Cambridge Road Estate, Kingston

Environmental Impact Assessment Scoping Report

April 2020

bartonwillmore.co.uk

BARTON WILLMORE
PLANNING / DESIGN / DELIVERY

Cambridge Road Estate, Kingston

Environmental Impact Assessment Scoping Report

Prepared on behalf of Countryside Properties (UK) Ltd

Project Ref:	26902/A5/EIAScoping		
Status:	Draft for comment	Final Draft	Issue
Issue/Rev:	01	02	03
Date:	August 2019	September 2020	April 2020
Prepared by:	NP	NP	NP
Checked by:	LW	LW	LW

Barton Willmore LLP
7 Soho Square
London
W1D 3QB

Tel: 020 7446 6888

CONTENTS

1	INTRODUCTION	3
2	THE SITE AND PROPOSED DEVELOPMENT	4
3	SCOPING	7
4	POPULATION AND HUMAN HEALTH	11
5	TOWNSCAPE AND VISUAL EFFECTS	13
6	AIR QUALITY	16
7	BIODIVERSITY	18
8	DAYLIGHT, SUNLIGHT AND OVERSHADOWING	21
9	WIND MICROCLIMATE	25
10	CUMULATIVE EFFECTS AND CONSULTATION	28
11	ENVIRONMENTAL STATEMENT STRUCTURE	31

APPENDICES

APPENDIX 1: Site Boundary Plan

1 INTRODUCTION

1.1 This report has been prepared by Barton Willmore on behalf of Countryside Properties (UK) Ltd (the Applicant). The report accompanies a request for an Environmental Impact Assessment (EIA) Scoping Opinion from the Royal Borough of Kingston upon Thames (RBKuT) in accordance with Regulation 15 of the *Town and Country Planning (Environmental Impact Assessment) Regulations 2017*[1] (as amended) (the "EIA Regulations").

1.2 In accordance with the EIA Regulations, a person who is minded to make an EIA application may ask the relevant planning authority to state in writing their opinion as to the information to be provided in the Environmental Statement (a "scoping opinion"). Regulation 15 (2) states that a scoping request must be accompanied by:

(i) a plan sufficient to identify the land;
(ii) a brief description of the nature and purpose of the development, including its location and technical capacity;
(iii) an explanation of the likely significant effects of the development on the environment; and
(iv) such other information or representations as the person making the request may wish to provide or make.

1.3 The purpose of the Scoping Report is to provide sufficient information on the proposed development and its potentially significant environmental effects to allow RBKuT to adopt an informed Scoping Opinion.

1.4 EIA Scoping is a statutory process through which the content and detailed methodology of the EIA process is agreed, formally, with RBKuT and statutory consultees. It is best practice and ensures that any future planning application is accompanied by a suitably proportionate and focused ES that takes all significant environmental issues into account.

[1] SI 2017/571 as amended by *The Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018* SI680

2 THE SITE AND PROPOSED DEVELOPMENT

The Site

Site Context

2.1 The site (see Site Location Plan at Appendix 1), is located within the administrative boundary of RBKuT. It is situated within the Norbiton Ward. Kingston Upon Thames town centre is located approximately 850m to the west of the site and the River Thames is located approximately 1.2km to the west of the site.

2.2 The site is located to the immediate south of the A2043 Cambridge Road and Hawks Road. Hampden Road marks the far eastern extent of the site and the back of the rear gardens to the properties on Portman Road represent the western extent of the site. The southern boundary of the site is bound by Bonner Hill Road.

2.3 The land use in the immediate vicinity of the site is predominantly residential and of a domestic suburban character and scale. Residential properties are located to the north of the site, beyond the A2043 and Hawks Road and to the west of the site, including along Portman Road, Somerset Road, Rowlls Road and Piper Road. The residential streets of Vincent Road and Cambridge Grove Road are located to the immediate southeast of the site. A recently constructed student living complex is located to the north of the site, on the southern side of the A2043.

2.4 To the immediate east of the site, beyond Hampden Road, is an area of commercial and light industrial use. To the south of the site, beyond Bonner Hill Road is Kingston Cemetery and Crematorium, which is designated as a Site of Importance for Nature Conservation (SINC) and protected Metropolitan Open Land (MOL).

2.5 Hogsmill River is located approximately 300m to the south of the site. Large scale industrial uses are located to the immediate south of Hogsmill River, including Hogsmill Sewage Treatment Works and a household Reuse and Recycling Centre.

2.6 Kingstonian Football Club Ground (Home of AFC Wimbledon) is located approximately 200m to the southeast of the site.

2.7 Norbiton train station is located approximately 400m to the north of the site, Kingston train station is located approximately 800m to the north west of the site and Berrylands train station

is located approximately 900m to the south of the site. All of the train stations provide services into Wimbledon, Clapham Junction and London Waterloo.

2.8 There are no listed buildings located on the site. The nearest listed building to the site is the Grade II listed Mortuary Chapels and the Grade II listed Tomb of Dorothy Frances Victoria Burton, located approximately 100m south of the site. The Grade II listed Church of St Peter and the grade II Listed Vine House are located approximately 200m to the northwest of the site. The Grade II Listed The Old Mill House is also located approximately 300m southwest of the site. Clattern Bridge Scheduled Monument is located approximately 1km to the west of the site.

2.9 Rose Walk, Raeburn Open Space and Elmbridge Open Space Local Nature Reserves are located approximately 1km to the southeast of the site. Bushy Park and Home Park Site of Special Scientific Interest (SSSI) is located approximately 1.4km to the west of the site.

2.10 According to the Gov.UK website the site is located in Flood Zone 1 (at a low risk of flooding).

2.11 The site is located within an Air Quality Management Area (AQMA).

2.12 The site is not located within a Conservation Area or Local Area of Special Character. The nearest Conservation Areas to the site are Fairfield/Knights Park and Grove Crescent Conservation Areas, located approximately 500m to the southwest of the site and Park Road Conservation Area, located approximately 500m to the north of the site, respectively.

Site Description

2.13 The site area extends to approximately 9 hectares (ha). Cambridge Road Estate was built in the 1970s and consists of the following buildings and facilities:

- 832 residential homes, distributed across four 15 storey high-rises, low-rise blocks ranging from 2 storey houses to 5 storey maisonettes and flat blocks with elevated walkways and bridges to access upper levels;
- Hawks Road Clinic within the northwest of the site;
- The Bull and Bush Hotel within the west of the site;
- The Surrey Sports Centre (disused) within the west of the site; and
- Piper Community Hall within the south of the site.

