

Environmental Impact Assessment (EIA) Screening Report

Central St Martin's, London Borough of Camden

January 2020

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For and on behalf of GVA Grimley Limited trading as Avison Young

1. Purpose of this Report

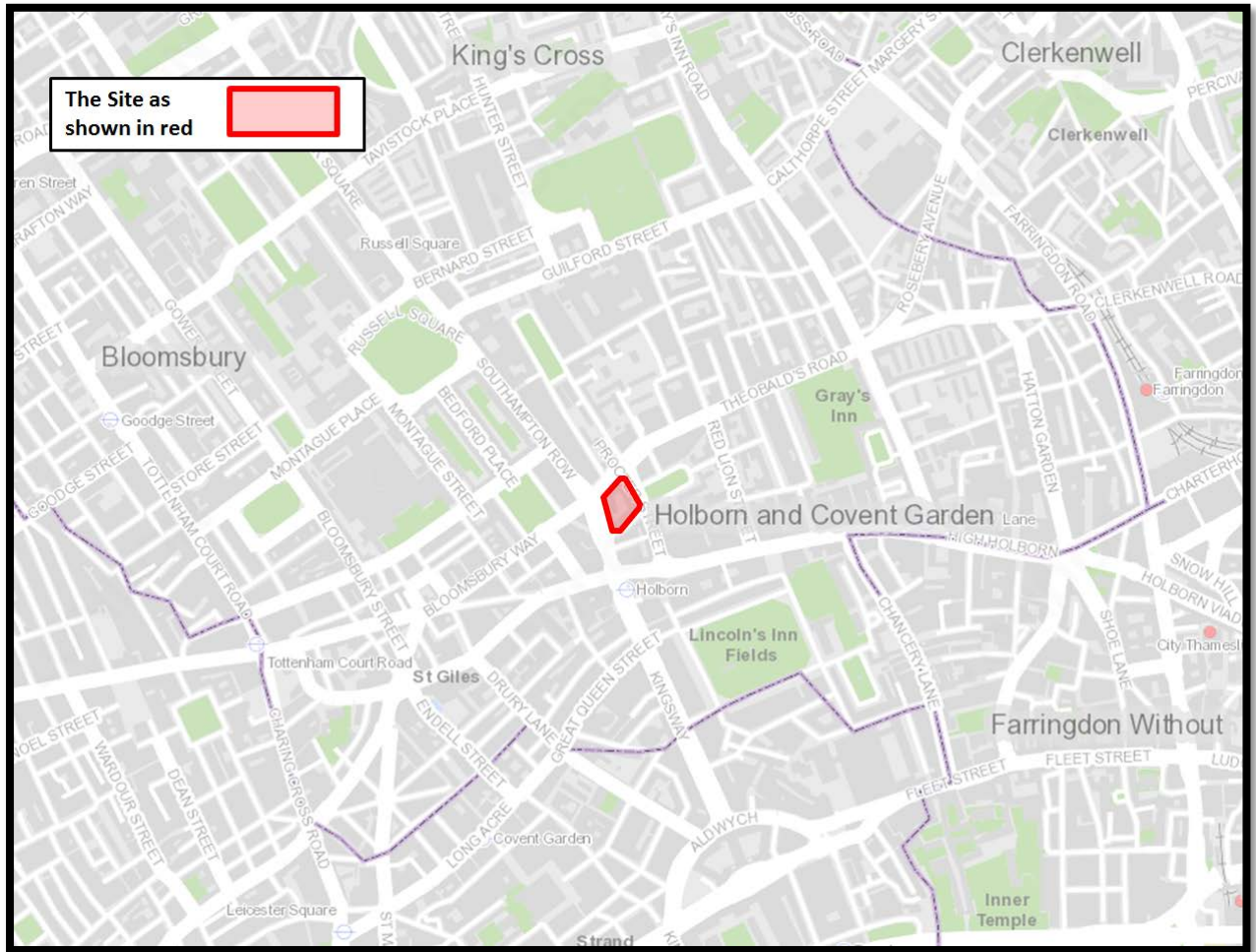
- 1.1 This report accompanies a written request for an Environmental Impact Assessment (EIA) Screening Opinion from London Borough of Camden (LBC) pursuant to Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations, 2017 (the EIA Regulations). The purpose of this report is to inform the request for an EIA Screening Opinion in respect of Grange St Martin's Hotel Limited (the Applicant's) proposal (the Development) for the redevelopment of Central St Martin's, Camden (the Site).
- 1.2 This report has been prepared by Avison Young on behalf of the Applicant. In accordance with Regulation 6(2) of the EIA Regulations this report provides:
- A plan sufficient to identify the land subject to the Development (the Site) (refer to **Section 2**).
 - A description of the Development (refer to **Section 2**).
 - A description of the aspects of the environment likely to be significantly affected by the Development (refer to **Section 5**).
 - A description of any likely significant effects of the Development on the environment resulting from:
 - The expected residues and emissions and the production of waste, where relevant (refer to **Section 5**).
 - The use of natural resources, in particular soil, land, water and biodiversity (refer to **Section 5**).
 - Other relevant information including features of the Development or any measures envisaged to avoid or prevent what might otherwise result in significant adverse effects on the environment (refer to **Section 5**).

2. Overview of the Site and the Development

Overview of the Site

- 2.1 As shown in **Figure 1**, the Site is located in Camden, north London within the administrative boundary of the LBC. The Site comprises an area of approximately 0.5 hectares (ha).

Figure 1: Site Location



- 2.2 **Figure 2** illustrates that the Site is bound by:

- The A40 to the north and east.
- Fisher Street to the south.
- Southampton Row (A4200) to the west.

Figure 2: The Site



- 2.3 The existing Site currently comprises the Grade II* Listed Lethaby Building, the former home of the London College of Art and Design (The Central School), in the western portion of the Site. Following the relocation of the Central School in 2012, the six-storey Lethaby Building is now used by the Koppel Project. A 1960's Block, which was an extension to the Arts School, is located in the eastern area of the Site, ranging from ground floor level plus two-storey to ground floor level plus 12-storeys, with the ground floor plus 12-storey tower element located in the central-eastern area of the Site. A five-storey building located in the north eastern area of the Site, connected to the north of the 1960's Block, was previously used as a theatre referred to as the Cochrane Theatre. Both of these are currently used by the Koppel Project. A Bridge Link building is located along the southern border of the Site, connecting the Grade II Listed Lethaby Building in the west and the 1960's Block in the east. Vehicular access to the Site is provided beneath the Bridge Link building. There is a site-wide basement.
- 2.4 There is no surface car-parking located on the Site. There are a number of trees planted at various locations around the Site's perimeter.

Overview of the Development

- 2.5 Whilst the design of the Development is not yet fixed for the purposes of the Applicant's forthcoming detailed planning application, the information provided to Avison Young by the Applicant in respect of the Development (and summarised here) is considered adequate to establish the likely environmental effects of the Development and to advise on EIA Screening matters.

- 2.6 The Development will necessitate partial demolition of the non-designated existing buildings and structures on the Site. The Lethaby building will be retained, refurbished and partially extended to reinstate lost portions of the original building. It will be the focus of a number of restoration works to remove post-war structural additions, modern single-storey extensions and surplus or redundant plant and services kit.
- 2.7 **Figure 3** demonstrates the current massing of the Development and **Figure 4** presents the current ground floor plan of the Development. With reference to **Figure 3** and **Figure 4**, it is envisaged that the Development will provide in the region of 108 hotel rooms within the Lethaby Buildings and 323 hotel rooms within a refurbished 1960's building, together with a quantum of commercial and mixed-use floorspace to include, among others, exhibition, cultural and gym uses. In addition, it is envisaged that the Development will provide in the region of 33 residential units (1, 2 and 3-bed units) within a further building.

Figure 3: An Illustrative Massing Plan of the Development (as shown in red) (source: Orms)

