the impact on health and social care services and has local NHS organisations been contacted regarding existing and planned healthcare capacity?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>This HIA has been undertaken to help define and address any health issues in a systematic way, including the impact of the Proposed Development on healthcare services from the construction workers during the construction of the Proposed Development, and from the workers during the operation of the Proposed Development.</p> <p>The Proposed Development is a commercial only scheme and no residents would be accommodated on-site. The Proposed Development is not expected to have a significant effect upon the provision of healthcare.</p>	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	Measures to mitigate health risks for construction workers should be incorporated with the Construction Management Plan.
Does the proposal include the provision, or replacement of a healthcare facility and does the facility meet NHS requirements?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development does not include the provision or replacement of a healthcare facility.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal assess the capacity, location and accessibility of other social infrastructure, e.g. schools, social care and community facilities?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<p>The Proposed Development does not have any residential aspects. Given this, the impacts upon forms of infrastructure driven by residential population have not been considered. These include impacts upon schools and social care.</p> <p>However, it does make public realm improvements, including a public rooftop garden.</p>	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal explore opportunities for shared community use and co-location of services?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development will result in the creation of new public realm spaces, including two new squares at street-level and a rooftop garden.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Access to open space and nature

HUDU HEALTH LINK

Providing secure, convenient and attractive open/green space can lead to more physical activity and reduce levels of heart disease, strokes and other ill-health problems that are associated with both sedentary occupations and stressful lifestyles.

There is growing evidence that access to parks and open spaces and nature can help to maintain or improve mental health.

The patterns of physical activity established in childhood are perceived to be a key determinant of adult behaviour. A growing number of children and young people are missing out on regular exercise, and an increasing number of children and young people are being diagnosed as obese. Access to play spaces, community or sport facilities such as sport pitches can encourage physical activity. There is a strong correlation between the quality of open space and the frequency of use for physical activity, social interaction or relaxation.

Open space provision

- 2.12 The most recent open space assessment for LBS shows that there were 2.22 hectares (ha) of open space per 1,000 residents in 2013 across the borough.⁹ This is below the national recommendation of 2.43 ha per 1,000 residents set by the National Playing Fields Association (NPFA). This suggests that LBS has an under provision of open space.
- 2.13 In proximity to the Proposed Development (classified as ten minutes walking time) there are seven open/play spaces (outlined in **Table 4**), although none exceeded 2ha in size, which means that they are classed as ‘pocket parks’, the lowest category for public parks set out within the GLA guidelines.
- 2.14 The Bankside, Borough, and London Bridge sub-area that broadly aligns with the northern element of the local area, was ranked as ‘level of park provision below borough standard’ in the open space strategy, suggesting that provision is particularly lacking in the area local to the Site. The sub-area strategy for this part of the borough details that there is a relatively limited amount of open space, with 0.25 ha of public parks per 1,000 of the population, falling significantly below the standard of 0.72 ha of public parks per 1,000 of the population target identified for the borough.¹⁰ This is also projected to fall to 0.2 ha per 1,000 of the population in 2026 as a result of population growth.

Table 4 Pocket parks within ten minutes walking distance of the Site

Park name	Walking distance
Leathermarket Gardens	6 minutes
Guys Street Park	6 minutes
Little Dorit Park	8 minutes
Mint Street Park	8 minutes
Potters Fields Park	9 minutes
St. John Church Park	9 minutes
Tabard Gardens	10 minutes

Source: Google Maps, 2018; NB: All parks listed are less than 2ha in size.

- 2.15 Alternative and more recent data from the Ordnance Survey suggests there is approximately 526ha of open space in the borough, corresponding to 1.65ha per 1,000 residents in 2020. Of this figure, 41% is public park or garden (216ha), and 24% is cemetery, religious grounds or other space (128ha) (see **Table 5**).
- 2.16 This data also highlights that the local area contains a relatively lower provision of open space compared to the number of residents than the rest of LBS, which reflects its highly urban nature. **Figure 3** maps open space across LBS using Ordnance Survey data, highlighting that larger open spaces are located towards the south of the borough, further away from the Site.

⁹ LBS, 2013. Southwark Open Space Strategy

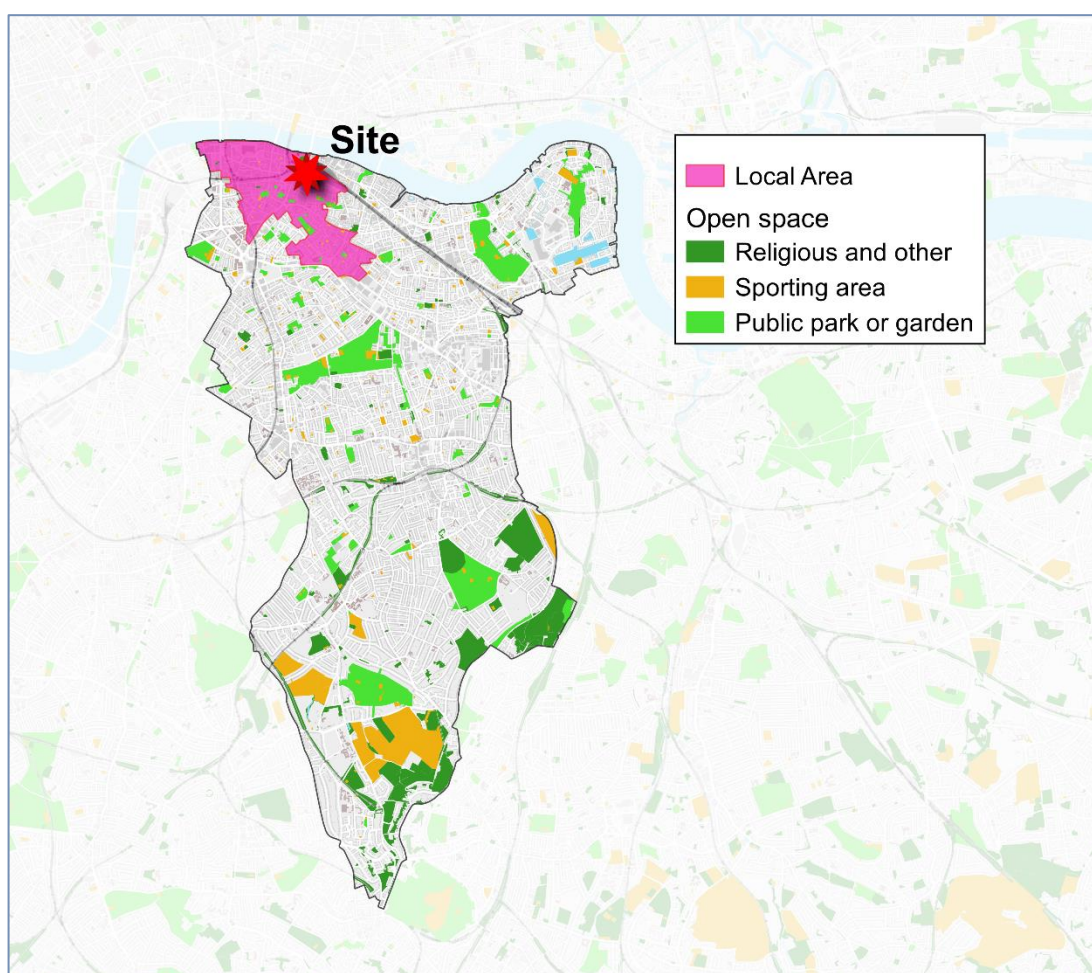
¹⁰ Ibid

Table 5 Provision of open space in the local area and LBS

	Local area		LBS	
	Area (Ha)	Area per 1,000 population (Ha)	Area (Ha)	Area per 1,000 population (Ha)
Allotments or Community Growing Spaces	0	0.00	15	0.05
Other Sports Facility	0.3	0.01	113	0.35
Play Space	1.0	0.05	13	0.04
Playing Field	0.6	0.03	41	0.13
Public Park or Garden	7.8	0.35	216	0.68
Cemetery, Religious Grounds or Other	0.8	0.04	128	0.40
Total	10.6	0.47	526	1.65

Source: Ordnance Survey, 2021, Open Greenspace.

Figure 3 LBS open space as categorised by Ordnance Survey



Source: Ordnance Survey, 2021, Open Greenspace.

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Human health impacts

- 2.17 When operational, there will be an additional 2,940 workers on-site above existing levels. In the context of local footfall, this increase will be minimal and so is not expected to generate a significant amount of additional demand for open space in the local area.
- 2.18 Currently, the Site is inaccessible as a pedestrian route and offers limited north/south permeability. The Proposed Development would offer two large public squares at street level in strategic locations where pedestrian flow rates in and out of the Site will be the highest. The borough has also been identified to have a deficiency of open space, and so this provision will have a greater impact. A public roof garden will also be provided at the top of the Proposed Development, encouraging exploration of a variety of green spaces. Access is given by dedicated lifts. There is also an opportunity in the public rooftop garden to experience uninterrupted views across London.
- 2.19 Overall, the Proposed Development would contribute positively towards open space, nature and public realm provision in a relatively deficient but highly accessible area with large pedestrian footfall.