2.14 The site includes small formal and informal spaces/play spaces and ground level car parking areas.

The Proposed Development

2.15 The planning application proposed is a hybrid (part detailed, part outline) for a residential-led proposed development comprising demolition of the existing buildings on the site and construction of up to 2,170 new homes and up to 3,600sqm of non-residential floorspace that is to be used as commercial, community and office (workspace) use. The proposed development is proposed to be divided into five construction phases and across thirteen plots.

2.16 The exact tenure mix of the residential homes is yet to be decided, but it is intended to provide a mix of council rent, shared ownership homes, shared equity homes and private sale homes.

2.17 The maximum height of development would be up to +64.423 metres (13 storeys) Above Ordnance Datum (mAOD).

3 SCOPING

3.1 This scoping exercise has been informed by desk-based research, professional judgement and other information available for the site. Table 1 sets out the proposed scope of the ES.

Table 1: EIA Scoping Summary

Topics	Potential Construction Phase Effects	Potential Operational Phase Effects	Likely Significant Effects (Pre-Mitigation)	Comments
Population and Human Health	✓ - T	✓ - P	✓	Topic scoped into the ES
Townscape and Views	✓ - T	✓ - P	✓	
Air Quality	✓ - T	✓ - P	✓	
Biodiversity	✓ - P/T	✓ - P	✓	
Daylight, Sunlight and Overshadowing	✓ - T	✓ - P	✓	
Wind Microclimate	✓ - T	✓ - P	✓	
Transport and Access	x	x	x	Topic scoped out of the ES.
Noise and Vibration	x	x	x	
Water Resources and Flood Risk	x	x	x	
Cultural Heritage	x	x	x	
Land Contamination	x	x	x	
Waste	x	x	x	
Lighting	x	x	x	
Accidents and Disasters	x	x	x	

Key: ✓ Likely Significant Effect / x No Likely Significant Effect.
T – Temporary Effect / P – Permanent Effect

Climate Change and Greenhouse Gases

3.2 Climate change and greenhouse gases will be covered in a dedicated section in the introductory chapters of the ES. It is difficult to assign significance to effects on climate change, as it is a global issue with an infinite spatial scope. Therefore, the ES will focus on the climate change mitigation and adaptation measures incorporated into the proposed development to maximise positive climate change effects. This will draw upon technical chapters and reports, including the Flood Risk Assessment, Energy Statement and Air Quality Assessment, and will summarise the sustainability and energy provisions included within the proposed development.

Environmental Disciplines Scoped Out

3.3 Further information on the topics scoped out of the EIA in Table 1 is set out in the following sections.

Transport and Access

3.4 The traffic generation from the construction phase is not considered to be of such a scale that it would result in significant effects. As is normal on construction sites in London, construction traffic impacts would be minimised through standard best practice measures implemented through a Construction Traffic Management Plan (CTMP) to be secured by a planning condition. Given that the overall ratio of parking spaces will reduce in the proposed development, the operational phase is also not considered likely to result in significant effects. Therefore, this topic has been scoped out of the ES.

Noise and Vibration

3.5 The demolition works will result in noise and vibration effects on residents and properties adjacent to the site. The construction works will also affect residents adjacent to the site and, as the development progresses, residents of the site. Standard mitigation measures for the construction works would be set out in a Construction Environmental Management Plan (CEMP) which will be secured through a condition attached to planning consent. The CEMP will stipulate working hours, best practice methods of minimising noise and vibration effects from construction, and ensure the contractors are as considerate as practicable.

3.6 Once complete and occupied, noise from the proposed development would primarily relate to road traffic noise. It is understood that vehicular trip generation will also be similar to the existing situation because as whilst the number of homes is increasing, the overall ratio of parking spaces per unit will significantly reduce with an overall site wide provision of 0.4 spaces per unit. Therefore, noise effects identified for the existing situation and the proposed development are likely to be very similar. It is considered therefore that effects on noise and vibration are not likely to be significant and this topic can be scoped out of the ES. A standalone Noise Assessment will be submitted with the planning application.

Water Resources and Flood Risk

3.7 According to the Gov.uk website, the site is located in Flood Zone 1 and is at a low risk of flooding from rivers. No risks have been identified in relation to surface water flooding. A large part of the site is already covered in buildings and hardstanding and is in residential use and therefore significant effects are not anticipated in respect of flood risk. A Flood Risk Assessment (including Surface Water Drainage Strategy) will be submitted with the planning application. The Flood Risk Assessment will consider flooding from all sources, taking account of the likely increase in intensity and frequency of storm events related to climate change, and water resources (including potable and foul water capacity). This topic has therefore

been scoped out of the ES.

Cultural Heritage

3.8 In terms of archaeology, there are no designated assets within or adjacent to the site. The site has been subject to extensive construction activities throughout the majority of the 20th century. It is therefore considered unlikely that any extensive features of an archaeological nature survive in situ. Overall, the archaeological resource within the site is considered to be of low importance, where it survives. On this basis, likely significant effects on archaeology are not anticipated to occur and this topic has therefore been scoped out of the ES.

3.9 In terms of built heritage, there are no designated or non-designated assets within the site. The proposed development is not anticipated to result in likely significant effects on built heritage and this topic has therefore been scoped out of the ES. An Archaeology and Heritage Assessment will be prepared and submitted with the planning application.

Land Contamination

3.10 The site is currently in residential use and has been since 1970s. There are no highly contaminative uses, such as heavy industry, on the site. The site is therefore unlikely to be heavily contaminated. A Phase 1 Geoenvironmental Assessment will be submitted alongside the planning application. Should site investigation and subsequent remediation be required, it would be secured through a planning condition and undertaken before or during demolition and construction, subject to agreement with RBKuT and undertaken in accordance with all relevant legislation and guidance. Significant effects associated with contamination are therefore not considered likely and it is proposed that land contamination is scoped out of the ES.

Waste

3.11 Waste will be generated during the demolition phase of the proposed development from the removal of existing buildings and infrastructure; through the construction phase from disused construction materials; and through the operational phase from the proposed residential and non-residential land uses. Existing buildings and infrastructure on the site would be removed with much of the materials either reused or recycled for use on or off the site, in accordance with all applicable legislation.

3.12 A Waste Strategy would be prepared and submitted with the planning application and as proposed uses are not dissimilar to existing uses, significant effects are not anticipated, this topic has been scoped out of the ES. Household and commercial waste and recycling would

be collected, recycled and disposed of by the local collection service.