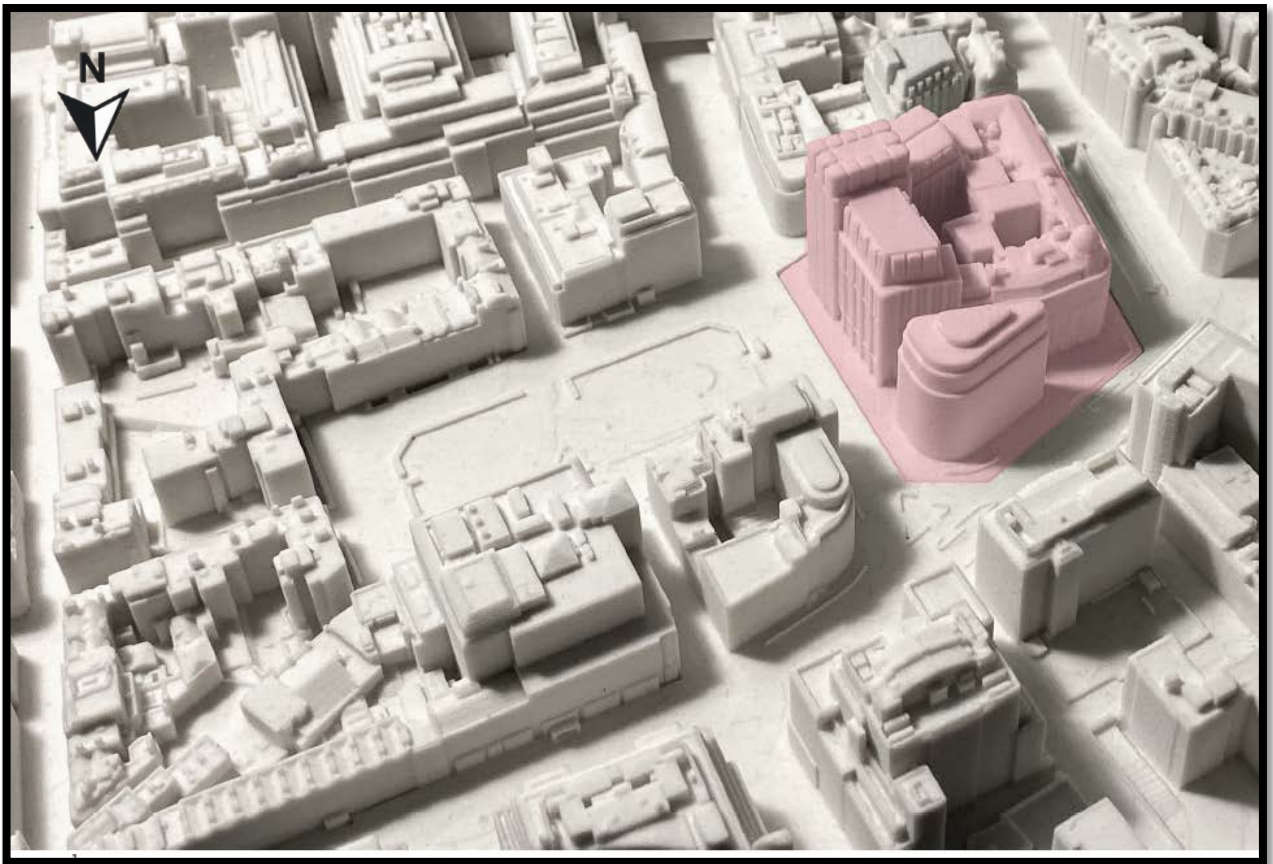
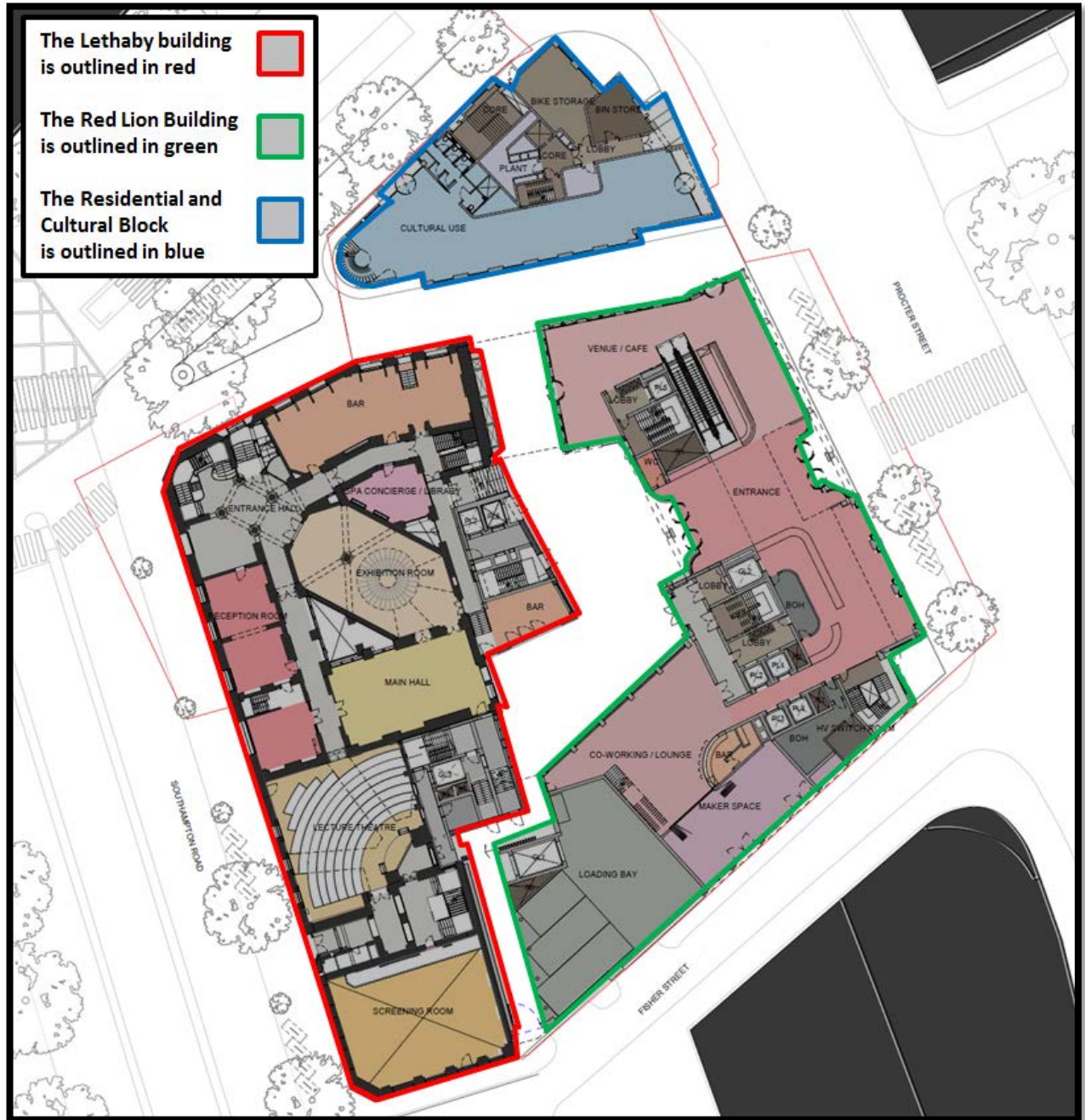
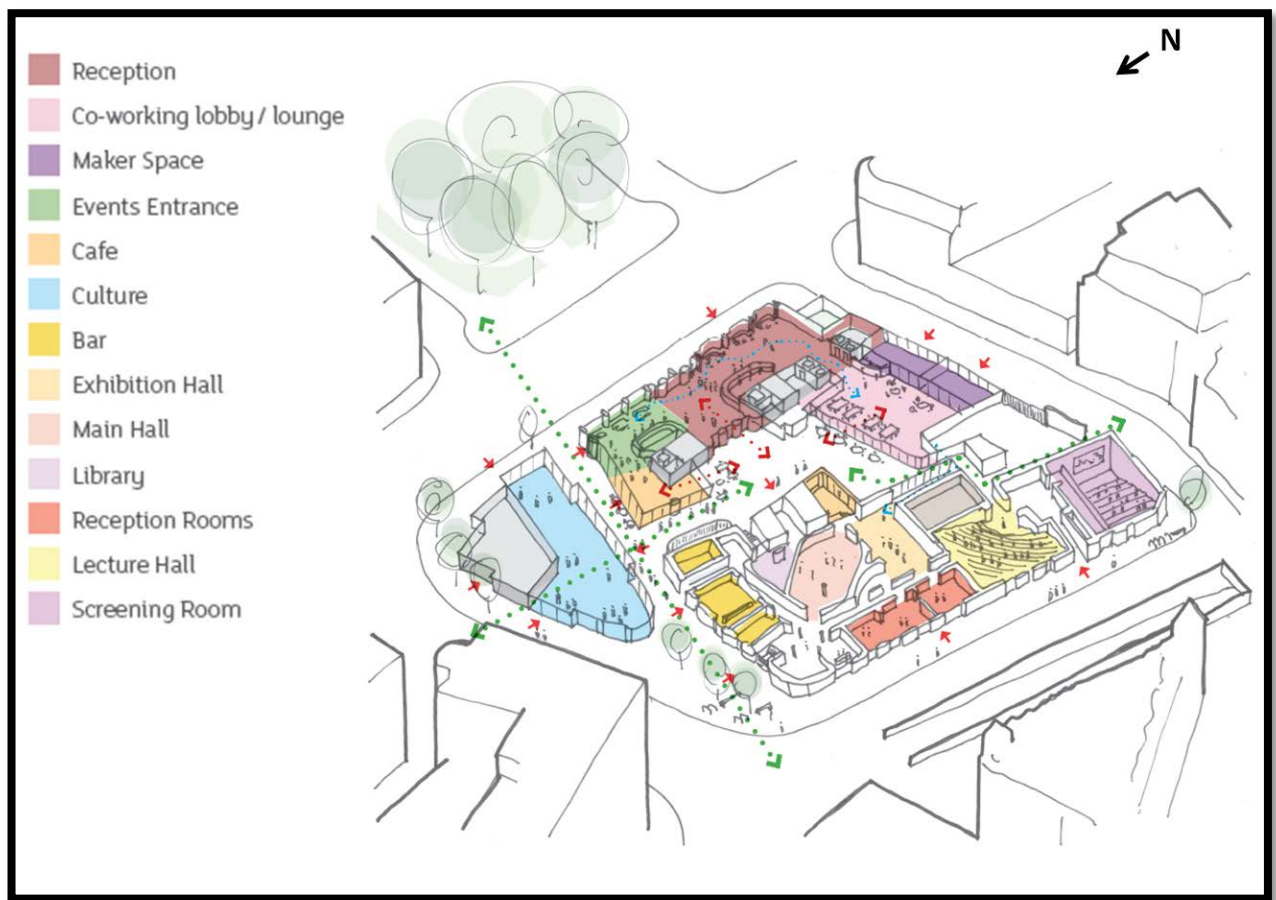


Figure 4: An Illustrative Ground Floor Plan of the Development (source: Amended from Orms)



2.8 The new land uses will be provided within three buildings: ground level plus 5-storeys (the Lethaby Building), ground level plus 8-storeys (Residential and Cultural Block) and ground level plus 14-storeys (Red Lion Building). The massing of the partly refurbished and extended Red Lion Building will comprise three main blocks: a ground level plus 10-storey block along Fisher Street, a ground level plus 14-storey block and a stepped block (ranging between ground level plus seven-storey and ground level plus 14-storey), both along the eastern border of the Site facing Red Lion Square Gardens. The construction of the Red Lion Building will include the reuse of the existing frame of the 1960's block. Residential land uses will be present in one of the three buildings, within the Residential Tower in the north-east of the Site. The Development will provide a three-level basement beneath the Red Lion Building. **Figure 5** presents an illustrative plan of the land uses across the ground floor of the Development. Additional uses will comprise residential units and hotel rooms above ground floor level and spa, events / conferencing facilities and gym space within the new basement.

Figure 5: Illustrative Land Uses Currently Proposed Across the Ground Floor of the Development (source: Orms)



- 2.9 The partly refurbished and extended Red Lion Building will include various building components so that the building in totality will comprise a range of building heights and geometries. The design affords the massing and scale of the Development to effectively relate to the physical scale and proportions of Red Lion Square Gardens to the east of the Site, as well as visual interest, avoiding overly bulky building design and allowing for other appropriate ground floor uses. A mixture of brick and glazed finishes will afford connection between the Site and both the historic and more modern surrounding building context.
- 2.10 The massing of the Residential and Cultural Block (within the north-east of the Site) will reinstate the former diagonal street, reinstating Orange Street. It is proposed that the residential building will be predominantly brick. As stated in the above, the Lethaby building will remain as existing, with only minor changes proposed.
- 2.11 The siting and layout of buildings within the Site will define new pedestrian street and public courtyard space at ground floor level with. In addition, there will be an accessible roof garden located within the Red Lion Building.
- 2.12 The three-level basement beneath the Red Lion Building on the Site will provide storage for refuse and cycle parking spaces for users of the hotels as well as the gym facilities associated with the hotels. The basement will also comprise spa and events / conferencing facilities.
- 2.13 The Development will be 'car-free', with the exception of one disabled bay, in the form of a layby on Drake Street. There are anticipated to be 101 long-stay and 166 short-stay cycle parking spaces within the

Development. The residential cycle spaces will be located at ground floor level within the Residential and Cultural Block. Servicing will occur at street level, predominantly along the eastern boundary of the Site.

- 2.14 The proposed energy strategy will comprise energy efficient Air Source Heat Pumps (ASHP) to supply low carbon heating and cooling to the Development. Other low carbon technologies will also be explored where possible to ensure the most sustainable and efficient energy strategy for the Development.

3. Determining the Need for EIA

3.1 The need for EIA is determined by the definitions and criteria provided in Schedule 1 or Schedule 2 and Schedule 3 of the EIA Regulations. Where projects are classified as Schedule 1 development, EIA is mandatory. Where projects are classified as Schedule 2 development, EIA is only required if the project is likely to have significant environmental effects as referenced in Schedule 3 'Selection Criteria for Screening Schedule 2 Development'. In this case EIA is required if the development is located in a 'sensitive area' as defined by the EIA Regulations or if the development is likely to have significant environmental effects with reference to Schedule 3 'Selection Criteria for Screening Schedule 2 Development'.

3.2 With reference to the information provided in **Section 2** of this report, the Development does not fall within the definitions set out within Schedule 1 of the EIA Regulations. However, the Development has the potential to fall within Schedule 2 10(b) of the EIA Regulations. That is:

"10. Infrastructure projects...(b) Urban development projects, including the construction of shopping centres and car parks, sports stadiums, leisure centres and multiplex cinemas..."