Table 6 Access to open space and nature – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal retain and enhance existing open and natural spaces?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development will not result in any loss of open and natural spaces. However, the Proposed Development will provide a public roof garden which is accessible to everyone, as well as bringing greater permeability through the Site as a result of new ground level pedestrian routes. This will enhance the public realm.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
In areas of deficiency, does the proposal provide new open or natural space, or improve access to existing spaces?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>According to the LBS Open Space Strategy, the borough had 2.22 ha of open space per 1,000 residents in 2013. This is below the requirement of 2.4 ha per 1,000 residents set out by the National Playing Fields Association. In the area local to the Site there is limited open space, with public park provision significantly below the borough target.</p> <p>The additional workers located at the Proposed Development are not expected to generate a significant impact upon demand for open space.</p> <p>However, the Proposed Development will provide new open space through the public roof garden and substantial new public realm and pedestrian routes.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal provide a range of play spaces for children and young people?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<p>The Proposed Development does not increase the population of children and so provides no play space.</p> <p>However, the new public spaces created by the Proposed Development will be a suitable environment for all ages.</p>	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal provide links between open and natural spaces and the public realm?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development will substantially improve access through the Site. The new pedestrian routes will relieve pressure on Borough High Street and provide links to London Bridge station.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Are the open and natural spaces welcoming and safe and accessible for all?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Walking will be encouraged through the provision of shared open space and high quality public realm which will be connected to existing streets.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	The Design and Access Statement details measures undertaken to ensure accessibility of open spaces, this includes wheelchair accessible ramps for tiered elements of the rooftop garden.
Does the proposal set out how new open space will be managed and maintained?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	In order to ensure the effective management of the Site, the rooftop garden and public spaces will be regularly maintained.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	As above, proposals for the management and maintenance of open spaces are set out in the Design and Access Statement.

Air quality, noise and neighbourhood amenity

HUDU HEALTH LINK

The quality of the local environment can have a significant impact on physical and mental health. Pollution caused by construction, traffic and commercial activity can result in poor air quality, noise nuisance and vibration. Poor air quality is linked to incidence of chronic lung disease (chronic bronchitis or emphysema) and heart conditions and asthma levels of among children and young people. Noise pollution can have a detrimental impact on health resulting in sleep disturbance, cardiovascular and psycho-physiological effects. Good design and the separation of land uses can lessen noise impacts.

Evidence base

- 2.20 As a result of high levels of air pollution, LBS has declared the entire northern part of its Borough, from the A205 north to the boundary with the River Thames, as an Air Quality Management Area

for both annual mean NO₂ and 24-hour mean PM₁₀ which are attributable to road traffic emissions. The Site is located within this Air Quality Management Area. The Site is also located in London Bridge at Borough High Street Transport for London (TfL) nitrogen dioxide (NO₂) Focus Area.

- 2.21 Within its Air Quality Annual Status Report (2019) LBS outlines recordings of NO₂ and PM₁₀ at one roadside location and one urban background location using automatic monitors. NO₂ is also measured at 45 locations by LBS using diffusion tubes. The nearest monitor to the Site is the kerbside diffusion tube on Borough High Street (ID – SDT81), located approximately 0.08km from the Site. The 2019 mean monitored NO₂ concentration at this location was 61.2µg/m³, indicating the annual mean NO₂ objective of 40µg/m³ was exceeded at the diffusion tube closest to the Site in 2019
- 2.22 The English Index of Multiple Deprivation rankings provides an assessment of deprivation under a number of domains. The living environment domain category considers the extent of air pollution, noise levels and road traffic accidents at the neighbourhood level. On this ranking, LBS ranks as the 22nd most deprived local authority of the 317 local authorities within England in 2019.¹¹

Human health impacts

Construction

- 2.23 ES Volume 1 Chapter 9: Air Quality provides a technical assessment of the potential for the Proposed Development to result in changes in air quality. This assessment concludes that during the construction and demolition phase, the Proposed Development is not expected to result in a significant change in air quality, as all effects are negligible. A Dust Management Plan has been produced to outline the mitigation measures in place to reduce the potential adverse impact of construction dust, including the use of dampening of demolition areas to reduce dust levels.
- 2.24 ES Volume 1 Chapter 8: Noise and Vibration similarly provides a technical assessment of the potential for construction noise to result in significant environmental impacts. This assessment concludes that following consideration of a series of measures outlined in the Site Environmental Management Plan to reduce noise, including locating stationary plant away from sensitive noise receptors and the use of hoarding to minimise noise transmission, the demolition and construction phase would result in significant noise impacts at three receptor locations, these are Guy's Hospital, the Bunch of Grapes restaurant, and Iris Brook/Orchard Lisle House.
- 2.25 This conclusion is predicated on the basis that all on-site plant activities operate simultaneously at the shortest distance to the most sensitive receptor, a situation which in practice is seldom likely to occur. This assessment therefore represents a worst case scenario. As such, the majority of the construction phase potential impacts will range from negligible to, at worst, a temporary local adverse effect of moderate significance. The demolition and construction phase will involve the application of the principle of Best Practical Means (BPM) as defined in Section 72 of the Control of Pollution Act 1974, carrying out all work in such a manner as to reduce any disturbance from noise to a minimum and all plant brought on-site will comply with relevant UK noise limits applicable to the equipment.
- 2.26 The Proposed Development will incorporate a standard of accommodation above the baseline requirements suggested by Building Regulations or related British Standards. This is particularly relevant with regards to noise ingress. Furthermore the external noise levels are to comply with local planning requirements.
- 2.27 Overall, the impact on health outcomes arising from changes in air quality, noise and neighbourhood amenity is thought to be relatively small. Increased noise and construction dust during this phase have the potential to reduce health outcomes for individuals consistently exposed. However, existing health literature highlights continued exposure to these changes as the primary

¹¹ MHCLG, 2019. Index of Multiple Deprivation.

driver of health changes. Due to the relatively minor level of changes in these conditions, and the temporary nature of the demolition and construction period, any health impacts arising from these changes are thought to be minimal in scale.

Operational

- 2.28 During the operational phase, the Proposed Development has the potential to impact noise and air quality through the generation of additional vehicle trips, and the location of a total of 3,840 workers on-site. However, as discussed in ES Volume 1 Chapter 9: Air Quality and Chapter 8: Noise and Vibration, no significant adverse impacts are anticipated to occur as a result of these changes once operational.
- 2.29 In addition, the Proposed Development incorporates a number of measures that would benefit air quality locally, with the most significant of these being a new entrance/exit to the London Bridge Underground Station, redirecting pedestrian flow away from Borough High Street, which faces higher rates of air pollution, and the development of new areas of sheltered public realm away from the roadside that involve high levels of tree planting.

Table 7 Air quality, noise and neighbourhood amenity – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal minimise construction impacts such as dust, noise, vibration and odours?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The Construction Management Plan outlines the construction management measures to be adopted and implemented for the Development to mitigate the impact of all construction impacts, including noise, vibration, parking and security, amongst others.</p> <p>The Applicant will also ensure that the Considerate Constructors Scheme is operated on-site.</p>	<input type="checkbox"/> Positive <input checked="" type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	Specific mitigation measures are presented within the Construction Management Plan and ES Volume 1 Chapter 9: Air Quality and Chapter 8: Noise and Vibration.
Does the proposal minimise air pollution caused by traffic and energy facilities?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Environmental Statement Chapter 9: Air Quality finds that impacts on air quality in the construction (after mitigation) and operational phases are not significant.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal minimise noise pollution caused by traffic and commercial uses?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Environmental Statement Chapter 8: Noise and Vibration and the Construction Management Plan finds that noise impacts in the construction phase require mitigation and will be insignificant to, at worst, a temporary local adverse effect of moderate significance, and impacts in the operational phase are expected to be insignificant but are nonetheless mitigated.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Accessibility and active travel

HUDU HEALTH LINK

Convenient access to a range of services and facilities minimises the need to travel and provides greater opportunities for social interaction. Buildings and spaces that are easily accessible and safe also encourage all groups, including older people and people with a disability, to use them. Discouraging car use and providing opportunities for walking and cycling can increase physical activity and help prevent chronic diseases, reduce risk of premature death and improve mental health.