Lighting

3.13 The site is within an existing urbanised area that lies within Environmental Zone E3 (i.e. a medium district brightness area) as defined by the Institute of Lighting Professionals[2]. The proposals would not alter the land uses at the site, none of which would give rise to significant lighting effects. As such, this topic has been scoped out of the ES. A separate Lighting Strategy will be submitted as part of the planning application documentation.

Accidents and Disasters

3.14 The proposed development is primarily residential in nature and does not include uses which are considered to be hazardous. The site is not in a location which is at risk of disasters such as flooding, land instability or earthquakes. During construction, all applicable health and safety legislation will be complied with. No likely significant effects are anticipated and therefore this topic has been scoped out of the ES.

Environmental Disciplines Scoped In

3.15 For each of the topics scoped into the assessment, further information on the details to be included in the assessment and the methodology to be employed are set out in the following sections.

[2] Guidance Notes for the Reduction of Obtrusive Light (2005) Institute of Lighting Engineers

4 POPULATION AND HUMAN HEALTH

4.1 An assessment of potential effects of the proposed development on population and human health in the local and wider area will be undertaken. This will include construction phase (temporary) and operational phase (permanent) effects. The issues are anticipated to include changes to, and effects on:

- Construction and operational phase employment generation;
- Changes in population numbers once the proposed development is operational;
- Demands on primary healthcare and on primary and secondary education infrastructure, once the proposed development is operational;
- Wider human health effects; and
- Access and proximity to a range of public open spaces.

Approach

4.2 The assessment will be undertaken using the following methodology:

- Identification of baseline conditions with respect to the topics identified above using information and statistics available in the public domain;
- Assessment of likely significant effects of the proposed development on the environment by reviewing the baseline conditions and determining the change attributable to the development using published formulae and guidance to assess effects;
- Recommendation of mitigation or enhancement measures if necessary; and
- Assessment of residual effects assuming implementation of the mitigation/ enhancement measures.

4.3 A qualitative assessment of the potential for the proposed development to lead to likely significant effects with respect to wider human health issues will be undertaken. Health is a multidisciplinary topic and many individual technical documents submitted in support of the planning application are relevant to health. The assessment of wider human health effects will be desk-based, using information available in the public domain.

4.4 In addition, a rapid Health Impact Assessment (HIA) will be undertaken in accordance with the Healthy Urban Development Unit (HUDU) methodology which will be appended to the ES chapter.

4.5 The HIA would include completion of the healthy urban planning checklist which has been

created by HUDU, along with the six east London Growth Boroughs and Groundwork London. The checklist is a desktop assessment aiming to 'mainstream' health into the planning process and poses a series of questions applicable to development of this type.

Summary

4.6 Table 2 summarises the population and human health effects to be scoped into the ES.

Table 2: Population and Human Health Scope

Receptor	Effects	Scoped In
Population/Housing	Long term increase in population and housing requirement/provision	✓
Education	Increased requirement for education provision.	✓
Employment	Increase in short term construction employment and long-term operational employment	✓
Health	Increased demand on GP and dentists. Wider human health effects.	✓
Public Open Space	Access, proximity and range of open space provision.	✓

5 TOWNSCAPE AND VISUAL EFFECTS

5.1 The townscape and visual assessment will assess the likely effects of the proposed development on the townscape, including townscape character and townscape features; and on views and visual amenity.

Baseline

5.2 The site forms a component of the built-up residential and suburban area of South-West London, comprising large multi-storey blocks, as well as lower-rise blocks and terraced housing, which are set within areas of car-parking and amenity green space. The existing built forms on the site are visible from a number of locations in the surrounding townscape.

Approach

5.3 The assessment will be undertaken in accordance with the Landscape Institute and Institute of Environmental Management and Assessment, 'Guidelines for Landscape and Visual Impact Assessment' (Third Edition, 2013).

5.4 In accordance with current good practice, the assessment will address townscape and visual effects as separate issues. Townscape effects relate to both the effect on the physical features of the site, and on the townscape character of the site and surrounding area. Visual effects relate to typical views of the proposed development from the surrounding area.

5.5 Baseline information for the study area will be collated, which will include topography, townscape planning policy designations, published sources of townscape character, desktop review of townscape features, a zone of theoretical visibility (ZTV), typical photograph viewpoints and any other relevant information.

5.6 The townscape and visual assessment will:

- Assess the value, susceptibility and sensitivity of the townscape and visual receptors (the receiving environment);
- Assess the magnitude of townscape and visual effects;
- Assess the significance of townscape and visual effects; and
- Identify requirements for any mitigation measures.

5.7 Assessments will be made at the baseline year 2020, during construction; on completion - in the winter without the benefit of effective new planting; and 15 years thereafter, in summer, with the benefit of effective planting mitigation.

5.8 The visual effects from the following representative viewpoints will be assessed, the locations of which have been determined with the relevant officer at RBKuT as part of pre-application discussions:

- Viewpoint 1: View east from Bushy Park – Heron Pond;
- Viewpoint 2: View north-east from Thames Path – Hampton Court;
- Viewpoint 3: View east from Kingston Bridge on the west side;
- Viewpoint 4: View south-east from Clarence Street;
- Viewpoint 5: View south from Richmond Park – southern entrance;
- Viewpoint 6: View south from Richmond Park – King's Clump;
- Viewpoint 7: View south-east from Norbiton Station;
- Viewpoint 8: View south-east from Gloucester Road;
- Viewpoint 9: View west from Clarence Avenue;
- Viewpoint 10: View west from Waters Road;
- Viewpoint 11: View south-east from A2043;
- Viewpoint 12: View east from Fairfield Park;
- Viewpoint 13: View east from Fairfield South;
- Viewpoint 14: View east from Somerset Road;
- Viewpoint 15: View east from Rowlls Road;
- Viewpoint 16: View north from Piper Road;
- Viewpoint 17: View west from Bonner Hill Road;
- Viewpoint 18: View west from Vincent Road;
- Viewpoint 19: View north from Kings Cemetery – War Memorial;
- Viewpoint 20: View north-east from Kings Cemetery - West;
- Viewpoint 21: View north-east from footpath near King Athelstan Primary School;
- Viewpoint 22: View north from Cheyne Hill;
- Viewpoint 23: View north-west from A2043;
- Viewpoint 24: View north-west from Green Lane Recreation Ground;
- Viewpoint 25: View east from Wheathfield Way;
- Viewpoint 26: View east from Orchard Road;
- Viewpoint 27: View east from Eden Street;
- Viewpoint 28: View south-east from Old London Road;
- Viewpoint 29: View north from King's Cemetery; and
- Viewpoint 30: View south-west from Gloucester Road.

