

2 EIA METHODOLOGY

Introduction

- 2.1 This chapter sets out the methodology used to prepare each chapter of the ES and describes its structure and content. In particular, it sets out the process of identifying and assessing the likely significant effects of the Development on the environment.
- 2.2 The ES has been prepared in accordance with the Town & Country Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (as amended) (the "EIA Regulations")ⁱ. Reference has also been made to currently available good practice guidance on EIA including the Planning Practice Guidance issued by the Ministry of Housing, Communities and Local Governmentⁱⁱ.

Scoping

- 2.3 The Development has been the subject of a scoping exercise to identify the likely significant effects on the environment that may arise from the construction and operational phases of the Development. An EIA Scoping Report (Appendix 2.1) was submitted to RBKuT on 28th April 2020 in support of a request for a Scoping Opinion in accordance with Regulation 15 of the EIA Regulations. RBKuT subsequently issued their formal EIA Scoping Opinion on 12th June 2020 (refer to Appendix 2.2).
- 2.4 The results of the scoping exercise have identified that the following subject areas should be included in the ES:
- Population and Human Health;
 - Townscape and Views;
 - Air Quality;
 - Biodiversity;
 - Daylight, Sunlight and Overshadowing; and
 - Wind Microclimate.

Topics Scoped out of the ES

- 2.5 The scoping exercise also identified that the Development would not give rise to likely significant effects on the environment with respect to other technical disciplines, as discussed below. This was agreed within the EIA Scoping Opinion (Appendix 2.2).

Cultural Heritage

- 2.6 An archaeology and heritage assessment has been prepared and is included as Appendix 2.3. In terms of archaeology, there are no designated assets within or adjacent to the Site and the Site does not lie within an Archaeological Priority Area (APA). The Site has been the subject of considerable construction impact in the 1970s to create the Cambridge Road Estate and associated car parks and open spaces. It is therefore considered unlikely that any extensive features of an archaeological nature survive in situ and overall, the archaeological resource within the Site is considered to be of low/negligible. The Development would also cause no impact to any APAs situated outside of the Site, the nearest of which is Kingston Cemetery APA located to the south of the Site. On this basis, likely significant effects on archaeology are not anticipated to occur and this topic has therefore been scoped out of the ES.
- 2.7 In terms of built heritage, there are no designated or non-designated assets within the Site. The nearest statutory designation to the Site is Clattern Bridge Scheduled Monument, located approximately 1km to the west of 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 majority of the nationally and locally listed buildings surrounding the Site are at a considerable distance from the Site. They have no historic or functional connection to the Site and are physically and visually separate from it, so the Site does not currently form part of the setting of any of these assets. The Development would not therefore effect the setting of the heritage assets surrounding the Site.
- 2.8 The nearest Conservation Area to the Site is Fairfield/Knights Park Conservation Area, located approximately 300m to the west of the Site. The Site is physically and visually separated from surrounding Conservation Areas by the intervening built up area and does not currently form part of the setting of these assets. The Development is therefore not anticipated to result in likely significant effects on built heritage and this topic has therefore been scoped out of the ES.

Water Resources and Flood Risk

- 2.9 A Flood Risk Assessment (FRA) and Drainage Strategy has been prepared for the Development (refer to Appendix 2.4). The assessment identifies that the Site is located entirely within Flood Zone 1 and therefore has a very low risk of flooding from rivers or seas.
- 2.10 The report demonstrates that the Development is not at significant risk of surface water

flooding subject to the recommended flood mitigation strategies being implemented. This includes the use of appropriate SuDS techniques to attenuate flows in order to discharge at approved rates. This will ensure that any risk of flooding to surrounding areas will be mitigated.

- 2.11 The FRA demonstrates that the Development is safe and in accordance with the requirements of the NPFF, PPG and the local planning policy. In terms of flood risk, it is an appropriate Development at this location and this topic has therefore been scoped out of the ES.

Land Contamination

- 2.12 A Phase 1 Ground Investigation Report has been undertaken for the Site (refer to Appendix 2.5). The results of the investigation did not indicate any significant levels of contamination on the Site, however small exceedances of contaminants were identified in topsoil and made ground soil samples and a single sample of asbestos. Ground gas monitoring was also undertaken at the Site which indicated low measured flows of ground gas.
- 2.13 Prior to construction of the Development, a further programme of intrusive investigation and ground gas monitoring will be carried out to identify the possible presence, nature and extent of any contamination within the ground/groundwater. This work would be the subject of a planning condition to be discharged prior to commencement of the Development. Any contamination (if present) would be suitably treated prior to Development and any remediation agreed with the RBKuT and Environment Agency and undertaken in accordance with all applicable legislation. These measures would ensure that no future residents of the Development would be exposed to contaminants during operation.
- 2.14 Based on the above, likely significant effects are not anticipated and this topic has been scoped out of the ES.