Evidence base

- 2.30 The Proposed Development is located in an area benefitting from excellent public transport links, with a PTAL rating of 6b, the highest rating that can be achieved. The Site is located in close proximity to London Bridge overground and underground stations (<0.1 mile), as well as Borough station (0.4 miles away), providing access to the Jubilee and Northern lines.
- 2.31 Vehicular and pedestrian access to the Site is currently from St Thomas Street (A200) and King's Head Yard. King's Head Yard provides access to the Site's car parking area whilst St Thomas Street is used for servicing. There is currently no public open space or a public route through the Site.
- 2.32 There are 19 bus routes within a 10-minute walk of the Site, with the closest bus stop being located approximately 220 metres away, about a three minute walk to 'London Bridge Bus Station', where the number 17 bus stops, providing services through central London towards North London. The Site is also located close to various cycling hire docking stations, with the most local being London Bridge and at Hop Exchange. The Site is also close to established cycle routes including Cycle Superhighway 7 (CS7) and National Cycle Network Route 4.
- 2.33 A Pedestrian Environment Review System (PERS) audit of the existing pedestrian network surrounding the Site has previously been undertaken:
- "The audit shows that, at present, a number of links achieved a red rating which indicates poor level of provision. These include the southern side of St Thomas Street, on the southern side of Borough High Street outside of the Site, on White Hart Yard and on King's Head Yard. The links have scored poorly based on several parameters with the worst scoring parameters being poor maintenance, user conflict, colour contrast, tactile information, and permeability."*
- 2.34 Refer to Chapter 7: Transport and Access of the ES and the Transport Assessment for a detailed assessment of the Site's accessibility.

Human health impacts

Demolition and construction traffic management

- 2.35 During the demolition and construction phase, there will be an increase in the amount of people travelling to the Site. The Proposed Development is to be car-free, with the exception of two accessible parking bays within the service area for the use of blue badge holders (agreed as a suitable level by LBS). For this reason, workers will travel to the Site by public transport and, as a result, not contribute towards an increase in vehicle trips. Furthermore, construction working hours will be 8am to 6pm, meaning that the majority of the construction workers will be travelling to the Site outside of peak periods. In addition, vehicle movements and deliveries during the construction stage will be reduced during weekday highway peak hours. Therefore, it should not make a significant difference to the level of demand for public transport.
- 2.36 The construction and demolition works would generate short-term increases in vehicle movements on the highway near the Site. These increases would not be constant over the construction period. The Transport Assessment looks at the highest peak frequency as it provides a worst case assessment and finds that "there is expected to be a maximum of 60 two-way HGV movements a day during the most intense construction period. Construction vehicle activity would have a

negligible effect on the majority of the surrounding roads, resulting in an increase of less than 10%.”

2.37 Chapter 7: Transport & Access also notes that:

“The construction vehicles would be managed in accordance with a Construction Logistics Plan and a Site Environmental Management Plan (SEMP). These documents would be agreed with LBS prior to the commencement of works and are expected to be secured by planning conditions.

Other potential effects as a result of construction would be on road surfaces from mud and dirt, as well as temporary footway closure on the southern side of St Thomas Street which would be actively managed in accordance with measures set out in the SEMP and the CLP. These measures would be expected to be incorporated as planning conditions / Section 106 measures and are therefore considered as mitigation measures rather than part of the scheme design, hence their consideration as such within this assessment. These measures are summarised as follow:

- *Restricted hours of work;*
- *Demolition and construction method statements;*
- *Considerate Constructors Scheme;*
- *Management of deliveries and trade contractors;*
- *Management of noise, vibration and dust; and*
- *Management of construction waste.”*

2.38 For further details, refer to Chapter 6: Development programme, demolition, deconstruction, refurbishment and construction, and Chapter 7: Transport & Access of the ES, the Transport Assessment, and the Construction Management Plan.

Accessibility

2.39 Currently, accessibility in the immediate vicinity of the Site is poor, as the junction immediately north of LUL London Bridge station entrance on Borough High Street has a higher rate of pedestrian accidents / near-misses compared to the majority of London. The current Site is an impenetrable block with no clear routes connecting to the London Bridge streetscape. New entry points to the Site will be established which will improve overall permeability. This will involve measures such as creating a new entrance from St Thomas Street, reinstating a Georgian passageway through the townhouses, and improving pedestrian safety and increase footfall from the new LUL entrance. Also, two existing entry points will be improved by the increased permeability of the Site, with the Proposed Development providing a new through route across the Site for pedestrians.

2.40 The Proposed Development would also ensure that all newly created public spaces are accessible to the maximum number of individuals. Where public spaces are tiered, such as is the case for the rooftop garden and woodland walkway, shallow gradient ramps will be provided to enable wheelchair access. A full list of measures intended to maximise access to and around the Proposed Development are provided in the Design and Access Statement.

Operational traffic management

2.41 The Proposed Development, once operational, is expected to have a negligible impact upon traffic levels. The limited number of service vehicles would enter a newly generated ground level services area created to the east of Keats House on-site. All deliveries to the Site will need to be pre-booked with a maximum of six deliveries an hour and no deliveries at peak hours (between 07:00-10:00, 12:00-14:00 and 16:00-19:00). In addition, a proportion of servicing will take place overnight (between 12 and 6am) to further reduce the number of vehicle trips during the day.

2.42 With the exception of two accessible parking bays and service vehicles the Proposed Development will be car-free, and so the majority of the trips in terms of staff travel are forecast to be undertaken on foot and by public transport. The impact of the operation of the Proposed Development on the

surrounding public transport network would be negligible. A Travel Plan will also be submitted in support of the planning application which will aim to ensure the predicted travel patterns are achieved and maintained.

- 2.43 In addition, consultation is currently being undertaken with TfL to inform proposals to manage the direction of vehicles along St Thomas Street. At this stage it is unclear which option will be taken forward to minimise traffic along in the area, but continued engagement and co-operation will be sought with TfL to minimise traffic impacts.

Active travel

- 2.44 Pedestrian access to the Site and in the surrounding area will face significant improvements as a result of the Proposed Development, contributing to active travel levels. The Proposed Development would improve pedestrian permeability between King's Head Yard and St Thomas Street through the creation of a new passageway, which will be linked to the two newly generated public squares. The existing passageway linking the Site with St Thomas Street will be enhanced, widening up the pedestrian access-way and improving public realm to contribute to pedestrian amenity.
- 2.45 The Proposed Development will contain facilities to support cycling with the provision of 1,336 cycle parking spaces provided across the Site. There will also be 73 showers and 490 lockers provided at basement level for all tenants, which will be located within easy reach of the cycle parking. Cycle parking spaces and associated shower and locker provisions will be allocated across ground level and Basement Level 1. Access to cycle facilities is provided via a cycle stair with return conveyor belt system to assist cyclists.
- 2.46 The Proposed Development has sought to address the 10 Healthy Streets indicators, as set out by the Mayor in the Mayor's Transport Strategy: "The strategy adopts the Healthy Streets Approach which creates streets and routes that encourage walking, cycling and public transport use, reducing car dependency."¹² These indicators have been taken into consideration when assessing links surrounding the Site, and some examples of how some of the indicators have been addressed is given below:
- **Shade and shelter:** the proposals will provide a new access into the Borough High Street London Bridge Underground entrance, providing shade and shelter for pedestrians, as well as providing shade and shelter on the footway along St Thomas Street;
 - **Places to stop and rest:** the proposals will provide seating within the proposed public realm giving pedestrians a place to stop and rest. There will also be seating in the new underground access;
 - **Not too noisy:** the proposals include a new, quieter access route for pedestrians accessing the Underground, as well as methods to improve cycle safety in an attempt to reduce traffic noise;
 - **People feel safe:** the additional activity and footfall from the Proposed Development will provide greater passive surveillance and increase the feeling of safety; and
 - **People feel relaxed:** increased maintenance of manhole covers along St Thomas Street, which will make the pedestrian environment more relaxing, particularly for those with mobility issues. General improvements and increase in public spaces and the public realm will improve pedestrian experience, reduce crime through natural surveillance, and contribute further towards making people feel relaxed.
- 2.47 Overall, the Proposed Development would result in a positive effect on health outcomes through changes to the active travel and accessibility once operational.