Summary

5.9 Table 3 summarises the townscape and visual receptors identified for inclusion in the

assessment.

Table 3: Townscape and Visual Effects

Receptor	Effects	Scoped In
Typical views from publicly accessible locations, including roads, footpaths and public open spaces	Visual effects on users	✓
Townscape features, including existing vegetation	Townscape effects on the landscape resource	✓
Townscape Character	Effects on townscape character areas	✓

6 AIR QUALITY

6.1 An assessment will be undertaken of the likely significant effects of the proposed development on the environment with respect to air quality.

Baseline

6.2 The RBKuT has declared an Air Quality Management Area (AQMA) across the entire Borough due to exceedances for particulate matter (PM_{10}) annual and 24-Hour mean concentrations and nitrogen dioxide (NO_2) annual mean concentrations. The main source of pollution in the AQMA is road traffic emissions.

Approach

6.3 It is proposed that air pollutant concentrations in the area will be assessed to identify current baseline levels and determine any constraints or impacts associated with the proposed development during both the construction and operational phases. It is therefore proposed that the following scope of works will be carried out:

- Consultation with the RBKuT Environmental Health Department to confirm the assessment methodology;
- Qualitative assessment of dust and particulate impacts during the construction stage in accordance with the Greater London Authority (GLA) and Institute of Air Quality Management (IAQM) construction guidance to determine the likely impacts on sensitive receptors;
- A quantitative assessment of predicted changes in concentrations of NO_2 and particulate matter (PM_{10}) at selected receptor locations during the construction and operational phases of the proposed development due to changes in traffic flows on the surrounding road network will be undertaken using ADMS-Roads extra. The need to conduct detailed modelling for construction traffic and operational traffic will be determined using the criteria set out in the Institute of Air Quality Management (IAQM) guidance 'Guidance on land-use planning and development control: Planning for Air Quality 2017'. Where these criteria are not met, an assessment of traffic emissions will be scoped out;
- A quantitative assessment of energy centre emissions will be undertaken using ADMS-Roads extra, to predict changes in concentrations of NO_2 at selected receptors. IAQM guidance provides criteria to determine the need to proceed to a detailed assessment of energy centre emissions. Where these criteria are not met, an assessment of energy centre emissions will be scoped out. Any proposed combustion plant should achieve NOx emission limits as detailed in the GLA's Sustainable Design and Construction guidance;

- A quantitative assessment of the likely exposure of future site occupants to poor air quality will be carried out at proposed onsite sensitive receptor locations; and
- A quantitative assessment of the air quality neutrality of the proposed development will be undertaken in accordance with the GLA's Sustainable Design and Construction guidance and Air Quality Neutral Policy contained in the London Plan.

6.4 An air quality modelling exercise will be undertaken for three different scenarios, as follows:

- Baseline year;
- Opening year without the proposed development; and
- Opening year with the proposed development.

6.5 An assessment of the likely significant cumulative effects on the environment with respect to air quality with the identified committed developments would also be undertaken for the construction and operational phases.

6.6 For mitigation measures during the construction phase, the focus will be on mitigation measures to be included in a Construction Environmental Management Plan (CEMP). Construction mitigation will be proposed based on the level of risk assessed and in line with IAQM Guidance on the Assessment of Dust from Demolition and Construction.

6.7 Operational phase mitigation will be proposed in accordance with the GLA's Sustainable Design and Construction guidance and Air Quality Neutral Policy guidance, if required.

Summary

6.8 Table 4 summarises the air quality receptors identified for inclusion in the assessment.

Table 4: Air Quality Effects

Receptor	Effects	Scoped In
Existing residential receptors	Potential exposure to increased pollution levels during both construction and operational phases of the proposed development.	✓
Future residents and users of the proposed development	Potential exposure to increased pollution levels during both construction and operation.	✓

7 BIODIVERSITY

7.1 An assessment will be undertaken of the likely significant effects of the proposed development on the environment with respect to biodiversity.

Baseline

7.2 A Preliminary Ecological Appraisal (PEA) and a ground level Bat Scoping Survey are being undertaken for the site. The PEA is to be concluded however the draft version has determined that the site is dominated by buildings and hardstanding with areas of amenity grassland, introduced shrubs (primarily within garden areas) and scattered trees. It was also determined that the site had potential to support bats, nesting birds and UK BAP Priority species.

7.3 There are no European or nationally designated sites on or directly adjacent to the site. The site does not lie within the impact zone of any nearby international designated sites. There are also no non-statutory designated sites directly on the site. The Kingston Cemetery Site of Local Importance is adjacent to the southern boundary of the site and several others occur within the wider area.

7.4 Following the draft PEA and Bat Scoping Surveys, a suite of bat surveys has commenced. Surveys being conducted include:

- Dusk emergence surveys;
- Dawn return to roost surveys; and
- Activity surveys including walked transect surveys and the use of static bat detectors.

7.5 The above-mentioned bat surveys have been designed based on the Bat Conservation Trust Good Practice Guidelines 3rd Edition (2016).

Approach

7.6 A qualitative and quantitative ecological impact assessment will be undertaken, following the principles set out in the CIEEM publication 'Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland' (Second Edition, 2016). This will include an assessment of cumulative and in-combination effects, details of appropriate mitigation measures and details of any residual effects (should any exist following mitigation), following consultation with the relevant statutory and non-statutory organisations. The findings of the ecological survey work will feed into the scheme design to ensure impacts are avoided where possible, in line with the CIEEM mitigation hierarchy. The assessment will also provide recommendations for

enhancement, in line with local and national planning policy.

7.7 Consideration will be given to the following potential effects:

- Construction
  - Land-take;
  - Habitat removal and damage;
  - Disturbance (visual, noise, lighting);
  - Pollution (air quality, dust generation, deposition, run-off);
  - Construction site hazards; and
  - Species-specific effects (direct mortality, injury, disturbance).

- Operation
  - Land-take;
  - Habitat creation;
  - Urbanisation (e.g. movement, lighting, noise, domestic pets and predation, fly-tipping)
  - Hydrology and pollution; and
  - Species-specific effects.