Noise and Vibration

- 2.15 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.

- 2.16 Once complete and occupied, noise from the Development would primarily relate to road traffic noise. Vehicular trip generation will be similar to the existing situation 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 Development are likely to be very similar. It is considered that effects on noise and vibration are not likely to be significant and this topic has therefore been scoped out of the ES. A standalone Noise Impact Assessment has been prepared and is included as Appendix 2.6.

Transport and Access

- 2.17 A Transport Assessment (TA) has been undertaken and is included in support of the planning application (refer to Appendix 2.7). The TA assesses the impact of the Development using trip generation calculations, including on public transport. The TA identifies that the net trip increase is not considered to be significant and would be accommodated on the existing transport network.
- 2.18 A Framework Travel Plan for the outline element of the Development and a Travel Plan for the detailed element of the Development (Phase 1) has also been submitted with the TA which set out measures to encourage modal shift from the private car to more sustainable means of travel including walking, cycling and public transport. The Framework and detailed Travel Plans include action plans for the implementation of these measures.
- 2.19 In terms of construction traffic, although there would be an increase in construction traffic, this is not considered to be of such a scale that it would result in significant effects. In addition, best practice mitigation will be in place to manage and mitigate the presence and movement of construction vehicles through a Construction Traffic Management Plan (CTMP), which would be secured by a planning condition to be discharged prior to commencement of the Development. Transport and Access has therefore been scoped out of the ES.

Agricultural Land

- 2.20 The Site has previously been developed and there will be no loss of agricultural land. This topic has therefore been scoped out of the ES.

Lighting

- 2.21 The Site lies within an existing urbanised area that is considered to lie within the Environmental Zone E3 (suburban), as defined by the Institute of Lighting Professionalsⁱⁱⁱ. The Site is predominantly in residential use. The Development is not anticipated to produce a significant lighting effect as the proposed use of the Development will be a residential with flexible commercial and community use and in the context of a suburban area. As such, this topic has been scoped out of the ES.

Waste

- 2.22 Waste will be generated during the demolition phase of the 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.
- 2.23 Construction waste will be disposed of in accordance with measures set out in the Construction Method Statement which has been submitted as part of the planning application. Operational waste will be disposed of in line with RBKuT requirements and managed in accordance with all applicable legislation.
- 2.24 On this basis, the likely significant effects of waste generation during the construction and operational phases of the Development are not considered to be significant and therefore waste is scoped out of the ES.

Climate Change

- 2.25 Climate change and greenhouse gases, as a separate chapter, has been scoped out of the ES. Chapter 3 summarises the findings of the ES relevant to climate change. This draws upon technical chapters and reports, including the FRA (Appendix 2.4), Transport Assessment (Appendix 2.5), Energy Strategy (Appendix 3.3) and Sustainability Statement (Appendix 3.4) and summarises the sustainability and energy provisions included within the Development setting out how the Development would mitigate and adapt to climate change. This is considered a suitably proportionate approach.

Accidents and Disasters

- 2.26 The Development is residential led with flexible commercial and community uses and therefore does not include uses which are considered to be hazardous, nor is the Site in a location which is at risk of disasters such as flooding, land instability or earthquakes. During construction, which is considered the only element which could be considered as hazardous, all applicable health and safety legislation will be complied with, in accordance with the CEMP. No likely significant effects are anticipated and therefore this topic has been scoped out of the ES.