3.3 The Site is not in a 'sensitive area' as defined by the EIA Regulations (refer to **Section 4**) and the Development does not meet any of the applicable thresholds for Schedule 2, 10(b) projects, that is it does not meet the following "... (i) The development includes more than 1 hectare of urban development which is not dwellinghouse development; or (ii) the development includes more than 150 dwellings; or (iii) the overall area of the development exceeds 5 hectares...". However, the applicable thresholds for Schedule 2 projects are intended to be applied broadly. Considering the Development comprises alterations to the Grade II Listed Lethaby Building and the Site is partially located within the Kingsway Conservation Area (the Lethaby Building) and adjacent to the Bloomsbury Conservation Area, which is located to the east and south of the Site, the Site could present potentially unique sensitive conditions. As such, it was considered that a legally robust and conservative approach would be to request an EIA Screening Opinion, irrespective of the Schedule 2 thresholds.

3.4 In view of the above, whilst the Development does not meet the Schedule 2 criteria, given the characteristics of the Site and the Development, Schedule 3 of the EIA Regulations will be carefully considered to determine the need (or otherwise) for EIA. Particular emphasis must be placed upon:

- The characteristics of the Development (refer to **Section 2**).
- The location of the Development (refer to **Section 4**).
- The types and characteristics of the potential environmental effects (refer to **Section 5**).

4. The Site, its Environmental Context and Sensitivity

Predominant Existing Land Uses

- 4.1 As noted in **Section 2** the existing 0.5 ha Site currently comprises the Grade II* Listed Lethaby Building, a 1960's Block, a theatre and a Bridge Link building, connecting the Grade II Listed Lethaby Building and the 1960's Block. The Site comprises predominantly buildings and hardstanding, with almost no vegetation. There are no surface level parking spaces provided on-Site. Vehicular access to the Site is provided beneath the Bridge Link building in the south of the Site via Fisher Road.
- 4.2 Adjacent to and beyond the Site (to a distance of approximately 1 km from the centre of the Site) are a range of land uses predominantly comprising:
- **To the north** – A dense mix of residential, commercial and office uses and transport infrastructure including Theobald's Road (A40), B502, Bloomsbury Street (A400). Friends of St George's Gardens and St Andrew's Gardens are located to the north of the Site.
 - **To the north-east** - A dense mix of residential, commercial and office uses and transport infrastructure including A201 and B502. Wilmington Square Gardens and Spa Fields Playground are located to the north-east of the Site. The Royal Mail London Delivery Office is also located to the north-east of the Site.
 - **To the east** - A dense mix of residential, commercial and office uses and transport infrastructure including A40, Farringdon Overground Station and Chancery Lane London Underground Station. Gray's Inn Walks Gardens and South Square Gardens Lincoln Inn Fields Park are located to the east of the Site.
 - **To the south-east** - A dense mix of residential, commercial and office uses and transport infrastructure including A40 and Temple Underground Station. Lincoln Inn Fields Park and Inner Temple Gardens are located to the south-east of the Site.
 - **To the south** - A dense mix of residential, commercial and office uses and transport infrastructure including A40, Charing Cross Road (A4200) and Holborn London Underground Station.
 - **To the south-west** - A dense mix of residential, commercial and office uses and transport infrastructure including A40, Shaftesbury Avenue (A401) and Covent Garden and Leicester Square London Underground Stations. Golden Square Park is located to the south-west of the Site.
 - **To the west** - A dense mix of residential, commercial and office uses and transport infrastructure including Bloomsbury Street (A400), Tottenham Court Road and Goodge Street London Underground Stations. Bloomsbury Square Gardens and Malet Street Gardens are located to the west of the Site. The British Museum is also located to the west of the Site.
 - **To the north-west** - A dense mix of residential, commercial and office uses and transport infrastructure including the A4200 and Russell Square London Underground Stations. Russell Square, Tavistock Square Gardens and Gordon Square Gardens are located to the north-west of the Site.

Transport and Connectivity

- 4.3 As noted within **Section 2** existing vehicular access / egress to / from the Site is afforded by Fisher Street on the southern border of the Site. This provides direct access to Southampton Row (A4200) to the west and the A40 to the east. As such, access to the wider strategic road network in all directions is possible.
- 4.4 The Site has a Public Transport Accessibility Level (PTAL) rating of 6b¹ (with 0 being the lowest rating and 6b being the highest rating), which indicates the Site as having 'excellent' access to public transport services. There are eight London Underground Stations within 1 km of the Site. These are:
- Holborn Underground Station, 210 m south of the Site.
 - Covent Garden Underground, 660 m south-west of the Site.
 - Chancery Lane Underground, 670 m east of the Site.
 - Russell Square Underground, 800 m north-west.
 - Tottenham Court Road Underground, 890 m west of the Site.
 - Temple Underground, 930 m south-east of the Site.
 - Leicester Square Underground, 945 m south-west of the Site.
 - Goodge Street Underground, 970 m west of the Site.
- 4.5 There are 13 bus stops within walking distance from the Site (within 350 m), the closest of which are situated on the surrounding road network of the site, including Drake Street/Procter Street, Southampton Row and Theobalds Road.. Within 2 km of the Site, there are 6 National Rail Stations including Farringdon (1.4 km to the east), Charing Cross (1.6 km to the south), City Thameslink (1.6 km to the south-east), London Euston (1.6 km to the north-west), Kings Cross (1.8 km to the north) and St Pancras International (1.8 km to the north).

Core Social Infrastructure

- 4.6 There are 14 open primary schools within approximately 1 mile of the centre of the Site (deemed to be an appropriate distance for primary school children to commute to school). These primary schools are all non-private and have surplus capacity of 314 primary places².
- 4.7 There are 14 open secondary schools within approximately 2 miles of the centre of the Site (deemed to be an appropriate distance for secondary school children to commute to school). Together, these have a surplus capacity of 533 secondary places³.
- 4.8 There are 23 open GP surgeries within approximately 1 mile of the centre of the Site³. Twenty of the GP surgeries are currently accepting new patients⁴.

¹ <https://tfl.gov.uk/info-for/urban-planning-and-construction/planning-with-webcat/webcat>

² <https://get-information-schools.service.gov.uk>

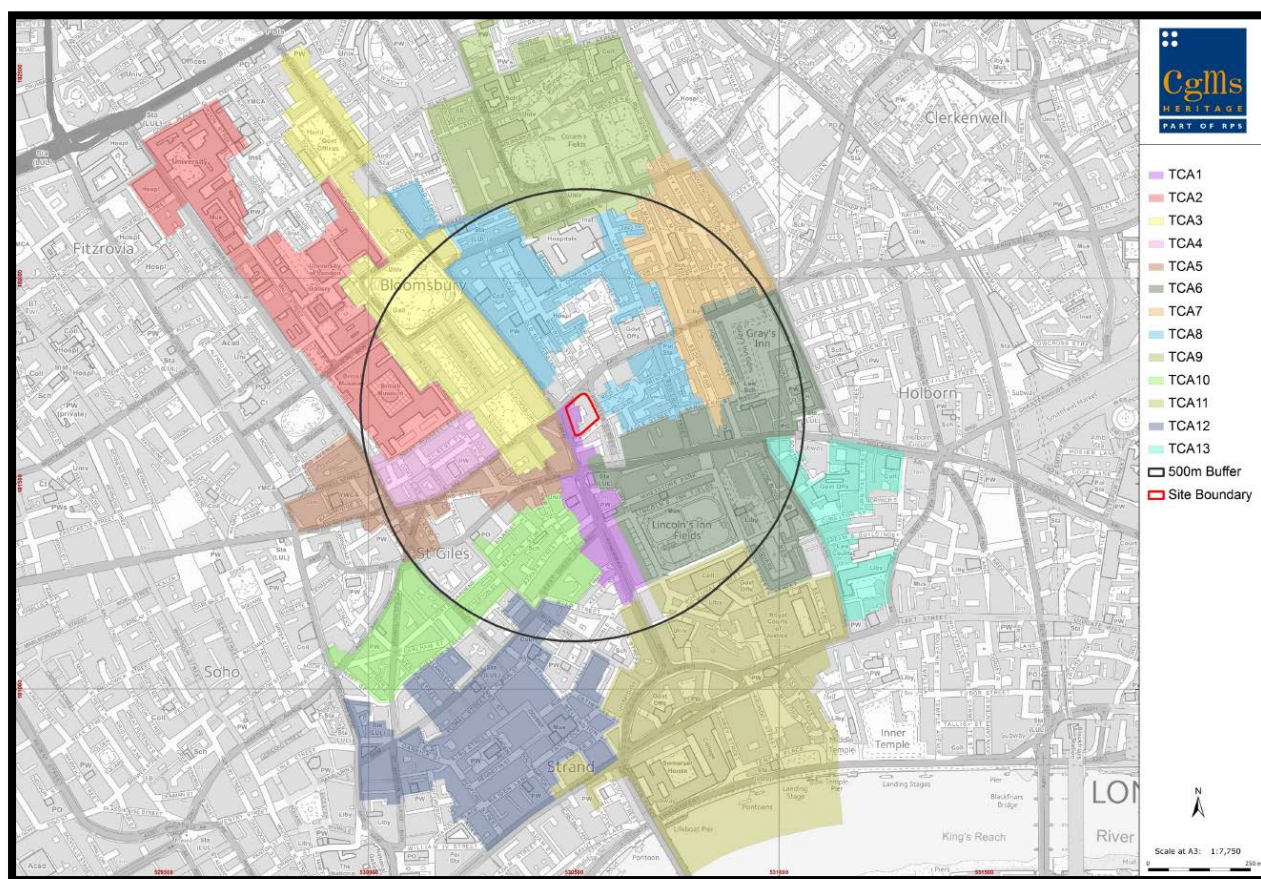
4.9 There are 12 public parks / significant public open spaces and recreational grounds within 1 km of the centre Site:

- Red Lion Square Gardens, approximately 20 m to the east of the Site (at its nearest point).
- Bloomsbury Square Gardens, approximately 110 m west of the Site (at its nearest point).
- Lincoln's Inn Fields, approximately 260 m south-east of the Site (at its nearest point).
- Queen Square Garden, approximately 330 m north of the Site (at its nearest point).
- Russell Square, approximately 400 m north-west of the Site (at its nearest point).
- Grays Inn Square and South Square Gardens, approximately 450 m to the east (at its nearest point).
- Bedford Square Gardens, approximately 575 m west of the Site (at its nearest point).
- Saint Andrew's Gardens, approximately 770 m north-east of the Site (at its nearest point).
- St George's Gardens, approximately 800 m north of the Site (at its nearest point).
- Tavistock Square Gardens, approximately 820 m north-west of the Site (at its nearest point).
- Gordon Square Gardens, approximately 850 m north-west of the Site (at its nearest point).
- Soho Gardens, approximately 900 m south-west of the Site (at its nearest point).

Townscape and Visual Matters

- 4.10 The Site and its immediate environs are characterised by built urban form which varies in scale, massing and height, comprising residential, retail and commercial uses and transport infrastructure. Buildings and structures within and surrounding the Site are generally low - medium rise, ranging from 3 to 15-storeys.
- 4.11 The Site is not covered by any planning policy designations relating to townscape value. However, the LBC identifies the Site as being partially located in the Kingsway Conservation Area. It is described as occupying the area *"...between Lincoln's Inn and Covent Garden, between the City and the West End. Creating a link between central London and south of the River Thames"*.
- 4.12 The wider surrounds of the Site were assessed by the Applicant's Heritage Consultants (RPS) and divided into 13 different Townscape Character Areas (TCAs), each recognised by identifying conservation areas and other townscape qualities such as building typologies and uses, the arrangement of streets and other thoroughfares, and the general character and activity found within the wider townscape. **Figure 5** sets out the TCAs within the surrounds of the Site.