Summary

7.8 Table 5 provides a summary of the key issues to be considered in relation to Biodiversity.

Table 5: Biodiversity Effects

Receptor	Effects	Scoped In
Ecological Designations Habitats	Construction: • Land-take • Habitat removal and damage • Disturbance (visual, noise, lighting) • Pollution (air quality, dust generation, deposition, run-off) • Construction site hazards • Species-specific effects (direct mortality, injury, disturbance. Operation • Land-take • Habitat creation • Urbanisation (e.g. movement, lighting, noise, domestic pets and predation, fly-tipping) • Hydrology and pollution • Species specific effects	 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Receptor	Effects	Scoped In
Ecological Designations Bats	Construction: • Habitat removal and damage • Habitat Fragmentation and isolation • Disturbance (visual, noise, lighting) • Species-specific effects (direct mortality, injury, disturbance. Operation • Habitat creation • Urbanisation (e.g. movement, lighting, noise, domestic pets and predation)	✓ ✓ ✓ ✓ ✓ ✓
Ecological Designations Nesting birds	Construction: • Habitat removal and damage • Habitat Fragmentation and isolation • Disturbance (visual, noise, lighting) • Species-specific effects (direct mortality, injury, disturbance. Operation • Habitat creation • Urbanisation (e.g. movement, lighting, noise, domestic pets and predation)	✓ ✓ ✓ ✓ ✓ ✓
Ecological Designations UK BAP Priority Species	Construction: • Habitat removal and damage • Habitat Fragmentation and isolation • Disturbance (visual, noise, lighting) • Species-specific effects (direct mortality, injury, disturbance. Operation • Habitat creation • Urbanisation (e.g. movement, lighting, noise, domestic pets and predation)	✓ ✓ ✓ ✓ ✓ ✓

8 DAYLIGHT, SUNLIGHT AND OVERSHADOWING

8.1 This chapter of the ES will assess the likely significant effects of the proposed development on the environment with respect to:

- Daylight and sunlight amenity within the surrounding residential properties; and
- Overshadowing to the surrounding gardens, amenity areas and open spaces.

Approach

8.2 The baseline daylight conditions, using the Vertical Sky Component (VSC) and No-Sky Line (NSL) tests, to the surrounding habitable properties will be assessed, as well as, the baseline sunlight conditions, using the Annual Probable Sunlight Hours (APSH) tests, of those properties which have windows which are oriented to within 90^0 of due south. The following residential receptors have been identified as sensitive in relation to daylight and sunlight and will therefore be included within the assessments:

- Residential properties along Cambridge Road;
- Residential properties along Cambridge Gardens;
- Residential properties along Clevedon Road;
- Residential properties along Hawks Road;
- Residential properties along Portman Road;
- Residential properties along Somerset Road;
- Residential properties along Rowlls Road;
- Residential properties along Piper Road;
- Residential properties along Bonner Hill Road;
- Residential properties along Cambridge Grove Road;
- Residential properties along Vincent Road; and
- Residential properties along Hampden Road.

8.3 Only neighbouring residential properties which have windows facing towards the site will be included in the assessment. If a nearby property has no windows facing the site, these properties would not be affected in terms of light.

8.4 The baseline overshadowing conditions would be established, using a Transient Overshadowing. The assessment would show the shadow cast on surrounding public and private amenity areas from sunrise to sunset on the solstices (21st March) and equinoxes (21st June and 21st December). Owing to the southerly location of the sun path, only the amenity areas located to the north of the site have the potential to have experience alteration is

sunlight with the proposed development implemented. Therefore, only amenity areas located from northward of the site from due east to due west have been considered. The following areas of amenity space have been identified as sensitive receptors in relation to the site:

- Amenity areas along Cambridge Road;
- Amenity areas along Cambridge Gardens;
- Amenity areas along Clevedon Road;
- Amenity areas along Hawks Road;
- Amenity areas along Portman Road;
- Amenity areas along Somerset Road;
- Amenity areas along Cambridge Grove Road; and
- Amenity areas along Hampden Road.

8.5 The assessment will consider the potential loss or gain in existing daylight and sunlight levels at the surrounding sensitive uses and changes to overshadowing as a result of the proposed development, relevant to both areas of both public and private open space such as rear private gardens. A separate standalone report will consider the potential for achieving satisfactory levels of daylight, sunlight and overshadowing within the residential buildings and amenity spaces of the proposed development itself. Commercial properties that are not considered to have a reasonable expectation of daylight or sunlight, and will therefore not experience significant effects, will not be assessed.

8.6 The assessment of daylight and sunlight effects will be primarily based upon the Building Research Establishments (BRE) Site Layout Planning for Daylight and Sunlight; A Guide to Good Practice 2011 (the BRE guidelines). The approach will however also be guided by the policy and guidance set out in the National Planning Policy Framework and The London Plan. The assessment will be based on a three-dimensional computer model of the existing and proposed development situations.

8.7 To assess the significance of any effect to the surrounding habitable rooms' windows, it is proposed to undertake the VSC, NSL and APSH tests.

8.8 In accordance with the BRE guidelines, National Planning Policy Framework and The London Plan, and where the reductions from the baseline condition are likely to be 'adverse', it may be appropriate to consider the retained daylight and sunlight values against alternative target value given the location and proposed density of the site. Factors such as the effect of any existing balconies or rear extensions will also be taken into account as set out in the BRE Guidelines[3].

[3] P Littlefair (2011) Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (BR 209)

8.9 Following the assessment, mitigation measures required to prevent, reduce or offset any impacts (if identified) and the residual impacts remaining following mitigation will be considered.

Significance Criteria

Daylight and Sunlight Effects Significance Criteria

8.10 With regards to the potential significance of any effect, the results will first be considered against the BRE Guidelines criteria. It is primarily on this basis that the significance of the effect will be determined.

8.11 With regard to the BRE Guidelines, professional judgement has been used to determine whether the potential effects would result in adverse or beneficial effects. The initial numerical criteria for determining the category of effect is based on percentage alterations, as follows:

- 0 – 19.9% alteration = Insignificant;
- 20 - 29.9% alteration = Minor;
- 30 - 39.9% alteration = Moderate; and
- Greater than 40% alteration = Major.

8.12 For instances where existing VSC, NSL and APSH levels within a property are low, any alteration may result in a disproportionate percentage change, whereby the actual change in daylight or sunlight within the property experienced by the occupant may not be as noticeable as the percentage change would suggest. This is one example of when professional judgement is taken into account.