¹² The Mayor, 2018. Mayor's Transport Strategy

Table 8 Accessibility and active travel – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal address the ten Healthy Streets indicators?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Proposals regarding the links surrounding the Site of the Proposed Development have been assessed in accordance with the 10 Healthy Streets indicators.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal prioritise and encourage walking (such as through shared spaces?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Pedestrian access will be significantly improved through: improvements to the public realm, permeability improvements, new access to London Bridge underground station, and removal of car access, among other things.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal prioritise and encourage cycling (for example by providing secure cycle parking, showers and cycle lanes)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development will provide lockers, changing rooms, showers and cycle parking to encourage cycling to the Site.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The Proposed Development will improve the pedestrian routes through the Site which will better connect pedestrian walkways to pre-existing streets.</p> <p>It is also in close proximity to established cycle routes, including Cycle Superhighway 7 and National Cycle Network Route 4 and will contribute to active travel access in a highly accessible location.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal include traffic management and calming measures to help reduce and minimise road injuries?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development has a range of measures which will be put in place in order to minimise trip generation, including prioritisation of active transport measures and the removal of car parking spaces on-site.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	Continued engagement should be sought with TfL to actively co-operate on potential options for vehicle management along St Thomas Street.
Is the proposal well connected to public transport, local services and facilities?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Site has a PTAL rating of 6b. This is categorised as having the best level of public transport accessibility.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal seek to reduce car use by reducing car parking provision, supported by the controlled parking zones, car clubs and travel plans measures?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development is expected to have a negligible impact upon travel levels – it will be car free (apart from servicing and two blue-badge parking spaces).	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	A Travel Plan will also be written which will aim to ensure the predicted travel patterns are achieved and maintained.
Does the proposal allow people with mobility problems or a disability to access buildings and places?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development has been designed to comply with relevant planning policy and meet all relevant building regulation requirements as a minimum. The Design and Access Statement explains how it will improve accessibility by introducing step-free access where possible.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Crime reduction and community safety

HUDU HEALTH LINK

Thoughtful planning and urban design that promotes natural surveillance and social interaction can help to reduce crime and the ‘fear of crime’, both of which impact on the mental wellbeing of the users of spaces. As well as the immediate physical and psychological impact of being a victim of crime, people can also suffer indirect long-term health consequences including disability, victimisation and isolation because of fear. Community engagement in development proposals can lessen fears and concerns.

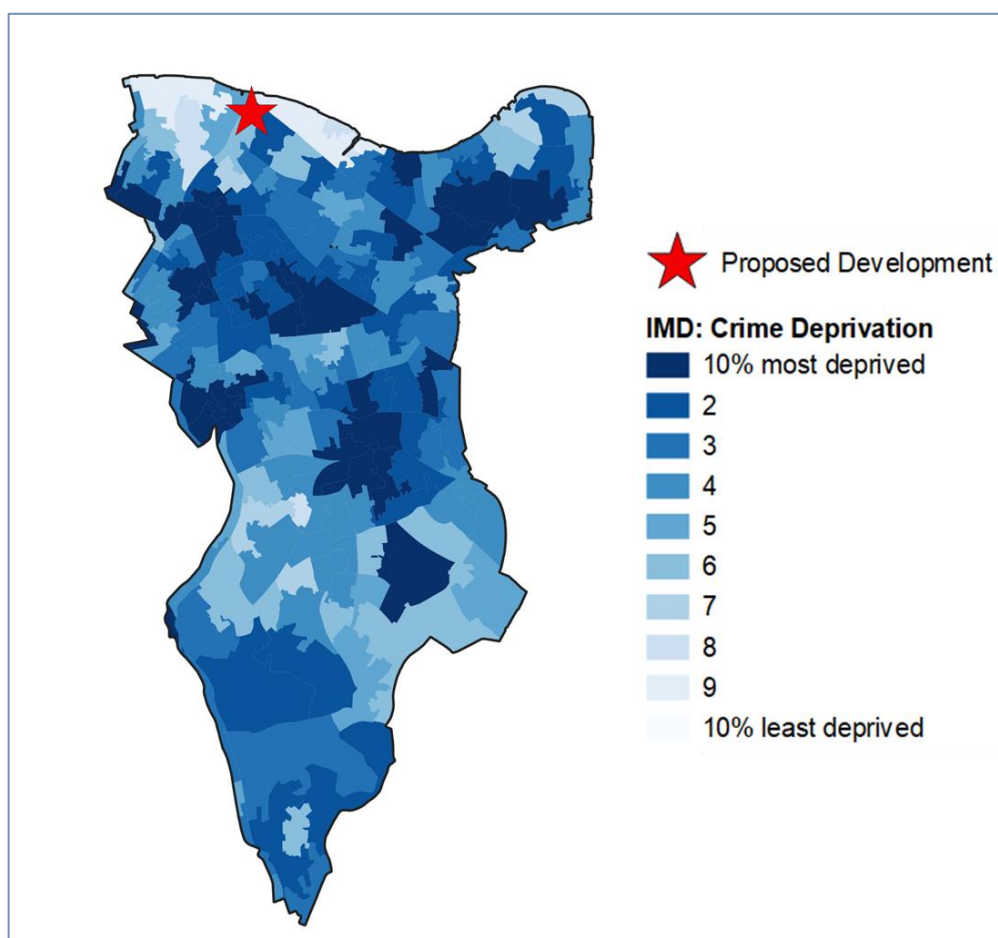
New environmental impact assessment regulations require consideration of any significant effects arising from the vulnerability of the proposed development to major accidents or disasters that are relevant to that development.

Evidence base

- 2.48 The English Indices of Multiple Deprivation (IMD) ranks areas in England based on their deprivation on seven key domains: income, employment, health deprivation disability, education skills and training, barriers to housing and services, crime and disorder, and living environment.
- 2.49 In 2019, approximately 80% of the Lower Super Output Areas (LSOAs) that make up the LBS are within the 50% most deprived nationally for crime, with over a third being in the 20% most deprived,¹³ signalling the extent to which crime is a problem in the borough. The IMD reports that the LBS is the 37th most deprived local authority in England with regards to the crime sub-domain. **Figure 4** illustrates these findings, showing that crime is a problem throughout the borough, but relatively less so in the north-west, where the Proposed Development is located. The LSOA in which the Site falls is ranked as being in the 40% least deprived nationally for crime, indicating that crime is an issue throughout the LBS, but slightly less so around the Site.

¹³ MHCLG, 2019. Index of Multiple Deprivation

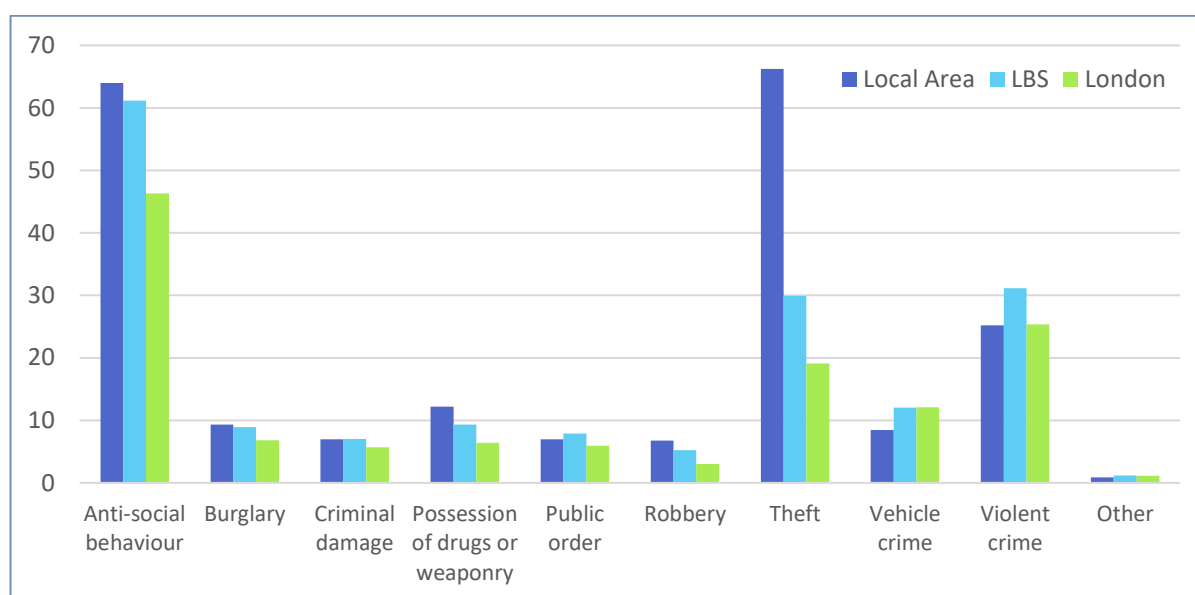
Figure 4 IMD 2019: Crime Deprivation by LSOA



Source: MHCLG, 2019. Index of Multiple Deprivation.

2.50 In 2020, a total of 4,600 crimes were committed in the area local to the Site, equivalent to a crime rate of 207 crimes per 1,000 residents. This is above the corresponding rates for LBS (174 crimes per 1,000 residents) and London (132 crimes per 1,000 residents). **Figure 5** presents a breakdown of the rate of crime by types, showing that the local area faces very high rates of anti-social behaviour and theft.

Figure 5 Crimes rate by type of crime (2020 crimes per 1,000 residents)



Source: Met Police, 2021. Crime Data Dashboard (January 2020 to December 2020).