Figure 5: TCAs Surrounding the Site.

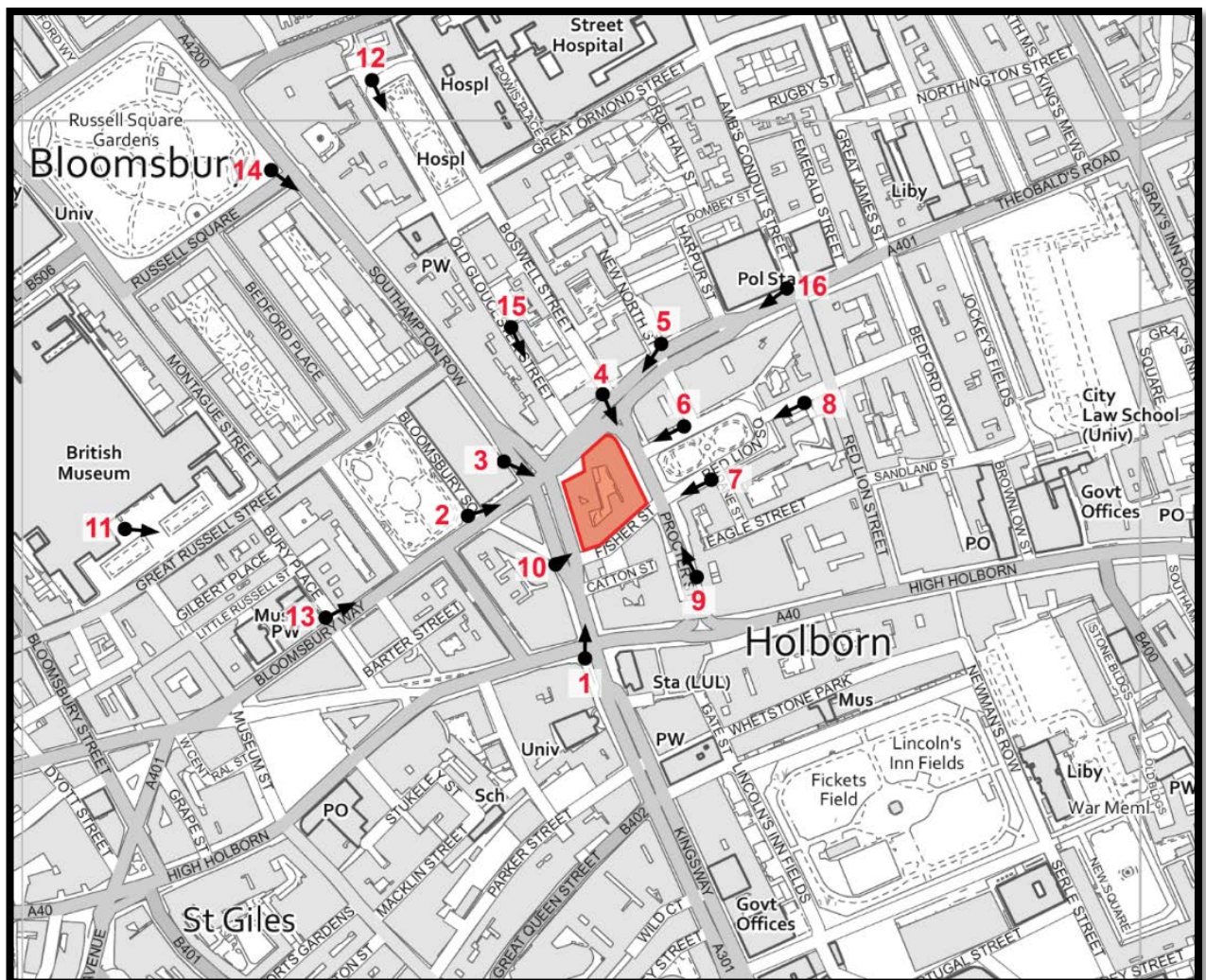


- 4.13 With reference to **Figure 5**, the Site is located within TCA 1: Kingsway. The Site was concluded to present a mixed contribution to TCA 1, due to the different built form on-Site and therefore its dual relationship to the surroundings. The western portion of the Site, within which the Lethaby Building is located, as a large scale Edwardian building was considered to positively contribute to the TCA. However, the 1960's built form on the eastern portion of the Site was considered to present a limited contribution to TCA 1.
- 4.14 The Site is not subject to any statutorily protected view. Furthermore, none of the strategic and local views identified within the LBC's Proposals Map⁴ are orientated towards the Site.
- 4.15 Sixteen views of importance to the Site have been identified by the Applicants Townscape and Visual Consultant (Peter Stewart Consultancy) and agreed with Camden. These include the following which are shown on **Figure 6**:
- View 1: View looking north from Southampton Row, to the south of the Site.
 - View 2: View looking north-east from Bloomsbury Square.
 - View 3: View looking south east from Southampton Row.
 - View 4: View looking south from Boswell Street.
 - View 5: View looking south west from New North Street.
 - View 6: View looking west from north of Red lion Square.

⁴ London Borough of Camden. Proposal Map. March 2019.
<https://www.camden.gov.uk/documents/20142/4820180/Camden+Policies+Map+2019+March.pdf/c810da24-d8d6-7ad8-e935-2be47b7feb37>

- View 7: View looking south-west from south of Red Lion Square.
- View 8: View looking west from Princeton Street.
- View 9: View looking north from Procter Street.
- View 10: View looking east from Southampton Row adjacent to Fisher Street.
- View 11: View looking east from the British Museum.
- View 12: View looking south east from Queen Street.
- View 13: View looking east from Bloomsbury Way.
- View 14: View looking south-east from Russell Square Gardens.
- View 15: View looking south from Old Gloucester Street.
- View 16: View looking south-west from Theobalds Road.

Figure 6: Views of Importance Surrounding the Site (Source: Peter Stewart Consultancy)



Statutory and Non-Statutory Heritage Designations

- 4.16 Within the western portion of the Site lies the Lethaby Building, which is a statutory designated Grade II* Listed Building. The eastern portion of the Site is not subject to any statutory or non-statutory heritage designations. There are more than of 20 Listed Buildings within 250 m of the Site, including Grade I and Grade II Listed Buildings, two of which are located adjacent to the Site, described as: Grade II Listed Kingsway Tram Subway (northern section only) and Grade II Listed Carlisle House.
- 4.17 The Site is not located in a World Heritage Site (WHS) and does not contain any Scheduled Monuments (SMs) or Registered Parks and Gardens. The nearest SM is located 750 m to the east and comprises Barnard's Inn Hall (Mercers' School). The Site is also within 1 km of five Registered Parks and Gardens, the closest being Bloomsbury Square, located 85 m to the west of the Site.
- 4.18 However, the western portion of the Site lies within Kingsway Conservation Areas within the LBC as shown within **Figure 7**. Additionally, the Site is also within 250 m of two other Conservation Areas: Bloomsbury Conservation Area and Seven Dials Conservation Area.

Figure 7: Heritage Receptors Surrounding the Site (The pink areas indicate Conservation Areas)
(Source: PSC)



- 4.19 The Site is located within the London Suburbs Archaeological Priority Area (APA), designated for prehistoric, roman road, and medieval settlement evidence, together with associations with the Civil War defence Lines and the 17th century expansion of London. The APA is classified as Tier 2 due to the multi-period heritage assets. The Site is also within 500 m of Lundenwic APA, a Tier 1 designated for association with the Anglo-Saxon international trading emporium, and Great Estates APA (within the LBW), designated as an area developed by wealthy landowners in the 17th and 18th century.

- 4.20 The Applicant's Archaeologist (L-P: Archaeology) has identified the Site as being of low archaeological potential for prehistoric and early medieval deposits and moderate archaeological potential for Roman and Medieval deposits⁵. However, WWII bombing and the development of the existing Site, including the construction of the existing site-wide basement, will have had a significant negative impact on potential underlying deposits. As such, any archaeological potential will have been severely compromised by past land uses and activities associated with the Site and the surrounds following high densities of development.

Biodiversity / Ecology

- 4.21 There are no statutory or non-statutory sites of nature conservation within the Site and there are no European or national statutory sites within 1 km of the Site. The Site lies within the Impact Risk Zone (IRZ) of Hampstead Heath Site of Special Scientific Interest, but due to the nature of the Development, this will not result in the requirement of the Local Planning Authority (LPA) to consult with Natural England.
- 4.22 The Site is within 1 km of 12 non-statutory Sites of Importance for Nature Conservation (SINC). Owing to the built up context of the Site and the surrounding area, with little ecological connectivity to the wider environment, it is considered appropriate to consider designated nature conservation sites within approximately 500 m of the Site. Two SINC's of Local Importance (SLINC) are located within 500 m of the Site including Lincoln's Inn Fields, 410 m south-east of the Site, and Russell Square, 425 m north-west of the Site.
- 4.23 The Applicant's Ecologist (The Ecology Consultancy) has undertaken a Preliminary Ecological Appraisal for the Site in July 2018 (updated in January 2020). The Site is dominated by buildings and hardstanding with no semi-natural habitats present. The Site was found to comprise areas of hardstanding located between the buildings. Ephemeral plant species were noted along the edges of the hardstanding and two mature trees and 11 semi-mature trees were identified within the areas of hardstanding along the north, east and western boundaries of the Site (with the exception of one sapling tree located within the internal courtyard).
- 4.24 Due to the limited suitability of habitat for legally protected species on the Site, only bats and breeding birds were considered to potentially be present on Site. However, buildings and trees onsite were considered to present negligible roosting potential for bats. The building and the mature and semi-mature street trees were considered to have potential to support nesting birds, but this was considered to be low for the sapling tree within the courtyard, as it was located adjacent to a used door and walkway. A disused feral pigeon nest was noted on a ledge on the southern, Bridge Link Building.
- 4.25 Red Lions Square Gardens is located 20 m to the east of the Site, comprising high density planting of mature trees. The Site is not directly connected to Red Lion Square Gardens by continuous greenspace and, therefore, this area of vegetation and the Site do not have ecological connectivity.

Geology, Ground Conditions and Contamination

- 4.26 The Site is not designated for any geological importance or interest and does not yield any significant geological resource.

⁵ L – P: Archaeology. Archaeological Desk Based Assessment: Central St Martins Camden WC1. November 2018.