8.13 Therefore, when assigning an overall significance per property, consideration will be given to the proportion of rooms / windows affected, as well as the percentage alterations, absolute changes, retained levels of light and any other relevant factors, such as there may be mitigating factors such as balconies, overhangs or design features which may also affect the determination of assigning the criteria.

8.14 Where room uses are unknown, all rooms assessed within the property or building are considered habitable to give the worst-case scenario for potential daylight and sunlight effects caused by the proposed development.

Transient Overshadowing

8.15 The BRE Guidelines do not provide any criteria for the significance of transitory overshadowing, other than to suggest that by establishing the different times of day and year when shadow would be cast over adjacent areas, an indication is given as to the significance of the effect of the proposed development.

8.16 The assessment of transient overshadowing effects is therefore based on professional judgement, taking into consideration the effect of the existing site and comparing it with the likely transient overshadowing effect of the proposed development. The effects are defined as being of negligible, minor, moderate or major magnitude and of adverse or beneficial significance.

Summary

8.17 Table 6 summarises the likely effects in relation to daylight, sunlight and overshadowing identified for inclusion in the assessment against the existing baseline conditions.

Table 6: Daylight, Sunlight and Overshadowing Effects

Receptor	Effects	Scoped In
Residential surrounding the site	Effects on Daylight and Sunlight levels	✓
Rear gardens to the residential properties surrounding the site and surrounding amenity space	Overshadowing effects	✓

9 WIND MICROCLIMATE

9.1 An assessment will be undertaken of the likely significant effects of the proposed development on wind microclimate.

9.2 This Chapter of the ES will report the outcome of the assessment of likely significant effects arising from the proposed development on the local wind environment in the context of the site and its surroundings. Buildings and terrain affect the speed and direction of wind flows. The anticipation of the likely wind conditions resulting from new developments are important considerations in the context of pedestrian comfort and the safe use of the public realm. While it is not always practical to design out all the risks associated with the wind environment, it is possible to provide local mitigation to minimise risk or discomfort where required.

9.3 The objective of the proposed wind studies will be to determine the impact of the proposed development on the pedestrian level wind environment of the site and its surroundings. The wind assessment will take into account the effect of the surrounding context and will pay particular attention to wind effects in open amenity spaces, building entrances and pedestrian routes to determine the level of compliance with the recommended standards.

9.4 The likely significant effects of the proposed development on the local wind environment will be assessed against best practice criteria for pedestrian comfort and safety. Where appropriate, the ES Chapter will identify mitigation measures to prevent, minimise or control likely negative effects arising from the proposed development. The residual effects will be assessed and presented in the ES. The proposed development includes the construction of tall buildings which will have an effect on wind conditions and microclimate.

Approach

9.5 The main interactions of wind with a building occur in relatively close proximity to a building, particularly when there are neighbouring buildings and streets along which the wind can be channelled. This means that the focus of the assessment will be within the site boundary and the immediately surrounding streets.

9.6 A "3D" computer model of the proposed development and adjacent areas will be constructed for the assessment comprising the following scenarios:

- Baseline: A quantified assessment of the existing wind environment at the site will be used to establish the 'Baseline Scenario';

- Proposed development: An assessment of the site with the proposed development surrounded by existing buildings will be modelled in order to determine the effect of the 'Proposed Scenario'; and
- Cumulative Scenario: The proposed development within the future surroundings will be assessed, i.e. including buildings which comprise part of other consented developments not yet built.

9.7 The method for the study combines the use of Computational Fluid Dynamics (CFD) to predict wind velocities and air flow patterns, with the use of wind data from the nearest suitable meteorological station and the recommended comfort and safety standards (Lawson Criteria). The extent of the model comprises the site and a surrounding context within a minimum radius of 350 metres. The study will take into account the following factors:

- The effect of the geometry, height and massing of the proposed development and existing surroundings on local wind speed and direction;
- The wind speed as a function of the local environment as topography, ground roughness and nearby obstructions (buildings, bridges, etc.); and
- The pedestrian activity to be expected (sitting, standing, strolling and fast walking). It should be noted that effects on pedestrian comfort and safety are only considered externally to the building. No assessment will be made of the potential effects of the wind environment inside buildings as microclimate studies are only intended to address external conditions.

9.8 The results of the assessment will be presented in the form of contours of the Lawson Criteria at ground level. This reference height is industry standard to assess comfort and safety at pedestrian level.

Criteria for Pedestrian Safety and Comfort

9.9 The Lawson Comfort Criteria (Table 7) will then be applied to determine the acceptability of wind conditions for pedestrian safety and comfort. The Lawson Comfort Criteria stipulate that for the comfort and safety assessment of wind effects, it is not only the velocity of wind that is considered but also the frequency of occurrence of these velocities as an indicator of the likely duration of certain wind speeds.

Comfort Criteria

9.10 The Lawson Comfort Criteria provides wind speed thresholds that should not be exceeded for more than 5% of the time in a season to be acceptable for the stated pedestrian activity.

Table 7: Lawson's Comfort Criteria (LCC)

Key	Comfort Category	Threshold	Description
	Sitting	0-4 m/s	Light breezes desired for outdoor restaurants and seating areas where one can read a paper or comfortably sit for long periods
	Standing	4-6 m/s	Gentle breezes acceptable for main building entrances, pick-up/drop-off points and bus stops
	Strolling	6-8 m/s	Moderate breezes that would be appropriate for window shopping and strolling along a city/town centre street, plaza or park
	Walking	8-10 m/s	Relatively high speeds that can be tolerated if one's objective is to walk, run or cycle without lingering
	Uncomfortable	>10 m/s	Winds of this magnitude are considered a nuisance for most activities, and wind mitigation is typically recommended

Table 8: Lawson's Pedestrian Safety Criteria

Safety Rating	Threshold Mean-hourly Wind Speed Exceeded Once Per Annum (0.025%)	Potential effects	Development Constraints
Unsuitable for the general public (S15)	>15 m/s	Less able and cyclists find conditions physically difficult.	Threshold not to be exceeded in areas accessible to the general public: sitting areas, standing areas, leisure walking areas.
Unsuitable for able-bodies (S20)	>20 m/s	Able-bodied persons find conditions difficult. Physically impossible to remain standing during gusts.	Threshold not to be exceeded in areas with limited public access e.g. maintenance areas, motorways.