Human health impacts

Construction phase

2.51 The Construction Management Plan provides a detailed outline of the measures taken to reduce crime during the construction and demolition phase. It notes that there will be security at the main entrance to the Site and the entrance will be manned by a full time security guard. Signage will also identify the work zones and safe routes so both Site operatives and visitors will be aware of no-go areas, safe routes and escape routes. The Construction Management Plan also notes that the following control measures shall be in place:

- There will only be one means of access into the building. The primary access point shall be through the access gate situated adjacent to the main entrance gate with the public pavement to St Thomas Street closed for the duration of construction works;
- Any access for bulk materials will be through the double gate along St Thomas Street, but only under supervision of traffic marshals and Site security, and with prior arrangement. This gate will remain locked at all other times and fully supervised by a traffic marshal or banksman;
- A digi-keypad shall be fitted to the external door at the main pedestrian entrance to the Site;
- Turnstiles with an access control system will be installed adjacent to the Site entrance;
- All deliveries to the Site will be undertaken through an electronic 'booking-in' system managed by the security organisation, with all deliveries allocated a specific time slot;
- Entrance to the Site will be secured with mortice locks at all times outside of working hours;
- Car parking will be prohibited on-site for the duration of the demolition and construction phase;
- Access to Site works areas from all other external doors shall remain locked and secured with emergency break glass bolts; and
- Operatives and visitors will have to attend an induction prior to working on-site. This will be carried out by the Main Contractor.

Operational phase

2.52 Once operational, the Development would be expected to reduce crime in the local area. The ability of well-designed developments to 'design-out' crime is well studied. Crime Prevention Through

- Environment Design (CPTED) holds that proper design, through application of CPTED guidance, results in behavioural responses that deter and reduce the fear of crime. For example, encouraging natural surveillance in order to have ‘more eyes on the street’ will deter criminal activity as will ensuring a good level of maintenance and management because visual deterioration may encourage crime and reduce ‘pride of place’.
- 2.53 CPTED is focused on natural crime prevention strategies through design. The design elements evoke behavioural cues which make people less likely to commit crime. There are four main principles to CPTED:
- **Natural surveillance:** physical features that make criminal activity more visible to the public, for example: good lighting, strategically placed windows, and reduced hiding spots;
 - **Natural access control:** design which prohibits potential criminals’ access, for example using curbing and landscaping to direct foot traffic into visible areas;
 - **Territorial reinforcement:** design which creates a clear distinction between public and private property such as security signage; and
 - **Maintenance:** a place that is clearly well cared for and maintained looks like it has a lower tolerance for crime and, subsequently, deters new crime.
- 2.54 Existing literature shows that not only does the reduction of crime have a direct effect in improving health and social outcomes, but the fear of crime has also been linked to reduced health outcomes. Increased fear of crime has been consistently linked to reduced physical activity across multiple age categories, indirectly resulting in reduced health outcomes.^{14,15} Children and adolescents exposed to violence have been additionally shown to be at risk of poor long-term behavioural and mental health outcomes regardless of whether they are victims, direct witnesses, or hear about it indirectly.¹⁶
- 2.55 Once operational, the Proposed Development would be expected to reduce crime in the local area through increasing the number of eyes on the streets, activating routes, security measures, and sensitive design. The design team has met with police security stakeholders to inform the Security Design Strategy. A reduction in crime will have both benefits for residents and business alike.
- 2.56 In January 2021, the Applicant appointed Kanda Consulting to undertake a pre-application community consultation for the Proposed Development. The findings of the consultation process have been published within the Statement of Community Involvement. The key findings as a result of this process are summarised below:
- Forty-three percent of respondents either somewhat agree or strongly agree with the delivery of a significant amount of affordable workspace as part of the proposals to redevelop the Proposed Development. The same response was given for the delivery of commercial office space;
 - Eighty-five percent of respondents either somewhat or strongly agree with the delivery of a new, publicly accessible rooftop garden at the Proposed Development; and
 - Seventy-six percent of respondents either somewhat or strongly agree with the proposals to sensitively refurbish the historic buildings on-site (Georgian Terrace/Keats House).

14 Lorenc et al., 2013, Fear of crime and the environment: systematic review of UK qualitative evidence.

15 Won et al., 2016, Neighbourhood Safety Factors Associated with Older Adults’ Health-Related Outcomes: A Systematic Literature Review.

16 Office of Disease Prevention and Health Promotion (USA), 2019, Healthy People 2020: Social Determinants of Health.

Table 9 Crime reduction and community safety – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal incorporate elements to help design out crime?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development will take account of the principles outlined in Secured by Design. The scheme will subscribe to the related design measures outlined by the CPTED. In addition, there will be a number of security measures in place such as video surveillance, access controls and intruder alarms.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal incorporate design techniques to help people feel secure and avoid creating 'gated communities'?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The Proposed Development will improve pedestrian routes through the Site to enable greater permeability. The public rooftop garden incorporated into the Proposed Development is accessible to all. This should help prevent any feelings of 'us' and 'them' between workers at the Site and the local residents and those who work elsewhere in the local area.</p> <p>Refer to the Design and Access Statement for more information.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal include attractive, multi-use public spaces and buildings?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The Proposed Development will comprise of mixed use buildings. A key aim of the Proposed Development is to retain and enhance heritage buildings to improve the attractiveness of the Site.</p> <p>Refer to the Design and Access Statement, which describes the design principles of the Proposed Development.</p> <p>This will be complemented with public gardens and public realm improvements.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Has engagement and consultation been carried out with the local community?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>A comprehensive public consultation has been undertaken with the local community, including residents, residents' groups, local businesses, elected representatives and community groups.</p> <p>Refer to the Statement of Community Involvement.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Access to healthy food

HUDU HEALTH LINK

Access to healthy and nutritious food can improve diet and prevent chronic diseases related to obesity. People on low incomes, including young families, as well as older people, are the least able to eat well because of lack of access to nutritious food. They are more likely to have access to food that is high in salt, oil, energy-dense fat and sugar.

Opportunities to grow and purchase local healthy food and limiting concentrations of hot food takeaways can change eating behaviour and improve physical and mental health.

The importance of eating healthy food is outlined by the NHS:¹⁷

“Eating a healthy, balanced diet plays an essential role in maintaining a healthy weight, which is an important part of overall good health. Being overweight or obese can lead to health conditions such as type 2 diabetes, certain cancers, heart disease and stroke. Being underweight could also affect your health.”

Evidence base

- 2.57 Residents of the LBS are more active than the London and England averages, as shown in **Table 10**, with adult obesity rates in the borough (52%) lower than comparators. However, the childhood obesity rate is higher than comparators, ranking the LBS as the fifth worst borough in terms of this metric in London, and obesity-related hospital admissions are alarmingly high, ranking the LBS as the worst performing borough on this metric, suggesting that obesity is a borough-wide issue.

Table 10 Obesity/physical activity rates

	LBS	London	England
Childhood obesity rate (% of age 10-11)	27%	24%	21%
Adult obesity rate (% of age 18+)	52%	56%	62%
Obesity-related hospital admissions (per 100k residents)	84	31	20
Proportion of physically inactive residents	26%	28%	29%

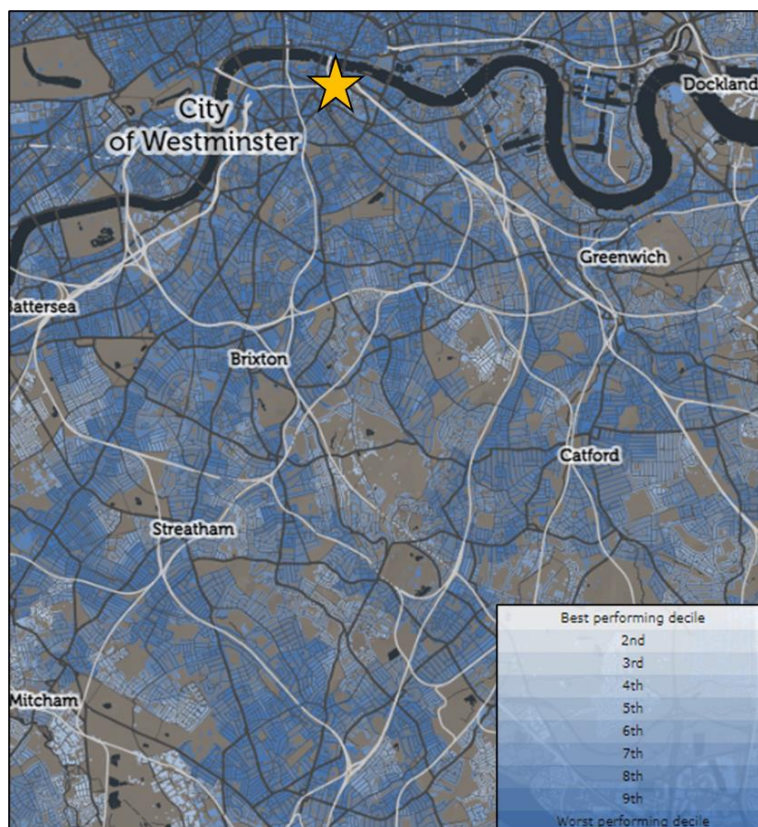
Source: Public Health England, 2020. Fingertip Health Profiles; NHS Digital, 2020. Statistics on obesity, physical activity and diet; UK Active, 2014. Turning the tide of inactivity