- 4.27 According to the British Geological Survey (BGS)⁶ the bedrock geology of the Site and the majority of its environs is that of the London Clay Formation. This comprises clay, silt and sand associated with sedimentary bedrock formed between 56 - 47.8 million years ago during the Palaeogene period. This is overlain by sand and gravel of the Lynch Hill Formation. A Geotechnical and Geo-Environmental Desk Study Report⁷ was completed by the Applicants Ground Conditions and Contamination Consultant (A-squared Studio Engineers Ltd), within which the preliminary ground model anticipated a layer of Made Ground across the entire Site to a depth of 3 m based on available borehole records. This layer was expected to overlay approximately 3 m of Lynch Hill Gravel, which itself was anticipated to overlay approximately 18 m of London Clay.
- 4.28 Historic maps for the area⁸ show the Site to be completely developed by the 1870s, comprising both commercial and residential buildings. Between the 1870s and the 1950s the Site underwent numerous changes, including the development of a Church, a fire station and a small number of commercial and retail uses. The Site experienced a high level of bomb damage during WWII, resulting in the entire eastern and south-eastern areas of the Site being destroyed, labelled as 'ruins' on historic mapping. A larger scale of development occurred on the Site during the 1960s, including the construction of the Cochrane Theatre in the north of the Site and the tower block in the eastern portion, labelled at the time of construction as the Holborn College of Law, Language and Commerce and at a later date as The Polytechnic of Central London. From 1982, there were no further changes noted on Site.
- 4.29 The area surrounding the Site underwent similar levels of development until the 1970s, when the much higher level of changes occurred within the surroundings areas, comprising predominantly commercial and some residential units. Additionally, tram lines were located 25 m north-east of the Site, between the 1890s and the 1950s, comprising the only non-road transport network in the immediate vicinity of the Site. Although the Site was historically used as educational facility, a wide range of potential contaminants were identified as part of the risk assessment, and the Geotechnical and Geo-Environmental Desk Study Report concluded that the Site was likely subject to moderate risk of contamination.
- 4.30 The Site was considered to be high risk for Unexploded Ordnance (UXO), with records of three high explosive bomb strikes on Site during WWII, with a further five bomb strikes within 65 m of the Site.
- 4.31 There is no existing infrastructure directly beneath the Site. However, a Royal Mail Post Office Tunnel is located in proximity to the northern boundary of the Site and the Site falls within the London Underground (LUL) Zone of Influence (the western boundary of the Site). The Kingsway Tram Tunnel is also present along the western boundary of the Site. Additionally, the Eastbound Crossrail Tunnel is located beneath the immediate vicinity of the southern boundary of the Site.

⁶ <https://bgs.ac.uk>

⁷ A-squared Studio Engineers Ltd. Grange Central St Martins – Geotechnical and Geo-Environmental Desk Study Report. October 2019.

⁸ <https://www.old-maps.co.uk/#/>

Water Resources and Flood Risk

- 4.32 The Site is located in Flood Zone 1⁹ (land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%)) and does not contain any surface water features.
- 4.33 At its closest points, the River Thames is located approximately 0.95 km south of the Site.
- 4.34 A Secondary A Aquifer is known to exist beneath the Site.

Air Quality

- 4.35 The Site (and the entire LBC) is designated as an Air Quality Management Area (AQMA). This is due to the breach of the National Air Quality Objectives in relation to ambient annual mean Nitrogen Dioxide (NO₂) and 24-hour mean Particulate Matter (PM₁₀)¹⁰. The key sources of such pollutants in LBC are attributable to road traffic and associated emissions.

Noise and Vibration

- 4.36 The main sources of noise at the Site are likely to arise from road traffic, servicing of the existing surrounding retail and commercial land uses and noise from air traffic.
- 4.37 There is a potential for vibration at the Site due to the operation of the surrounding rail and underground lines.

Hazards

- 4.38 According to various on-line sources the Site and its immediate environs are not subject to any Control of Major Accidents and Hazards (COMAH) sites¹¹, geological hazards¹² or safeguarded aviation zones. Furthermore the Site and its environs are not in an area of significant Radon potential or risk¹³ and the Site is not underlain by any high pressure gas pipelines¹⁴.
- 4.39 As noted above, there are records of three high explosive bomb strikes on Site during WWII, with a further five bomb strikes within 65 m of the Site.

Overall Sensitivity of the Site

- 4.40 With reference to all information provided above, it can be demonstrated that the Site is not located within a 'sensitive area' as defined by the EIA Regulations; that is, a site comprising one or more of the following:
- SSSI or any consultation area around an SSSI.

⁹ <https://flood-map-for-planning.service.gov.uk>

¹⁰ <https://uk-air.defra.gov.uk>

¹¹ <https://notifications.hse.gov.uk/COMAH2015/Search.aspx>

¹² <https://bgs.ac.uk>

¹³ <https://ukradon.org/information/ukmaps>

¹⁴ <https://www.nationalgrid.com/uk/about-grid/our-networks-and-assets/gas-network-route-maps>

- Land to which Nature Conservation Orders apply.
- International conservation sites.
- National Parks.
- AONBs.
- WHSs.
- SMs.

5. The Likelihood of Significant Environmental Effects

- 5.1 Giving due regard to Schedule 3 of the EIA Regulations together with the information provided within **Section 2** and **Section 4** of this report, the likelihood of significant environmental effects to result from the Development are considered as follows. For each environmental topic area considered, environmental effects are considered for:
- The Site preparation, demolition and construction works associated with the Development (the Works).
 - The operation of the completed Development (the Completed Development).
- 5.2 With regard to the likelihood of significant environmental effects arising from the Development with other significant approved development (the Cumulative Scenario), as per the EIA Regulations, the potential for cumulative effects of the Development with other significant developments (Cumulative Schemes) has considered "*...existing and / or approved development.*" Given that existing development is already considered in the analysis of the existing environmental baseline conditions relevant to the Site and the Development (refer to **Section 4**) and a consideration of the likelihood of significant environmental effects of the Development are judged against this existing situation, the Cumulative Scenario need focus only on Cumulative Schemes with:
- A resolution to grant planning permission.
 - A valid planning permission and yet to start on-site.
 - A valid planning permission and under construction.
- 5.3 For the purposes of this report, given the fragmented urban nature of the Site's environmental context, and the scale and nature of the Development, the potential for Cumulative Schemes (and therefore effects) need only be considered up to approximately 500 m from the centre of the Site. No Cumulative Schemes exist within this geographical area. As such, there can be no cumulative effects and the remainder of **Section 5** does not deal with an assessment of the Cumulative Scenario.

Transport and Connectivity

The Works

- 5.4 Inevitably, the Works will give rise to some disruption to the normal operation and functioning of the local road network. However, the Works will be rigorously planned and programmed to minimise such disruption and allow for continued access to surrounding land uses. In this respect, a Construction Traffic Logistics Plan (CTLP) will set out all traffic and transport related management methods and controls to ensure minimal disruption to the surrounding road network. For example, designated vehicular access and egress to the Site will be stipulated and vehicular traffic arising from construction site deliveries and pick-ups will follow pre-agreed designated routes and be timed to avoid peak traffic hours. Accordingly, while the Works may temporarily increase vehicular traffic generation associated with the Site, the traffic increase is not envisaged to be significant.

- 5.5 Similarly, the CTLP will also deal with the appropriate management of the pedestrian realm surrounding the Site. For example, should any public footway closures be required, these will be clearly advertised. Additional signposting will be erected to inform and guide pedestrians to nearby alternative routes. It therefore follows that temporary pedestrian realm disruptions and diversions will be managed so as to avoid significant effects.

The Completed Development

- 5.6 The Development is anticipated to be car-free, with the exception of one disabled parking bay. Therefore, new vehicle movements to and from the site will largely be associated with delivery and servicing vehicles. It is forecast that the Development would generate approximately 70 delivery and servicing trips per day, equating to an increase in traffic flows of less than 10 additional trips per hour on the local highway network. This increase would fall within the daily fluctuation of traffic along the local highway network surrounding the site.
- 5.7 A draft Delivery and Servicing Plan (DSP) will be submitted as part of the planning application for the Development. The DSP will outline measures to ensure that servicing activities are managed appropriately such that the local community, pedestrians, cyclists and other highway users experience minimal disruption and disturbance associated with the Development. This will be further supported by the implementation of a Travel Plan. The Travel Plan will advocate and encourage occupiers of the Development to use non-car modes of transport. As such, the Development is unlikely to give rise to significant vehicular traffic effects.
- 5.8 As noted in **Section 2**, the Development will provide increased connectivity to the wider area. The provision of approximately 101 long-stay cycle parking spaces for residents and staff and 166 cycle spaces for visitors of the Development will further encourage the use of non-car modes of transport.

Recommendations

- 5.9 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by the following documents:
- A Draft CTLP.
 - A Transport Assessment (including for a Framework Travel Plan and a Draft Delivery and Servicing Plan).

Core Social Infrastructure and Employment

The Works

- 5.10 The works will have no direct or indirect effect upon core social infrastructure in the area including primary school, secondary school and healthcare provision.
- 5.11 During the Works, there is anticipated to be an increase in direct, indirect and induced employment associated with the construction activities on-Site. However, in the context of existing employment within the wider area and the considering the size of the Development, the effects would unlikely be significant beyond a local scale.

The Completed Development

- 5.12 The Development will give rise to a new on-Site resident population which may place additional demand upon core social infrastructure. However, with reference to **Section 4**:
- A surplus capacity of 314 primary school places is reported within the 14 existing primary schools within 1 mile of the Site.
 - A surplus capacity of 533 secondary school places is reported within the 14 existing secondary schools within 2 miles of the Site.
- 5.13 The Development (with an approximate 33 new homes) is unlikely to generate a child yield in-excess of 314 primary school aged children and 533 secondary school aged children. Consequently, it is unlikely the Development will generate any significant demand and 'over-capacity' issues at local primary and secondary schools.
- 5.14 With regards to local healthcare, as noted in **Section 4**, 20 GPs within 1 mile of the Site are accepting new patients. It is therefore reasonable to assume adequate GP services exist to serve the resident population of the Development.
- 5.15 As noted in **Section 2**, the Development will provide hard and soft landscaped areas for public use at ground floor level and as part of a roof garden within the new eastern building. In addition, with reference to **Section 4**, there are 15 public parks / significant public open spaces within 1 km of the Site. The new resident population will therefore have adequate access to public open and recreational space within reasonable walking distance from the Site. For those where it is unfeasible to walk distances to open spaces (for example young children below the age of 12) Red Lion Square Gardens 20 m to the east of the Site provides suitable space as well as Bloomsbury Square Garden just over 100 m to the west of the Site.
- 5.16 Once complete, the Development is anticipated to generate direct, indirect and induced employment opportunities associated with the proposed employment uses on Site. As above, the effects would unlikely be significant beyond a local scale.

Recommendations

- 5.17 Not applicable.

Townscape and Visual Effects

The Works

- 5.18 The physical presence of a construction site will give rise to the visual appearance of hoardings, on-site plant and machinery and other activities associated with the Works. However, any townscape and visual effects associated with the Works are anticipated to be temporary. Furthermore, a Construction Environmental Management Plan (CEMP) for the Works will set out a range of good construction site housekeeping initiatives with the aim of reducing townscape and visual effects. These will include, but not be limited to:

- The maintenance of adequate construction site hoarding.
- The orderly segregation of particular construction site activities, for example, the clear delineation of construction site offices and staff facilities, material storage areas, plant and machinery storage areas.

5.19 The implementation and monitoring of the CEMP will ensure any temporary townscape and visual effects are unlikely to be significant.

5.20 As the Works proceed and the Development emerges, the townscape and visual characteristic of the Site will adjust to those that will be generated by the presence of the completed and operational Development. However, for the reasons stated below, the physical presence of the completed and operational Development is unlikely to have significant adverse effects upon the prevailing townscape or views.

The Completed Development

5.21 The scale of the completed and operational Development will not be disproportionate to the existing massing on-Site or to the surrounding townscape and has the potential to enhance the townscape character of the Site and its setting due to the repair work to be completed to the Lethaby Building, to repair the historic bomb damage caused during WWII, and good quality design of the buildings on-Site. As stated in **Section 4**, the eastern portion of the Site contributes minimally to the Kingsway Conservation Area and as such presents another opportunity to increase the positive contribution of the Site to the surrounding and the Conservation Area, whilst also improving the connectivity between the Site and the neighbouring Red Lion Square Gardens.