Summary

9.11 Table 9 summarises the likely effects in relation to wind microclimate for inclusion in the assessment.

Table 9: Wind Microclimate Effects

Receptor	Effects	Scoped In
Existing residential receptors – Building entrances Pedestrian circulation areas, open amenity spaces	Changes to wind microclimate conditions	✓
Residents and users of the proposed development – Building entrances Pedestrian circulation areas, open amenity spaces	Changes to wind microclimate conditions	✓

10 CUMULATIVE EFFECTS AND CONSULTATION

10.1 The ES will consider the potential for likely significant effects on the environment resulting from committed developments in the area. PPG[i] identifies that:

> *"…There are occasions where other existing or approved development may be relevant in determining whether significant effects are likely as a consequence of a proposed development..."*

10.2 Table 10 sets out the committed schemes which have been identified for the assessment of likely significant cumulative effects on the environment. It is considered appropriate to include major schemes within 1km of the site that either have planning permission or are in the process of being implemented, as well as major planning applications which have been submitted but not yet determined.

Table 10: Cumulative Schemes

Scheme Name and Reference Number	Description	Planning Status	Direction and distance from the site
65 Hampden Road, Kingston Upon Thames, KT1 3HQ (Reference: 19/00020/FUL)	Demolition of existing industrial buildings and erection of replacement residential accommodation containing 79 flats, comprising of 1, 2, 3 and 4 bedroom units, a Police Office, Use Class B1 (a), residents work hub incorporating 47 car parking spaces, 184 private cycle parking spaces and 6 public cycle spaces and refuse, recycling and plant stores, a private and communal amenity spaces, play space and hard/soft landscaping (revisions submitted to show detailed design amendments)	Approved	Approximately 150m south of the site.
Site At Eden Walk Shopping Centre Eden Walk Kingston Upon Thames KT1 1RP (Reference: 15/13063/FUL)	The demolition and redevelopment of Eden Walk Shopping Centre, including Millennium House and Neville House to provide a mixed use development consisting of retail units and kiosks (Use Classes A1-A5), leisure including a cinema (Use Class D2), media screens, offices (Use Class B1a) and residential (Use Class C3); plant (including CHP); public and residential car parking; formation of new access for residential basement car parking, refurbishment of the existing multi-storey car park including new access ramp, extension of basement; public realm works including pedestrian routes and public spaces, improvements to Memorial Gardens, and associated works. Listed Building Consent for the relocation of the War Memorial to a location in Memorial Gardens, and for works abutting the United Reformed Church.	Approved	Approximately 700m west of the site.

Canbury Place Car Park 12-52 Kingsgate Road, 13-43 Richmond Road Kingston Upon Thames KT2 5AA (Reference: 19/02323/FUL)	Hybrid application for up to 445 no. residential dwellings comprising: Detailed application for Canbury Place car park and 12-52 Kingsgate Road for the demolition of the existing buildings and the erection of two buildings to provide 372 no. residential apartments (use class C3), 1,738 sqm office space (use class B1a), 734 sqm nursery/offices (flexible use class D1/B1a) and 696 sqm gym/offices (flexible use class D2/B1a) with associated access, parking and landscaping arrangements, including the stopping up (closure) of Kingsgate Road - this application is accompanied by an Environmental Statement	Pending Consideration	Approximately 800m northwest of the site.
229 – 255 Kingston Road, New Malden, KT3 3SW (Reference: 19/01228/FUL)	Redevelopment of the site to provide 297 residential units in buildings ranging from 4 to 7 storeys, with 216sqm commercial space (A1, A2, A3, A4, B1 and D1) at ground floor, 124 car parking spaces (including car club and accessible provision); communal landscaped amenity areas, secure cycle parking and other associated development.	Pending Consideration	Approximately 800m south east of the site.
Development Site at Post Office Ashdown Road, Kingston Upon Thames (Reference: 14/13247/FUL)	Erection of new buildings of 4 to 16 storeys in height and part demolition, alterations and change of use of Former Post Office and Former Telephone Exchange listed buildings to provide 2,141 sqm of retail/ cafe/ restaurant uses (A1-A5 use) and 638 sqm of flexible floorspace to be used for either retail/café/restaurant uses (A1-A5) or Office (B1), 931 sqm of Office (B1) floorspace and 253 sqm of community/leisure (D1/D2 use) and 319 residential units. 132 car parking spaces proposed with access from Ashdown Road and 610 cycle parking spaces. The revisions are accompanied by an Environmental Statement Addendum and updated Technical report Addendums. | Development Site At Former Post Office Ashdown Road Kingston Upon Thames	Approved	Approximately 900m west of the site.

10.3 Guidance is sought from RBKuT as to whether any other committed developments should be considered for the potential to lead to likely significant cumulative effects on the environment with the proposed development.

Consultation

10.4 The following statutory and other consultees will be consulted through the EIA process:

- Highways England;
- Environment Agency;
- Historic England;

- Natural England;
- Transport for London;
- RBKuT (various departments); and
- Any other stakeholder that RBKuT nominates.

10.5 Public consultation will be undertaken during the preparation of the planning application. The feedback received through the consultation will be summarised in the ES and written up in full in the Statement of Community Involvement submitted in support of the planning application.

11 ENVIRONMENTAL STATEMENT STRUCTURE

11.1 The ES will contain two main volumes as set out in Table 11 below.

Table 11: Environmental Statement Structure

Volume 1: ES Main Text and Figures		
Chapter No.	**Chapter Title**	**Description**
1	Introduction	Introduction to the ES, EIA requirements, details of project team, ES organisation and availability.
2	EIA Methodology	Methods used to prepare each chapter, description of ES structure and content, generic significance criteria, scoping and consultation.
3	Site and Development Description	Site description and details of the proposed development.
4	Alternatives and Design Evolution	Outline of the main alternatives considered by the Applicants.
5	Construction Methodology and Phasing	Details of anticipated programme for development and construction methodology.
6	Population and Human Health	Consideration of the potential effects on population and human health.
7	Air Quality	Assessment of effects relating to air quality.
8	Biodiversity	Assessment of effect on biodiversity and ecology at the site.
9	Daylight, Sunlight and Overshadowing	An assessment of the effects of the proposed development on the daylight, sunlight and overshadowing levels.
10	Wind Microclimate	An assessment of the effects of the proposed development on the local wind microclimate.
11	Summary and Residual Effects	Summary of the residual and interactive effects of the proposed development.
Volume 2		
Technical Appendices		Technical data and reports to support the chapters in Volume 1.
Volume 3		
Townscape and Visual Assessment		Effects of the proposed development on townscape and visual amenity.
Standalone Document		
Non-Technical Summary		Summary of the ES in non-technical language.