- 2.58 The Geographic Data Science Lab releases a dataset called AHAH (Access to Healthy Assets and Hazards) – which is a multi-dimensional index measuring how ‘healthy’ neighbourhoods are, based on the following data:
- Access to retail outlets (fast food outlets, pubs, off-licenses, tobacconists, and gambling outlets);
 - Levels of air quality (green space and air pollution);
 - Access to health services (GPs, hospitals, pharmacies, dentists, and leisure services); and
 - Access to natural environment (green spaces including parks and recreational spaces, and blue spaces including rivers, canals and lakes).
- 2.59 One of the measures for the AHAH index is access to fast food, on which LBS scores very poorly, as illustrated in **Figure 6**. The LSOA in which the Site is located falls in the 10% worst performing

¹⁷ NHS, no date. NHS choices: Eight Tips for Healthy Eating.

deciles nationally, indicating that accessibility to unhealthy food is a major concern in the local area. However, this is a finding mirrored across much of the capital, and in particular, Inner London boroughs due to their highly urban nature.

Figure 6 Access to healthy assets and hazards (AHAH) index: access to fast food



Source: Consumer Data Research Centre (CDRC), 2017.

Human health impacts

- 2.60 The Proposed Development will include a restaurant and small café at roof level to accompany the rooftop garden. It is thought that this retail offer will be primarily aimed at the wider public, as opposed to on-site workers, however there is potential for on-site provision to change the diets of on-site workers.
- 2.61 The potential health of the Proposed Development in relation to access to healthy food is uncertain due to it being largely dependent on worker's choices, however the proposals do not include hot food takeaway uses, therefore the impact is unlikely to be negative as set out in **Table 11**.
- 2.62 On balance, given the food and beverage offering at the Proposed Development will not contribute towards an over-concentration of hot food takeaways, it is thought that any impact on access to healthy food would be minimal.

Table 11 Access to healthy food – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal facilitate the supply of local food, i.e. allotments, community farms and farmers' markets?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	The Proposed Development does not involve the creation of any allotments or community farms.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Is there a range of retail uses, including food stores and smaller affordable shops for social enterprises?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development is primarily an office building, but includes provision of a restaurant and café at rooftop level to accompany the rooftop garden. In addition, there is potential for further food and beverage provision at ground floor level within flexible-use space. Depending on the nature of the occupiers, which are not known at this stage, the food and beverage provision at the Proposed Development has the potential to improve local choice.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal avoid contributing towards an over-concentration of hot food takeaways in the local area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Proposed Development does not contain any hot food takeaway provision. Food provision on-site will occur at the rooftop restaurant, but this is not thought to contribute towards an over-concentration of hot food takeaways.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Access to work and training

HUDU HEALTH LINK

Employment and income are key determinants of health and wellbeing. The Marmot Review, commissioned by the Department of Health, looks at the relationship between health inequalities and economic status for communities within England.¹⁸ The review concludes that greater economic status is predictive of better health outcomes, and unemployment contributes to poor health outcomes. This conclusion is echoed by Public Health England (2014): “unemployed people have a greater risk of poor health than those in employment, contributing to health inequalities.”¹⁹

Employment and skills effects are shown to be particularly relevant for some equality groups, including young children, people from BAME communities, disabled people, and people from low income groups. Unemployment generally leads to poverty,

¹⁸ Marmot et al., 2010, Fair Society, Healthy Lives: Strategic Review of Health.

¹⁹ Public Health England, 2014, Local Action on Health Inequalities: Increasing Employment Opportunities and Improving Workplace Health.

illness, and a reduction in personal and social esteem. Work aids recovery from physical and mental illnesses and improves health outcomes.

Evidence base

- 2.63 In the 12 months to March 2020, the employment rate in the LBS was 80%, higher than both the London (75%) and England (76%) averages.²⁰ The economic activity rate was higher in the borough than comparators at 85%, compared to 79% in both London and England. There were also 9,700 unemployed residents in the 12 months to March 2020, giving an unemployment rate of 4.9%, which was slightly higher than the London level (4.8%) and higher than the national level (4.1%).
- 2.64 The result of the pandemic on the economy has been severe since the outbreak began, with the labour market being particularly affected by the restrictions that have been put in place to curb the virus. Such restrictions have resulted in a contraction in economic activity (9.9% drop in GDP in 2020),²¹ forcing many businesses to place their employees on furlough. As a result of this and national redundancies, worklessness has increased around the country, with London having been particularly hard hit.
- 2.65 Whilst the immediate economic effects of the pandemic are severe, available initial forecasts point towards a short-term impact with economic recovery to pre-pandemic levels. Future projections predict that GDP will rapidly revert back to its pre-pandemic levels throughout 2021, as the vaccination programme picks up pace.²²

Human health impacts

- 2.66 The construction and demolition phase is estimated to support 2,695 gross job years, equivalent to 270 FTEs over the duration of the period. This equates to an average of 750 workers on-site annually during the construction period, representing an uplift of 13% for the LBS construction workforce.²³ The Applicant has taken the necessary steps to maximise the number of employment opportunities associated with the Proposed Development that can be fully exploited within the local area. In their Community Strategy, Great Portland Estates (the Applicant's parent company) outline their ten long term commitments. These include:²⁴
- **Working with industry bodies and their supply chain to maximise apprenticeship opportunities at their developments and managed buildings** – at least 5 apprentices will be recruited within the relevant parties during construction. The Applicant will also work with local universities and colleges to engage with the project team and provide access to the Applicant's active sites to support learning;
 - **Promoting the property and construction industry through engagement with local schools** – provide opportunities for work experience and career events for schools located in the communities in which our occupied buildings are located;
 - **Working with colleges and universities to develop the knowledge and skills of the future workforce** – provide work experience for at least one university/college student per annum to work within our occupied buildings; and
 - **Helping the existing workforce to adapt to new ways of working** – champion health and wellbeing at our buildings and for our employees.
- 2.67 When operational, the Proposed Development is estimated to support a total of 3,535 FTEs, equivalent to 3,840 jobs when accounting for part-time working patterns. This equates to an additional 2,690 FTEs (2,940 jobs) when comparing against the existing Site. When considering

²⁰ ONS, 2020. Annual Population Survey

²¹ Reuters, 2021. London stock falls as UK GDP slumps a record 9.9% in 2020

²² Bank of England, 2021. Monetary Policy Report February 2021

²³ See Volterra, 2021. New City Court – Marketing Strategy

²⁴ Great Portland Estates, 2018. Creating sustainable relationships.

displacement and multiplier effects, the Proposed Development is estimated to support a total of 3,025 net additional FTEs, equivalent to 3,310 net additional jobs.

2.68 The Applicant has also committed to providing jobs to unemployed LBS residents in both the construction and operation phases. The draft s.106 Head of Terms includes the following commitments:

- **Employment and enterprise during construction (in-kind provision)** – One job lasting a minimum 26 weeks for an unemployed Southwark resident per 500sqm GEA, one Southwark resident trained in pre-or post-employment short courses per 500sqm GEA, and one new apprenticeship start or in work NVQ per 2,000sqm. Where the target number of sustained jobs, short courses or apprenticeships cannot be provided, a contribution will be sought to be used by Southwark, calculated as £4,300 for shortfall against target number of jobs lasting minimum 26 weeks, £150 for shortfall against target number of Southwark residents trained in short courses, and £1,500 for shortfall against target number of apprenticeship starts.
- **Employment and enterprise in operational development (in-kind provision)** – Requirement to provide jobs lasting a minimum of 26 weeks for unemployed Southwark residents calculated at 10% (for office floorspace) or 20% (for retail floorspace) of the estimated Full Time Employee (FTE) employment on-site according to Homes and Community Agency (HCA) employment densities or an alternative measure agreed by the council. An employment and training contribution will be sought, to be set at the target number of jobs lasting a minimum of 26 weeks for unemployed Southwark residents multiplied by £4,300.

2.69 The Proposed Development will also provide approximately 5,000sqm (GIA) of flexible, high quality, affordable workspace across all floors of the Grade II listed Georgian terrace, offering support for start-ups, small, or independent businesses. This equates to approximately 10% of the total office provision under the Proposed Development. This affordable workspace will help support the ongoing success of small businesses and local employment opportunities.