5.22 The Applicant's Townscape and Visual Impact Consultant (Peter Stewart Consultancy) has worked closely with (and will continue to work with) the Applicant's Architects (Orms) to ensure potential significant adverse effects of the surrounding townscape and views arising as a result of the Development are avoided. In this respect, design principles will be devised which will aim to ensure the Development form, massing, materials, landscaping and other design features are complementary to the existing townscape whilst creating the potential to enhance the existing views of the Site. Such work has and will form part of an iterative design process.

5.23 Considering all of the above, the physical presence of the completed and operational Development is unlikely to have significant adverse effects upon townscape or views.

Recommendations

5.24 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:

- A Draft CEMP (including for townscape and visual construction management).
- A Townscape and Visual Assessment, informed by Accurate Visual Representations (AVRs) of the Development within the 16 key views referenced in **Section 4, Figure 6** and any other further views agreed in consultation with the LBC.

Above Ground Heritage Effects

The Works

- 5.25 As identified in **Section 4**, the Site is partially (western portion) located within Kingsway Conservation Area and there are above ground heritage receptors within its boundary, the Grade II* Listed Lethaby Building. As such, direct effects to above ground heritage receptors associated with the Works could arise from the Development.
- 5.26 However, the Applicant's Heritage Consultant (RPS) worked together with the Applicant's Architect (Orms) in order to advise on the suitability of the proposed Works to the Grade II* Listed Lethaby Building, to alleviate the likelihood of direct effects to the above ground heritage receptors on Site. In order to effectively inform the design, the Applicant's Heritage Consultant previously completed a Historic Building Survey Gazetteer for the Lethaby Building¹⁵. Therefore, it can be reasonably assumed that the close work between the Architects and the Heritage consultant will ensure that any potential direct effects to the on-Site above ground heritage receptors during the Works will be avoided.
- 5.27 The appearance of a construction site could have the potential to give rise to indirect setting effects to Conservation Areas and Listed Buildings. However, for efforts to avoid potential direct effects to heritage receptors, input will be sought from the Applicants Heritage Consultant and Townscape and Visual Impact Consultants (RPS and Peter Stewart Consultancy) in order to minimise impacts at all stages of the Development, including the Works. This being the case, the implementation of a CEMP to ensure good construction site housekeeping will further reduce the likelihood of significant effects.

The Completed Development

- 5.28 As noted previously, the Applicant's Heritage Consultant (RPS) has closely worked with (and will continue to work with) the Applicant's Architects (Orms) to ensure potential significant adverse effects to relevant heritage receptors and their settings as a result of the Development are avoided through design principles, ensuring the Development positively responds to the surrounding historic environment.
- 5.29 The redevelopment of the eastern portion of the Site, as well as the careful conservation of the Grade II* Listed Lethaby Building has the potential to increase the contribution made by the Site to the surrounding relevant heritage receptors, as well as the Kingsway Conservation Area, in which it partially lies.

Recommendations

- 5.30 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- A Draft CEMP (including for above ground heritage asset construction management).
 - A Heritage Statement.

¹⁵ RPS (CgMs Heritage). Historic Building Survey Gazetteer, In Respect of: Lethaby Building Southampton Row. November 2018.

Buried Heritage Effects

The Works

- 5.31 **Section 4** identifies that the Site is located within the London Suburbs Archaeological Priority Area (APA). Furthermore, as previously noted, the Applicant's Archaeologist (L-P: Archaeology) has identified the Site as being of low archaeological potential for prehistoric and early medieval deposits and moderate archaeological potential for Roman and Medieval deposits.
- 5.32 Owing to the potential for archaeological deposits to be present beneath the Site, albeit low, planning requirements necessitate the Site must be investigated prior to implementation of the Works to accurately determine the actual potential for deposits, and if present, the nature and value of such beneath the Site. As such, and already discussed, the Applicant's Archaeologist (L-P: Archaeology) undertook a desk based assessment, within which the recommendation suggested, as per best practice, where the Development proposes to build beyond the existing basement floor levels, further investigation would be undertaken. Such investigation shall include a watching brief during the geotechnical test pitting prior to any Works on Site.
- 5.33 In the event that deposits are identified on-Site, within areas of proposed intrusive groundworks, preservation measures proportional to the significance of the deposits shall be undertaken by the way of preservation by record. Given the known archaeological potential on-Site, the Applicant's Archaeologist (L-P: Archaeology) considers this approach a suitable strategy to ensure the Site does not give rise to significant archaeological effects.

The Completed Development

- 5.34 In addition to the migratory approach as set out above, the completed and operational Development will not give rise to any activities that necessitate intrusive ground works. Consequently, there will therefore be no potential for any below ground heritage asset (archaeological) effects once the Development is completed and operational.

Recommendations

- 5.35 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- A Draft CEMP (including for above ground heritage asset construction management).
 - An updated Archaeological Desk-Based Assessment.

Biodiversity / Ecological Effects

The Works

- 5.36 With reference to the Preliminary Ecological Appraisal and to **Section 4**, the Site does not contain any statutory or non-statutory ecological sites and there are no statutory nature conservation designations within

approximately 500 m of the Site. However, the Site is within 500 m of two SLINCs including Lincoln's Inn Fields, 410 m south-east of the Site, and Russell Square, 425 m north-west of the Site.

- 5.37 The location of the above mentioned non-statutory sites are considered to be adequately geographically removed from the Site so that they will not be directly or indirectly affected by the Works. Furthermore, there is no ecological connectivity between the Site and either of the non-statutory SLINCs. It is therefore concluded that even in the absence of any standard construction site mitigation, the Works will not lead to any effect upon them.
- 5.38 Owing to the limited ecological importance of existing habitats on the Site, their loss as a result of the Works will not give rise to significant ecological effects. Any potential for conflict with nesting birds during the Works can be avoided by the removal of any vegetation and demolition of buildings outside of the bird nesting period (i.e. between the beginning of September and the end of February). In the unlikely event this is not possible, vegetation removal and building demolition could be carried out during the bird nesting season, but only once surveys are completed by suitably qualified ecologists to confirm that active nests are not present. Due to the potential for feral pigeons to breed outside of the breeding season, vigilance will be maintained to ensure works stop immediately and qualified ecological advice is sought in the event of the discovery of breeding birds outside of the main breeding season to ensure no ecological impacts.
- 5.39 The above measures would be set out within the aforementioned CEMP, which will include best practice environmental management controls during the Works. This will also include measures to reduce noise, dust emissions, night-time light emissions and avoid the incidence of contaminated run-off. As such, the CEMP will ensure the environmental protection of surrounding areas, including ecological resources. This will ensure that no ecological resource is significantly adversely affected by the Works.

The Completed Development

- 5.40 For the reasons previously stated, and considering the Development will not contain any contaminative or hazardous land uses, the completed Development will not affect non-statutory ecological sites.
- 5.41 The Development brings about the potential to increase the biodiversity / ecological value of the Site via ecological enhancements that can contribute to local green infrastructure and ecosystem services. Such measures would include the potential biodiverse roof on the proposed public terrace, thereby affording a greater provision of soft landscaping and habitats of wildlife value when compared to the existing situation. This and other ecological enhancement measures has the potential to be realised via the landscaping strategy which may include native species planting, grassed areas and biodiverse roofs, all to be informed by the Applicant's Ecologist (The Ecology Consultancy).
- 5.42 Furthermore, and taking a precautionary approach, an appropriate lighting strategy will be devised with input from the Applicant's Ecologist (The Ecological Consultancy) so as to ensure no additional lighting impacts to any surrounding ecological receptors. As such, the presence of the completed and operational Development is unlikely to significantly affect areas of ecological value.

Recommendations

5.43 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:

- A Draft CEMP (including for biodiversity / ecological construction management).
- An updated PEA
- A Lighting Strategy (within the Design and Access Statement).

Geology, Ground Conditions and Contamination

The Works

5.44 As noted in **Section 4**, the Site is not designated for any geological interest or importance and does not yield any significant geological resource. As such, the Works will not give rise to any effect upon geological resources.

5.45 **Section 4** recognises that due to previous land uses on and in proximity to the Site, the Site could yield potential sources of ground contamination. Furthermore, such contamination could be encountered and / or mobilised during the intrusive ground works required to facilitate the Development. It therefore follows that the Works could give rise to the risk of contamination exposure to humans (for example construction site workers) and the wider environment.

5.46 Owing to the potential for contamination to be present beneath the Site, legislative requirements necessitate the Site must be investigated prior to implementation of the Works to accurately determine the actual potential for contamination, and if present, the type and quantum of contamination beneath the Site. Such legislation also dictates that a site must be suitable for its intended end-use and must not cause harm to human health or the environment. To this end, should the Site Investigation (SI) reveal contamination to be present, a suitable remediation strategy will be devised and implemented to ensure the Site does not give rise to significant ground contamination risks and associated effects.

5.47 In addition to the above, standard and best practice environmental management controls will be implemented during the Works to safeguard against the risks (and associated effects) of unforeseen and unexpected potential contamination events such as accidental spills of construction related materials brought to and stored on the Site during the Works. Such environmental management controls will include but not be exclusive to:

- The use of Personal Protective Equipment (PPE) by all construction site workers.
- Procedures for the safe and contained storage of construction materials on-Site.
- Procedures for dealing with accidental material spills (for example, the deployment of emergency containment, bunding and surface water drainage filtration equipment).

5.48 All such measures will be set out in the aforementioned CEMP.

- 5.49 With respect to the risk of UXO, all intrusive ground works will be subject to a UXO Watching Brief. This precautionary measure will ensure that should UXO be encountered, appropriate steps can be taken to immediately de-risk the situation. Again, it is envisaged that the CEMP will set out the correct process and procedures to follow should UXO be encountered.
- 5.50 The above legislative requirements and best practice measures mean that significant environmental effects as a result of Works are unlikely. The implementation of these measures is typically controlled through Environment Agency standard planning conditions.
- 5.51 Further to the above, a Basement Impact Assessment (BIA) will be completed for the Development. This will comprise further assessments of the Development design, setting out precautionary measure to ensure no significant effects on local hydrogeology and existing structures with regards to the proposed works associated with the basement.

The Completed Development

- 5.52 For the reasons previously stated, the completed Development will not affect any designated site of geological interest or importance; neither will the Development give rise to any effect upon geological resources.
- 5.53 The completed and operational Development will not give rise to any activities that necessitate intrusive ground works. In addition, the Development does not propose any land uses that will be of a contaminative nature. Consequently, there will be no potential for any contamination risks (and associated effects) or UXO risks once the Development is complete and operational.

Recommendations

- 5.54 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- An Updated Phase 1 Contamination Assessment (including for a Detailed UXO Threat and Risk Assessment).
 - A Basement Impact Assessment.
 - Depending on the outcome of the Phase 1 Contamination Assessment, a Phase II Contamination Assessment and Remediation Strategy.
 - A Draft CEMP (including for contamination and UXO management).

Water Resources and Flood Risk

The Works

- 5.55 As identified within **Section 4**, the Site does not contain any surface water features. In addition, the closest water feature to the Site is that of the River Thames. This is located approximately 0.95 km south of the Site.