11.2 The first five chapters of the ES would be introductory and provide essential information for the subsequent technical chapters. Further information on these chapters is set out below.

Introduction

11.3 This chapter will provide background to the EIA, describe the structure of the ES and identify the project team.

EIA Methodology

11.4 This chapter will set out the methodology used in the EIA, state the assumptions applicable to all disciplines, summarise the EIA Scoping process undertaken and summarise the public

consultation process. Bespoke methodologies, limitations and assumptions will be contained in the technical chapters of the ES where required.

11.5 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative. Generic criteria to be used in carrying out this process are detailed below. Some technical chapters will use discipline-specific criteria with their own terms for magnitude, sensitivity and significance. This will be explained in the relevant chapter.

Prediction of Impact Magnitude

11.6 The methodology for determining the scale or magnitude of impact is set out below.

Table 12: Methodology for Assessing Magnitude

Magnitude of Impact	Criteria for assessing impact
Major	Total loss or major/substantial alteration to key elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Moderate	Loss or alteration to one or more key elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Minor	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but not material. The underlying character/composition/attributes of the baseline condition will be similar to the pre-development circumstances/situation.
Negligible	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.

11.7 The sensitivity of a receptor is based on the relative importance of the receptor using the scale set out below.

Table 13: Methodology for Determining Sensitivity

Sensitivity	Examples of Receptor
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character, or is of high importance.
Low	The receptor/resource is tolerant of change without detriment to its character, is of low or local importance.

Assessment of Effect Significance

11.8 Effect significance will be calculated using the matrix in Table 9. This illustrates the interaction between impact magnitude and receptor sensitivity.

Table 14: Effect Significance Matrix

Magnitude	Sensitivity		
	High	Moderate	Low
Major	Major Adverse/Beneficial	Major - Moderate Adverse/Beneficial	Moderate - Minor Adverse/Beneficial
Moderate	Major - Moderate Adverse/Beneficial	Moderate – Minor Adverse/Beneficial	Minor Adverse/Beneficial
Minor	Moderate - Minor Adverse/Beneficial	Minor Adverse/Beneficial	Minor Adverse/Beneficial - Negligible
Negligible	Negligible	Negligible	Negligible

Site and Development Description

11.9 This chapter will describe the setting of the site and the existing conditions on the site, as well as explaining the proposed development and setting out the development parameters. The parameter plans will be included as figures to the chapter.

Alternatives

11.10 This chapter would describe the evolution of the proposed development based on environmental constraints.

Construction Methodology and Phasing

11.11 This chapter will outline the anticipated construction programme, phasing and methodology and explain the assumptions made. This chapter will form the basis of the construction phase assumptions documented in each of the technical chapters of the ES.

Technical Assessments

11.12 Each ES chapter will follow the headings set out below to ensure the final document is transparent, consistent and accessible.

- Introduction;
- Planning Policy Context;
- Assessment Methodology;
- Baseline Conditions;
- Likely Significant Effects;
- Mitigation Measures;
- Residual Effects;
- Cumulative Effects; and

- Summary.

11.13 Each chapter sub-heading is explained in further detail below.

Table 15: Technical Chapter Format and Content

Sub-Heading	Content
Introduction	• This section will introduce the assessment discipline and the purpose for which it is being undertaken.
Planning Policy Context	• This section will include a summary of national, regional and local policies of relevance to the environmental discipline and assessment. Where applicable, relevant legislation will also be summarised.
Assessment Methodology	• This section will provide an explanation of methods used in undertaking the technical study with reference to published standards, guidelines and best practice. The application of significance criteria will also be discussed. • It will also outline any difficulties encountered in compiling the required information.
Baseline Conditions	• This will include a description of the environment as it is currently (2020) and as it is expected to change given the project were not to proceed (i.e. 'do-nothing' scenario). The method used to obtain baseline information will be clearly identified. Baseline data will be collected in such a way that the importance of the particular subject area to be affected can be placed in its context and surroundings so that the effects of the proposed changes can be predicted.
Likely Significant Effects	• This section will identify the likely significant effects on the environment resulting from the construction and operational phases of development.
Mitigation Measures	• Adverse effects will be considered for mitigation and specific mitigation measures put forward, where practicable. Mitigation measures considered may include modification of the project, compensation and the provision of alternative solutions (including alternative technology) as well as pollution control, where appropriate. • The extent of the mitigation measures and how these will be effective will be discussed. Where the effectiveness is uncertain or depends upon assumptions about operating procedures, data will be introduced to justify the acceptance of these assumptions. • Clear details of when and how the mitigation measures will be carried out will be given. When certainty of impact magnitude and/or effectiveness of mitigation over time exists, monitoring programmes will be proposed to enable subsequent adjustment of mitigation measures, as necessary. • The opportunity for enhancement measures will also be considered, where appropriate. • Information will be included on the mechanism by which the mitigation will be secured (e.g. by planning condition) with outline arrangements for monitoring and responsibilities for doing so, where necessary.
Residual Effects	• The residual effects, i.e. the effects of the proposed development assuming implementation of proposed mitigation, will be determined. The residual effects represent the overall likely significant effect of the proposed development on the environment having taken account of practicable/available mitigation measures.
Cumulative Effects	• The cumulative effects of the proposed development and the identified committed developments will be assessed.
Summary	• A summary of the assessment and conclusions will be provided at the end of each technical chapter.

Summary and Residual Effects

11.14 The residual effects of the proposed development will be summarised in one table at the end of the ES setting out the overall beneficial and adverse effects of the proposed development.

11.15 Interactive effects (the interaction of effects relating to different technical disciplines on one receptor or group of receptors) will be summarised here, if applicable. Transboundary effects would not be likely.

APPENDIX 1

SITE BOUNDARY

General Notes

DO NOT SCALE. All dimensions must be checked on site, errors are to be reported.

Contractors must ensure that cross referenced drawings and specifications noted on these drawings are checked on a regular basis to ensure that the latest revisions are used.

Key Plan

Key

Site boundary

Scale 1:1000 @ A1

0 10m 25m 50m 75m

Issue Record	By	Chk	Date
P01 For information	PC	SPC	28.06.19

Title
Existing site context

Project
Cambridge Road

Scale
1:1000 @ A1 1:2000 @ A3

Status
For Information

Drawing Number **Revision**
503-PTA-MP-RF-DR-A-1200 **P01**

Patel Taylor
48 Rawstorne Street
London EC1V 7ND
T +44 (0)20 7278 2323
www.pateltaylor.co.uk

Patel Taylor