Table 12 Access to work and training – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal provide access to local employment and training opportunities, including temporary construction and permanent 'end-use' jobs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The construction and demolition phase is estimated to support 2,695 gross job years and the Proposed Development is expected to support 2,940 additional jobs once operational.</p> <p>The Applicant has taken the necessary steps to maximise the number of employment opportunities associated with the development that can be fully exploited within the local area, and these will be secured through the s106.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal provide childcare facilities?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	As the Proposed Development does not include any residential provision, this is not deemed to be necessary.	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal include managed and affordable workspace for local businesses?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Affordable workspace will be provided in the restored Georgian Terrace facing St Thomas Street across all levels from lower ground to the third floor. Approximately 10% of office space at the Proposed Development will be affordable workspace for local businesses.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal include opportunities for work for local people via local procurement arrangements?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The Applicant will take the necessary steps to maximise the number of local employment opportunities associated with the Proposed Development.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Social cohesion and lifetime neighbourhoods

HUDU HEALTH LINK

Friendship and supportive networks in a community can help to reduce depression and levels of chronic illness as well as speed recovery after illness and improve wellbeing. Fragmentation of social structures can lead to communities demarcated by socio-economic status, age and/or ethnicity, which can lead to isolation, insecurity and a lack of cohesion.

Voluntary and community groups, properly supported, can help to build up networks for people who are isolated and disconnected, and to provide meaningful interaction to improve mental wellbeing. Planning proposals should be developed in consultation with differentiated community groups (such as children, young people, residents, families, businesses, faith groups, community organisations). They should be involved in the planning of the project from the beginning and throughout the life cycle of the project. Opportunities for post planning qualitative consultations should be considered with these different groups to explore a range of social, emotional and health needs.

The concept of Lifetime Neighbourhoods placed the design criteria of Lifetime Homes into a wider context. It encourages planners to help create environments that people of all ages and abilities can access and enjoy, and to facilitate communities that people can participate in, interact and feel safe. Planning Practice Guidance now refers to inclusive and age friendly design and the issues and principles to be considered, and characteristics of a dementia-friendly community.

Evidence base

- 2.70 While no direct data on the strength of community cohesion is available the local area or LBS, the Community Life Survey indicates that only 73% of individuals from London meet up with friends in person at least once a week compared with 74% nationally. Generally, on social support measures, London performs in line with the national average. Across London, the proportion of people agreeing that there are people who would be there for them if they needed help is 94%

compared to 95% nationally, and the proportion of individuals agreeing that they have individuals they can socialise with is 92% compared to 91% nationally.

Human health impacts

- 2.71 The public and workers will have access to a variety of facilities including the rooftop garden incorporating a café and restaurant, ground-floor retail, new access routes, gardens and improved public realm. These provide opportunities for users to interact and build a sense of community within the Proposed Development.
- 2.72 Throughout the application process there has been extensive pre-application consultation as well as public consultation. Consultation can improve community outcomes: as noted by the National Planning Policy Framework ‘good quality preapplication discussion enables better communication between public and private resources and improved outcomes for the community’.²⁵ Full details of the consultation process undertaken by the Applicant and project team can be found in the accompanying Statement of Community Involvement.
- 2.73 The Proposed Development supports all non-residential aspects of lifetime neighbourhoods:
- **Access:** the accessibility of the Proposed Development will enable residents to travel out in the area in which they live, connecting them with services and people in the immediate neighbourhood and beyond;
 - **Services and amenities:** the Proposed Development will contribute to services directly through offering a rooftop garden with accompanying restaurant and café and ground floor retail units, and will improve access to local amenities helping to complete the ‘retail horseshoe’ in the area surrounding London Bridge;
 - **Built and natural environment:** the Proposed Development is delivering an improvement in the local built environment through replacing buildings which lack the necessary density with purpose built, well-designed, high-quality office space; and
 - **Social networks/well-being:** the Proposed Development will provide public spaces at ground and rooftop level to encourage local social interaction in addition to retail space at ground floor level.

²⁵ MHCLG, 2019. National Planning Policy Framework: Pre-application engagement and front-loading.

Table 13 Social cohesion and lifetime neighbourhoods – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal consider health inequalities by addressing local needs through community engagement?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>A comprehensive public consultation has been undertaken with the local community, including residents, residents' groups, local businesses, elected representatives and community groups. The consultation process covered health-influencing variables such as COVID-19 and its impact on trading, the rooftop garden, and site permeability.</p> <p>Respondents to community consultation highlighted particular support for the rooftop garden, affordable workspace and servicing strategy of the Proposed Development.</p> <p>Refer to the Statement of Community Involvement.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal connect with existing communities, i.e. layout and movement which avoids physical barriers and severance and land uses and spaces which encourage social interaction?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The Proposed Development will improve the permeability through the Site. This will help avoid creating a disconnect between the Site and the wider community. The retail provision, combined with the public realm will help create a 'retail horseshoe' surrounding London Bridge. As a result, the Proposed Development will not exist in isolation but will operate in conjunction with the wider London Bridge retail and office landscape.</p> <p>Refer to the Design and Access Statement.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal include a mix of uses and a range of community facilities?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The Proposed Development will consist of a mix of uses. The majority of the Site will be office space but this will also be accompanied by retail and food & drink provision.</p> <p>The Proposed Development will provide a public rooftop garden. This garden will be accessible for everyone and will not require pre-booking.</p> <p>Refer to the Design and Access Statement.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal provide opportunities for the voluntary and community sectors?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<p>The Applicant's Community Strategy notes how it will: work with industry bodies and its supply chain to maximise apprenticeship opportunities, promote the property and construction industry through engagement with local schools, work with colleges and universities to develop the knowledge and skills of the future workforce, and help the existing workforce adapt to new ways of working.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal take into account issues and principles of inclusive and age-friendly design?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The proposals improve access to and around the Site, which is particularly of benefit to older people or those with mobility issues. Furthermore, the amenities and open space at the Proposed Development provide for all ages.</p> <p>Refer to the Design and Access Statement for more information.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Minimising the use of resources

HUDU HEALTH LINK

Reducing or minimising waste including disposal, processes for construction as well as encouraging recycling at all levels can improve human health directly and indirectly by minimising environmental impact, such as air pollution.

Human health impacts

- 2.74 There are various aspects of the Proposed Development which ensure the use of resources have been minimised. In terms of land use, the Proposed Development makes the best use of existing land because it is increasing the density of the development in a location that has good quality access to rail, underground and bus services. The Proposed Development will intensify the previously developed Site, in a highly accessible location, offsetting the need for greenfield development.
- 2.75 Recycling at the Site will be encouraged where possible during both the construction and operational phase. This will be outlined through a waste management plan and the provision of dedicated on-site waste storage and recycling facilities.
- 2.76 Other methods of sustainability and resource minimisation include:
- Water efficient fittings and appliances so that the Proposed Development uses significantly less water by limiting water flow through pipes and fittings and by changing conventional design to be more ergonomic;
 - A pre-demolition refurbishment audit of existing buildings, structures and hard surfaces will be completed to determine if reuse of existing materials is feasible and to maximise the recovery of material from demolition. As outlined in the Circular Economy Statement the ambition for the Proposed Development is to ensure that 90% of non-demolition waste and 95% of demolition waste is diverted from landfill;
 - Sustainable construction practices, including good site management to encourage resource efficiency, increased materials recovery, and avoid the disposal of waste to landfill (waste to landfill also reduced by reusing on-site, returned to suppliers via 'take-back' schemes, and recovering and recycling); and
 - Reducing noise, light, and air pollution through noise pollution reduction measures, careful lighting design, and air pollution minimisation measures.

Table 14 Minimising the use of resources – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal make best use of existing land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Transport accessibility is a key determinant of development density, with the densest development expected in the most accessible places. The Proposed Development makes best use of existing land by increasing the density of development within the Site in an accessible location.</p> <p>The Proposed Development will intensify a site, in a highly accessible location, offsetting the need for greenfield development.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal encourage recycling (including building materials)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Recycling at the Site will be encouraged wherever possible during both the construction and operational phase. Within the Site waste storage and recycling facilities will be provided, and recycling and non-recycling waste collections are expected daily.</p> <p>This will be outlined in a waste management plan.</p> <p>Refer to the Sustainability Strategy for further information.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal incorporate sustainable design and construction techniques?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Sustainable development is a key principle that has informed the design. From the outset, BREEAM pre-assessments have been carried out and indicate that all aspects of the scheme are likely to achieve a BREEAM rating of at least 'very good', with most of the Proposed Development achieving 'excellent'.</p> <p>The Proposed Development will also exceed the London Plan's carbon reduction target of 35% for all new buildings.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Climate change

HUDU HEALTH LINK

There is a clear link between climate change and health. Local areas should prioritise policies and interventions that 'reduce both health inequalities and mitigate climate change' because of the likelihood that people with the poorest health would be hit hardest by the impacts of climate change.