- 5.56 **Section 4** notes that the Site is located in Flood Zone 1. Consequently, the Site is in an area of low flood risk with the probability of river or sea flooding being less than 0.1 % in any year. Furthermore, as per standard practice, the CEMP will ensure appropriate surface water drainage of the construction site, thereby ensuring no occurrence of significant localised surface water flooding.

The Completed Development

- 5.57 As the Site is in an area of low flood risk, the completed and operational Development will not be subject to any significant risk and effects associated with fluvial or tidal flood risk.
- 5.58 The Development intends to replace existing hard-standing and impermeable areas with a similar type of land cover. However, climate change considerations require that the completed and operational Development must be designed with the resilience to cope with increases in precipitation frequency and intensity which may give rise to increased incidences of surface water flooding events. Similarly, the Development must be designed to ensure surface water flooding is not increased at the Site, or elsewhere, accounting for climate change.
- 5.59 In view of the above, the design of the Development is being informed by an appropriately qualified and experienced surface water drainage engineer. This will ensure inherent design measures of the Development will safeguard against surface water flooding risks and effects at the Site and elsewhere, even accounting for climate change. Similarly, the design of the Development is being informed by the Applicant's Services Engineer (Atelier ten) so that any additional demand for foul water drainage associated with a new resident population at the Site will be provided, thereby avoiding incidences of fowls water flooding.

Recommendations

- 5.60 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- A Draft CEMP (including for surface water drainage management).
 - A Flood Risk Assessment (FRA) and Sustainable Drainage (SuDS) Strategy (focussing on flood risk from all sources (including allowance for climate change), surface water drainage and foul water drainage only and including a Surface Water Drainage Strategy).

Air Quality

The Works

- 5.61 The Works have the potential to give rise to the following air quality effects:
- Dust emissions and associated nuisance generated by the physical components of the Works.
 - Additional emissions to the atmosphere from the operation of construction plant and machinery.
 - Additional emissions to the atmosphere from construction related traffic generation.

- 5.62 With regard to dust emissions and nuisance, this can be effectively managed by standard construction environmental management techniques, all to be included in the CEMP. These will include but not be exclusive to:
- Adherence to reasonable construction site working hours which will avoid early mornings, night-time and weekend working (unless required for an emergency situation).
 - Damping down of dusty surfaces and processes where dust may be generated.
 - Appropriate covering of potentially dust generating stockpiled materials on the construction site.
 - Avoiding the occurrence of dust generating activities during dry and windy weather conditions.
 - Dust monitoring to assess the effectiveness of dust management controls and to indicate if any when additional measures may be required.
- 5.63 With the above measures in place, dust generation and nuisance will be reduced as far as practically possible. In addition, dust tends to settle within 350 m of its source, thereby limiting the geographical extent of its potential effect.
- 5.64 Potential emissions arising from the operation of construction site plant and machinery will also be minimised via the CEMP which will specify the use of modern, low emission or zero emission plant and machinery and that plant and machinery must be turned off when not in use.
- 5.65 With regard to emissions from construction related traffic, as noted in a previous sub-section of **Section 5** (Transport and Connectivity) the temporary increase in traffic generation associated with the Works is not envisaged to be significant. It therefore follows that road traffic emissions will unlikely be significantly affected by this temporary addition of traffic to the local road network.
- 5.66 Considering all of the above, the Works are not anticipated to generate significant air quality effects.

The Completed Development

- 5.67 Potential air quality effects of the completed and operational Development could arise from:
- Additional emissions to the atmosphere from traffic generated by the completed and operational Development.
 - Additional emissions to the atmosphere from the operation of building plant, particularly any heating and power plant.
- 5.68 As noted in a previous sub-section of **Section 5** (Transport and Connectivity) with the Development in place, the overall traffic volumes and flows on the local road network are unlikely to be materially different to that of the existing situation. As such, the Development is unlikely to give rise to significant changes to vehicular traffic emissions and associated effects to ambient air quality.
- 5.69 With regard to building heating and power plant, as noted in **Section 3**, the Development will incorporate an Air Source Heat Pump solution. This all-electric solution will ensure no emissions to the atmosphere.

- 5.70 In view of the above, the operation of the completed Development is not anticipated to generate significant air quality effects.

Recommendations

- 5.71 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- A Draft CEMP (including for dust and air quality management).
 - An Air Quality Assessment.

Noise and Vibration

The Works

- 5.72 In common with all active construction sites the Works have the potential to give rise to the following noise and vibration effects:
- Increased ambient noise and vibration and associated nuisance generated by the physical components of the Works.
 - Increased ambient noise and vibration resulting from the operation of construction plant and machinery.
 - Increased road traffic noise from construction related traffic generation.
- 5.73 Standard construction environmental management techniques, all to be included in the CEMP will be effective in reducing all above potential effects. These will include but not be exclusive to:
- Adherence to reasonable construction site working hours which will avoid early mornings, night-time and weekend working (unless required for an emergency situation).
 - The use of construction techniques known to reduce the incidence of noise and vibration.
 - The use of modern, low noise emission plant and machinery.
 - Switching off plant and machinery when not in use.
 - Noise and vibration monitoring to assess the effectiveness of the management controls and to indicate if any when additional measures may be required.
- 5.74 With regard to noise generated from construction related traffic, as noted in a previous sub-section of **Section 5** (Transport and Connectivity) the temporary increase in traffic generation associated with the Works is not envisaged to be significant. In addition, it is well known that it take a 20 - 25% change in traffic

flow to create an audible difference in road traffic noise^{16, 17}. It therefore follows that road traffic emissions will unlikely be significantly affected by this temporary addition of traffic to the local road network.

- 5.75 Considering all of the above, the Works are not anticipated to generate significant noise and vibration effects.

The Completed Development

- 5.76 Potential noise and vibration effects of the completed and operational Development could arise from:

- Additional noise from traffic generated by the completed and operational Development.
- Additional noise generated from the operation of building plant.

- 5.77 As noted in a previous sub-section of **Section 5** (Transport and Connectivity) the overall traffic volumes and flows on the local road network attributable for the Development are unlikely to be materially different to that of the existing situation and certainly no more than +/- 20 - 25% when compared to the existing situation. Furthermore vehicular servicing of the Development will be designed so as to minimise noise impact to existing and future residents both on and off the Site. In this respect, a Delivery and Servicing Plan will be implemented.

- 5.78 With regard to potential noise emanating from the operation of building plant, the design of such Development infrastructure is being informed by the Applicant's Services Engineer and Acoustician (Cahill Design Consultant). This will ensure that in line with relevant stringent policy requirements and industry standard guidelines, the Development will incorporate low noise emission plant, with additional acoustic screening, as necessary. This will ensure the operation of plant will not breach existing ambient background noise levels. Similarly, the Development will also be designed to ensure future residents experience a suitable internal noise and vibration environment as required by planning policy and relevant industry standard guidelines. This will account for the consideration of acoustic design to mitigate any noise and vibration generated from the operational use of the rail lines adjacent to the Site.

- 5.79 In view of the above, the operation of the completed Development is not anticipated to generate significant noise and vibration effects.

Recommendations

- 5.80 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:

- A Draft CEMP (including for noise and vibration management).
- A Noise and Vibration Assessment.
- A Transport Assessment (including for a Framework Travel Plan and a Draft Delivery and Servicing Plan).

¹⁶ Highways Agency. The Design Manual for Roads and Bridges. Volume 10 - Environmental Design. 2008.

¹⁷ Highways Agency. The Design Manual for Roads and Bridges. Volume 11 - Environmental Assessment. 2009.

Wind Microclimate

The Works

- 5.81 The Site is not located in a particularly exposed or windy area which, as previously noted in **Section 4**, contains a massing similar to the surroundings, generally comprising low - medium rise buildings and structures ranging from 3 - 15-storeys. Whilst buildings located up-wind of the Site to the prevailing south-westerly winds predominantly comprise low-medium rise buildings and structures ranging from 2-6 storeys. As such, the surroundings are unlikely to create any wind tunnelling effect at the existing Site. In conclusion, the existing Site is unlikely to be subject to any uncomfortably windy and potentially unsafe wind conditions.
- 5.82 Due to the medium-rise nature of the existing built form on-Site, its removal during the Works to create a clear Site would potentially give rise to significant changes to the prevailing wind conditions either on or surrounding the Site. However, the expectation to reuse the structural elements of the existing tower and the retention of the Lethaby Building in full, mean the Site would not be cleared at any point during the Works. As such, significant changes to the prevailing wind conditions would not be anticipated.
- 5.83 As the Works proceed and the Development emerges, wind conditions in and around the Site will adjust to those that will be generated by the presence of the completed and operational Development. However, for the reasons stated below, these are unlikely to be significantly different to the existing prevailing wind conditions and / or give rise to uncomfortable or un-safe wind conditions.
- 5.84 It should be noted that the important factor for assessing wind microclimate effects is not whether there is a change in wind conditions, but whether the wind conditions are suitable (comfortable) and safe for the intended pedestrian or occupant use at a particular location.

The Completed Development

- 5.85 As noted previously, the Site is not located in a particularly exposed or windy area. Furthermore, the Development will be relatively modest in scale comprising two connected buildings ranging from ground level plus 5-storey to ground level plus 14-storeys and a third separate building ranging from ground level plus 1-storey to ground level plus 8-storeys. Given the current massing on the Site, which comprises the 1960's Block of ground plus 12-storeys, the existing massing is not dissimilar to the Development. It is therefore judged that the completed and operational Development will not create significantly different wind conditions to those currently prevailing within and surrounding the Site. Despite the above, the design of the Development has and will continue to consider proposed massing and landscaping suitability within the surrounding wind environment.

Recommendations

- 5.86 Not applicable.

Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare

The Works

- 5.87 The removal of some of the existing built form of the Site is unlikely to give rise to significant changes (increases) to the availability of daylight and sunlight within surrounding residential units or decreases in the incidence of overshadowing to nearby amenity open spaces.
- 5.88 As the Works proceed and the Development emerges, daylight, sunlight and overshadowing conditions around the Site will adjust to those that will be generated by the presence of the completed and operational Development. However, for the reasons stated below, these are unlikely to be unacceptable.
- 5.89 Similar to the assessment of wind microclimate and given the dense urban setting of the Site, it should be noted that the important factor for assessing daylight, sunlight and overshadowing effects is not whether there is a change in daylight, sunlight and overshadowing conditions, but whether the daylight, sunlight and overshadowing conditions are acceptable for the use of a particular habitable room or amenity space.
- 5.90 With regard to light pollution, the Site is located in a well-lit area. However, the CEMP will set out measures to ensure the use of any dawn, dusk or night-time lighting required in the winter months is limited and directional so that artificial light is directed into and not out of the Site.
- 5.91 Incidences of solar glare are not anticipated to arise. Details are provided below.

The Completed Development

- 5.92 Although the Development is of a modest scale, it will bring about some increase to the physical massing of the Site. There is therefore a potential for surrounding existing habitable rooms to experience decreases in daylight and sunlight and surrounding amenity spaces to experience increases in the incidence of overshadowing.
- 5.93 In view of the above, the Applicant's Daylight, Sunlight and Overshadowing Consultant (Anstey Horne) is informing the design of the Development to ensure any such changes to surrounding habitable rooms and amenity spaces are minimised and where changes do occur, these are not unacceptable in the context of the dense urban setting of the Site.
- 5.94 With regard to daylight, sunlight and overshadowing experienced by occupants, visitors and users of the Development itself, similar to the above, the Applicant's Daylight, Sunlight and Overshadowing Consultant (Anstey Horne) is informing the design of the Development to ensure acceptable standards will be met. This can be achieved by appropriate building massing, siting and orientation, the arrangement of living spaces and amenity spaces, and fenestration design.
- 5.95 A lighting strategy for the Development will ensure that artificial light emanating from the Development does not exceed the existing ambient artificial light levels already existing in the area. Given the urban and well-lit nature of the Site and its surrounds, this is not considered to be an onerous task. The strategy will ensure the lighting for the Development is sympathetic to and appropriate for the Site surrounds.

- 5.96 Although the Development will propose glazed areas, these will be broken up by brickwork, concrete aggregate and other non-reflective building materials. Owing to this and the overall likely proportion of glazed to non-glazed façade treatments associated with the Development, significant incidents of solar glare are not anticipated.

Recommendations

- 5.97 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- A Draft CEMP (including for light pollution management).
 - A Daylight, Sunlight and Overshadowing Assessment.
 - A Lighting Strategy (within the Design and Access Statement).

Waste

The Works

- 5.98 It is inevitable that waste will be generated from the Works. However, this is the case for any redevelopment project. As such, the emphasis should be placed upon how this waste is managed. For this reason, the CEMP will set out legal and best practice measures and protocols to ensure good construction site management practices lead to minimal waste creation and maximal re-use and recycling of waste materials arising from the Works.
- 5.99 In view of the above, the Works associated with the Development are unlikely to give rise to significant waste effects.

The Completed Development

- 5.100 The completed and operational Development will not include for any land uses or activities that will give rise to particularly hazardous waste materials. However, once operational, a quantity of domestic and commercial waste will arise from the Development. Again, the critical aspect is how this waste is managed. In this respect, and in line with policy requirements, the Development will be designed to ensure sufficient space and facilities are provided for the storage of segregated general and recyclable waste. In addition, it will be ensured that the servicing of the Development allows for adequate waste collection and disposal, as necessary.
- 5.101 Again, in view of the above, the operation of the completed Development is unlikely to give rise to significant waste effects.

Recommendations

- 5.102 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:

- A Draft CEMP (including for construction site waste management).
- An Operational Waste Management Plan.

Risk of Major Accidents and Disasters

The Works

- 5.103 As noted in **Section 4**, the Site and its environs are not subject to any COMAH sites, geological hazards or safeguarded aviation zones. Furthermore, with standard, tried and tested construction related environmental management controls in place (to be set out within the CEMP), previous sub-sections of **Section 5** (Geology, Ground Conditions and Contamination and Water Resources and Flood Risk) demonstrate the Works are unlikely to give rise to significant risks associated with contamination, UXO and surface water flooding.

The Completed Development

- 5.104 As previously noted, the Site and its environs are not subject to any recognised risk or hazard zone(s). In addition, the completed and operational Development does not proposed any land uses that will increase the risk of major accidents and disasters. In this respect, the Development will be designed in accordance with all relevant health and safety requirements. Furthermore, previous sub-sections of **Section 5** (Geology, Ground Conditions and Contamination and Water Resources and Flood Risk) justify that the completed and operational Development will unlikely give rise to any significant contamination or flood risk.

Recommendations

- 5.105 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- A Draft CEMP (including for ground contamination, UXO and surface water drainage management).
 - A Phase 1 Contamination Assessment (including for a UXO Risk Assessment).
 - Depending on the outcome of the Phase 1 Contamination Assessment, a Phase II Contamination Assessment and Remediation Strategy.
 - A FRA and Sustainable Drainage (SuDS) Strategy (focussing on flood risk from all sources (including allowance for climate change), surface water drainage and foul water drainage only and including a Surface Water Drainage Strategy).

Health and Wellbeing

The Works

- 5.106 Previous sub-sections of **Section 5** (Geology, Ground Conditions and Contamination, Air Quality and Noise and Vibration) demonstrate that the Works are not anticipated to give rise to any significant contamination,

UXO, air quality and / or noise and vibration effects, all of which have the potential to affect human health and wellbeing. The likelihood of insignificant effects for all relevant topics is by virtue of the nature and location of the Development, together with the implementation of a broad range of standard, tried and tested construction related environmental management controls, all to be set out within the CEMP. Consequently, the health and wellbeing of construction site workers, local residents, local workers and visitors to the locality is unlikely to be significantly affected by the Works.

The Completed Development

- 5.107 Similar to the above, previous sub-sections of **Section 5** (Geology, Ground Conditions and Contamination, Air Quality and Noise and Vibration, Wind Microclimate and Daylight, Sunlight, Overshadowing and Light Pollution) demonstrate that the Works are unlikely to give rise to significant contamination, air quality, noise and vibration, wind microclimate and / or daylight, sunlight, overshadowing, light pollution and solar glare effects. As such, with the Development in place, these environmental factors are unlikely to significantly affect the health and wellbeing of residents, users and visitors of the Development and the surrounding locality.
- 5.108 With reference to **Section 2**, the Development will provide new and generously proportioned hard and soft landscaped areas throughout the Site and provide in the region of 361 cycle parking spaces for residents and users of the Development. This will improve pedestrian and cyclist connectivity throughout and to and from the Site.
- 5.109 In view of the above, the Development will improve pedestrian connectivity and provide opportunities for residents and users of the Development to walk and cycle. In addition the provision of amenity space (including children's play space and an outdoor gym) will allow for physical activity. Although these inherent design features are unlikely to affect human health and wellbeing on a significant scale, they will encourage direct access to opportunities which can contribute to a healthy lifestyle.

Recommendations

- 5.110 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by:
- A Draft CEMP (including for ground contamination, UXO, dust, air quality, noise and vibration and light pollution management).
 - A Phase 1 Contamination Assessment (including for a UXO Risk Assessment).
 - Depending on the outcome of the Phase 1 Contamination Assessment, a Phase II Contamination Assessment and Remediation Strategy.
 - An Air Quality Assessment.
 - A Daylight, Sunlight and Overshadowing Assessment.

Climate Change

The Works

- 5.111 Climate change is global in cause and effect. It therefore follows that by virtue of the scale of the construction site and the Development, the Works are unlikely to significantly contribute to global climate.
- 5.112 In relation to the emission of greenhouse gases, previous sub-sections of **Section 5** (Transport and Connectivity and Air Quality) demonstrate that expected construction vehicular traffic volumes and flows (and therefore emissions which will include greenhouse gasses) are unlikely to be significant when considering the quanta of existing background traffic and associated emissions. It is also demonstrated that modern, efficient and low carbon emitting construction plant and machinery will be used throughout the Works.

The Completed Development

- 5.113 As previously noted, climate change is global in cause and effect. It therefore follows that by virtue of the scale and nature of the Development, its operation will not significantly contribute to global climate change. However, the Development will be designed to minimise greenhouse gas emissions and to ensure resilience to climate change.
- 5.114 With reference to previous sub-sections in **Section 5** (Transport and Connectivity and Air Quality) the Development will be car free. When considering servicing of the Development the overall vehicular trip generation from the Development is unlikely to be materially different to that of the existing situation. As such, the Development is unlikely to give rise to significant vehicular traffic effects. It therefore follows that the Development is unlikely to give rise to significant changes to vehicular traffic emissions which will include for greenhouse gases.
- 5.115 The design of the Development is being informed by the Applicant's Sustainability and Building Services Engineer (Atelier ten). This will ensure that in line with relevant policy requirements and industry standard guidelines, the Development will incorporate many inherent sustainability design features which will minimise the overall carbon footprint and greenhouse emissions arising from the Development. Such measures will include, but not be exclusive to:
- The selection and use of building materials from sustainable sources and with low embodied carbon. Including the re-using of the main existing tower block core and other materials / structures where suitable.
 - The incorporation of appropriately designed façades to balance solar gain against daylight availability.
 - The use of good levels of insulation for wall, floor and roof elements, thereby reducing heat demand. Including improving the thermal insulation of the Lethaby Building within suitable areas that do not require historical protection.
 - The use of thermally efficient windows to reduce head demand.

- The achievement of good levels of air tightness.
- Mechanical ventilation with heat recovery.
- The use of energy efficient lighting.

5.116 With regard to climate change resilience, as noted in a previous sub-section of **Section 5** (Water Resources and Flood Risk) the Site is located in an area of low flood risk. However, the design of the Development is being informed by an appropriately qualified and experienced surface water drainage engineer. This will ensure inherent design measures of the Development will safeguard against surface water flooding risks and effects at the Site and elsewhere, even accounting for climate change.

Recommendations

5.117 In line with planning policy and best-practice guidance, the detailed planning application will be accompanied by the following documents:

- A Draft CEMP (including for dust, air quality and noise and vibration management).
- A Draft CTLP.
- A Transport Assessment (including for a Framework Travel Plan and a Draft Delivery and Servicing Plan).
- A Flood Risk Assessment (FRA) and Sustainable Drainage (SuDS) Strategy (focussing on flood risk from all sources (including allowance for climate change), surface water drainage and foul water drainage only and including a Surface Water Drainage Strategy).
- An Air Quality Assessment.
- A Sustainability Statement.

Cumulative Interactions of the Development

5.118 As previously explained, the Development will not give rise to cumulative effects resulting from the Development with other Cumulative Schemes. However, the consideration of cumulative effects should also consider the potential for the cumulative interactions of the Development in isolation upon a particular receptor or set of receptors. For example, the cumulative interaction of noise, air quality and townscape effects resulting from the Development only on a receptor or set of receptors.

5.119 Considering that it is unlikely significant environmental effects will result from the implementation of the Development, or from the operation of the completed Development, it is unlikely that there will be any potential for significant cumulative interactions to occur.

6. Conclusion and Recommendations

- 6.1 The Development is considered to be modest in scale and of a type that is consistent with the existing Site and existing development in proximity to and further afield from the Site.
- 6.2 As noted within **Section 4**, the Site is not located in a 'sensitive area' as defined by the EIA Regulations. Accordingly, the absorption capacity of the natural environment in and surrounding the Site is judged to be high; the Site and its surrounds are resilient to change.
- 6.3 Any environmental effects associated with the Development are unlikely to be significant and can be adequately dealt with via the normal planning application process. As such, the Development is not considered to constitute EIA development.
- 6.4 Despite the above, it is acknowledged that to accord with various planning requirements (not the EIA Regulations), the Applicant's detailed planning application for the Development will need to be supported by the following suite of environmental technical studies:
- A Draft CEMP.
 - A Draft CTLP (within CEMP).
 - A Transport Assessment (including for a Framework Travel Plan and a Draft Delivery and Servicing Plan).
 - A Townscape and Visual Assessment.
 - A Heritage Statement.
 - A Preliminary Ecological Appraisal (PEA).
 - A Phase 1 Contamination Assessment (including for a UXO Risk Assessment).
 - A Basement Impact Assessment.
 - Depending on the outcome of the Phase 1 Contamination Assessment, a Phase II Contamination Assessment and Remediation Strategy.
 - A FRA and Sustainable Drainage (SuDS) Strategy (focussing on flood risk from all sources (including allowance for climate change), surface water drainage and foul water drainage only and including a Surface Water Drainage Strategy).
 - An Air Quality Assessment.
 - A Noise and Vibration Assessment.
 - A Daylight, Sunlight and Overshadowing Assessment.
 - A Lighting Strategy (within the Design and Access Statement).

- An Operational Waste Management Plan.
- A Sustainability Statement.

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