Climate change is potentially a significant threat to public health and may widen inequalities in health. The Mayor of London's Environment Strategy sets out a range of climate change mitigation and adaptation approaches for London. It focuses on reducing the risk of climate change impacts for the most disadvantaged communities, as well as increasing their resilience so that they can recover more quickly when those impacts do occur.

Planning is at the forefront of both trying to reduce carbon emissions and to adapt urban environments to cope with higher temperatures, more uncertain rainfall, and more extreme weather events and their impacts such as flooding. Developments that take advantage of sunlight, tree planting and accessible green/brown roofs also have the potential to contribute towards the mental wellbeing of users.

The UK Government recently announced its commitment for the country to achieve net zero carbon by 2050 by amending the 2008 Climate Change Act which previously had a target to reduce greenhouse gas emissions by at least 80% (compared to 1990 levels). There is a wealth of evidence which demonstrates that meeting this target requires effective spatial planning at a range of scales.

Human health impacts

- 2.77 Various measures have been included in the Proposed Development in order to both mitigate against the effects of climate change but also help reduce the impact the Proposed Development will have in relation to climate change.
- 2.78 A Preliminary Ecological Appraisal has confirmed that the Site and its zone of influence do not support any 'Important Ecological Features' (IEF's) that would likely be significantly affected by the proposed Development. All relevant EU and UK legislation relating to protection and enhancement of ecology will be complied with and the contractors will be required to minimise the ecological impact of construction activities.
- 2.79 The scheme design has incorporated energy efficient systems and solar panels (photovoltaic panels) to provide a proportion of the energy demand of the Proposed Development. This use of renewable energy sources will have the impact of reducing the use fossil fuels and the amount of greenhouse gas emissions. A whole life carbon assessment is being undertaken taking a holistic view to reducing embodied and operational carbon emissions.
- 2.80 The transport measures previously outlined and contained within the Transport Assessment and Travel Plan will encourage future occupants and visitors to travel via sustainable means to the Site, thus reducing the dependency on travel by car.
- 2.81 The Proposed Development will achieve a BREEAM rating of 'Excellent' for the areas assessed under BREEAM New Construction (NC) 2018 and 'Very Good' for the areas assessed under BREEAM Non-Domestic Refurbishment and Fit-Out (RFO) 2014. In addition, the Proposed Development will achieve the BREEAM thermal comfort credit, incorporating substantial ventilation, efficient LED lighting to minimise overheating, and efficient air conditioning units where required.

Table 15 Climate change – HIA

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal incorporate renewable energy?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	The scheme design has incorporated energy efficient systems and solar panels (photovoltaic panels) to provide a proportion of the energy demand of the Proposed Development.	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal ensure that buildings and public spaces are designed to respond to winter and summer temperatures, ie ventilation, shading and landscaping?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The Proposed Development will be able to adjust to hot temperatures and is looking to achieve the BREEAM 'thermal comfort' credit.</p> <p>Refer to the Sustainability Report for further detail on the measures taken to ensure sustainable thermal monitoring.</p>	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal maintain or enhance biodiversity?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>All relevant EU and UK legislation relating to protection and enhancement of ecology will be completed with and the contractors will be required to minimise the ecological impact of construction activities</p> <p>The rooftop garden being provided by the Proposed Development will provide a habitat that can support biodiversity, incorporating a woodland walkway and numerous areas of planting. Additional areas of planting will occur in new public spaces.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	
Does the proposal incorporate sustainable urban drainage techniques?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Sustainable Drainage Systems (SUDs) as pervoid permeable paving at ground floor and blue roof on the tower are being proposed for the site.</p> <p>Please refer to the schematic drainage strategy included in the Drainage Strategy report.</p>	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input type="checkbox"/> Uncertain	

3 CONCLUSION

- 3.1 The Proposed Development is an office-led scheme located in one of the most accessible locations in LBS and Central London, generating new jobs and densifying an existing site to meet local demand. The Proposed Development would impact health directly through the provision of employment opportunities during both construction and once operational. It would also contribute towards local public realm and accessibility once operational through the provision of new public spaces, improved accessways and a focus on measures to encourage active travel. Additionally, the Proposed Development would be designed in a way to reduce crime (as well as increase natural surveillance), and generally improve social cohesion.
- 3.2 **Table 16** presents a summary of the health impacts of the Proposed Development on each determinant of health, highlighting that the only potential negative health impacts of the Proposed Development arise on air quality, noise and neighbourhood amenity during the construction phase. These negative impacts will be mitigated through the production of a Site Environmental Management Plan, Construction Management Plan and Dust Management Plan, outlining measures such as dampening of matter for demolition to reduce adverse air quality impacts arising from dust.
- 3.3 Once operational, the Proposed Development will result in positive impacts upon the following determinants of health:
- Access to open space, nature and public realm;
 - Accessibility and active travel;
 - Crime reduction and community safety;
 - Access to work and training;
 - Social cohesion and inclusive design; and
 - Minimising the use of resources.

Table 16 Summary of health impacts of the Proposed Development

Determinant of health	Overall health impact (negative, neutral, positive)	Justification for health impact
Access to health and social care services and other social infrastructure	Neutral	<p>The Proposed Development does not involve changes in provision of healthcare and social infrastructure.</p> <p>Workers located at the Proposed Development have the potential to result in increased demand for healthcare and social infrastructure locally, but it is thought that in the context of existing provision this impact will be negligible.</p> <p>Accessibility improvements, such as increased pedestrian permeability and active transport measures, have the potential to increase access to existing services.</p>
Access to open space, nature and public realm	Positive	<p>The Proposed Development will create two new public squares at street-level, alongside a rooftop terrace and garden accessible to the public without advance booking. These spaces will be well maintained and contribute to local placemaking objectives within the London Bridge, Borough and Bankside Opportunity Area which currently has a deficiency of open space which is exacerbated by the fact it attracts high pedestrian footfall.</p>
Air quality, noise and neighbourhood amenity	Negative during construction, neutral once operational	<p>Demolition and construction works have the potential to result in increases in noise levels and air pollution through construction equipment and the generation of dust. These will be managed under best practice measures, including the production of a Dust Management Plan, a Construction Management Plan, and a Site Environmental</p>

Determinant of health	Overall health impact (negative, neutral, positive)	Justification for health impact
		<p>Management Plan, and will be compliant with relevant national policy.</p> <p>Once operational, the focus on active transport measures and planting of spaces have the potential to improve air quality levels in the vicinity of the Site.</p>
Accessibility and active travel	Positive	<p>Alongside the generation of new public squares, the Proposed Development will enhance existing permeability through the Site and create new means of pedestrian access, including a new entrance from the London Bridge underground station.</p> <p>The Proposed Development would incorporate 1,300 cycle parking spaces alongside lockers and showers to encourage active travel.</p>
Crime reduction and community safety	Positive	<p>The enhanced public realm and additional activity at the Proposed Development would encourage additional natural surveillance in an area of relatively high crime. CPTED measures, incorporating the principles of crime reduction into building design would ensure opportunities for crime are minimised.</p>
Access to healthy food	Neutral	<p>The Proposed Development would incorporate restaurant and café space on the rooftop garden and terrace. In the context of the existing food provision in the local area, this would not be thought to alter dietary patterns of local residents and workers. Food provision on-site is not anticipated to contribute to levels of hot takeaway food in the local area.</p>
Access to work and training	Positive	<p>The Proposed Development would result in new employment opportunities generated through the construction and operational phases. Overall 2,695 job years of employment are anticipated during the construction phase, with 3,535 full-time equivalent employment opportunities generated once operational. The Applicant has a strong record of commitment to employment and skills measures to maximise the local work and training impacts of these opportunities, including the provision of apprenticeships and the facilitation of intra-portfolio commercial space moves for local businesses on the existing site.</p>
Social cohesion and inclusive design	Positive	<p>The public spaces and retail elements of the Proposed Development would contribute to social cohesion, offering areas for social connection.</p> <p>The Proposed Development has been designed to maximise accessibility for all groups, including ensuring that all public spaces are wheelchair accessible, and inclusive WC facilities are available for workers and the wider public.</p>
Minimising the use of resources	Positive	<p>The Proposed Development would densify employment on one of the most accessible locations in Central London and LBS.</p> <p>The Sustainability Strategy outlines a variety of measures to minimise energy and resource use on-site, including the prioritisation of recycling and the use of photovoltaic cells.</p>

Determinant of health	Overall health impact (negative, neutral, positive)	Justification for health impact
Climate change	Neutral	The Proposed Development incorporates a variety of measures to reduce energy use. All newly developed areas will have a BREEAM rating of excellent, with redeveloped areas aiming for a BREEAM rating of very good.

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