Consultation Process

- 2.27 The planning application is the culmination of an extensive design process which has involved consultation with RBKuT, statutory consultees, the local community and other stakeholders.
- 2.28 Initial public exhibitions were held on the 18th and 20th May 2019 and the 14th and 15th July 2019. A series of exhibition boards were displayed at the public exhibition allowing attendees to learn about the proposals. Attendees were able to provide feedback via a feedback form, all of which were collated and analysed and submitted to the project architects, Patel Taylor, to assist with the development of their proposals.
- 2.29 On 9th September 2019, a permanent exhibition was set up in a vacant property on the Site (Tadlow House) to show the latest designs, including a 3D Model of the proposed masterplan. The regeneration office was located adjacent to the exhibition, providing residents and neighbours the opportunity to visit staff and discuss their concerns and ask questions about the regeneration of the estate.
- 2.30 A further exhibition took place on the 8th and 10th February 2020, prior to a residents' ballot held between 24th February to 18th March 2020. The ballot gave residents the opportunity to vote on whether they wanted redevelopment of the Estate to proceed. From the 820 eligible voters, a turnout of 86% was achieved, with 73% voting in favour of the redevelopment. A Ballot Form has been included as Appendix 2.8.
- 2.31 In addition to the public exhibitions, a number of other consultation events have been undertaken, as set out in Table 2.1.

Table 2.1: Consultation programme

Date	Event
February 2019 to May 2020	Public Workshops – six public workshops were undertaken with residents and neighbours of Cambridge Road Estate. The workshops focussed on the design of new homes, community facilities and gardens, play spaces and streets including the types of activities that could take place in the Development.
April and June 2019	Youth Workshops – four workshops were undertaken with a total of 18 young people to help them understand and influence the proposals for the Site. Both the public and youth workshops included a walkabout element to encourage conversations about the existing estate, such as play spaces, open spaces, courtyard design and wayfinding.
February 2019 to May 2020	Residents and Neighbours Meetings – representative groups of both residents and neighbours were set up in order to engage with them on a more regular basis about the details of the Development.
June 2019 to March 2020	Site Visits – Residents of the Cambridge Road Estate were invited on a free tour of one of the Applicant’s current regeneration schemes (Acton Gardens), to provide the opportunity to see what the new homes, community facilities and neighbourhood could be like.
February 2019 to May 2020	Outreach, Estate Pop-Ups, Door Knocking and Phone Calls – Flyers and newsletters were handed out at building entrances and key locations around the estate in order to inform as many people living on the estate about the proposals and to help in engage in conversation. Door to door knocking was also undertaken to check in and to understand resident thoughts on the proposals and if they had any questions or required further information. Residents were also contacted by phone to understand whether each household was up to date with the proposed regeneration plans and consultation process.
February 2019 to May 2020	Vox Pops – Video recordings of short interviews with residents were carried out at different stages of the project, both in the early stages of the project which focussed on residents’ experiences of living on the estate and aspirations for the regeneration and later stages, to record residents’ and neighbours feedback on the proposals they had viewed. All the vox pops were edited and shared via the CRE communication channels and at events.

- 2.32 Further details in relation to the public consultation exercise undertaken for the Development is provided within the Statement of Community Involvement (SCI), submitted separately in support of the planning application.
- 2.33 Chapter 4 summarises how the views of the local community have been taken into account in the design evolution of the Development.
- 2.34 In addition to consultation with RBKuT and the public exhibition, consultation has also been undertaken with the following statutory consultees:

- Historic England;
- Natural England;
- Environment Agency;
- Greater London Authority (GLA);
- Thames Water;
- Transport for London (TfL); and
- Community Groups and Local Residents' Associations.

Approach to Technical Studies

- 2.35 The EIA studies commenced at an early stage in the development process. The findings of these baseline environmental studies have played an important role in the design of the Development by defining the environmental sensitivities, constraints and opportunities associated with the Site.
- 2.36 The technical studies have been undertaken in accordance with current best practice. Specific guidance used is referenced within each of the respective assessment chapters. The majority of assessments involved consultations with statutory and non-statutory bodies, desk-based research, Site inspections and surveys, impact prediction and mitigation.
- 2.37 The assessment and conclusions of the operational phase assessments within the ES are based on the description of the Development provided in Chapters 3 and accompanying figures. Chapter 5 sets out details of the demolition and construction phases of the Development, on which the construction phase assessments are based.

Structure of Technical Chapters

- 2.38 Each technical chapter of the ES (Chapters 6-10) and ES Volume 3 (TVIA) has been set out broadly in line with Table 2.1 below. Chapter 5 provides information to allow the construction phase of the Development assessed by the disciplines set out in chapters 6-10 and ES Volume 3.

Table 2.1: Structure of the Technical Chapters

Heading	Content
Introduction	Each of the technical chapters begins with an introduction providing context to the EIA completed.
Policy Context	This section includes a summary of policies of relevance to the environmental discipline and explains its purpose in the context of the Development and the ES.

Assessment Methodology	This section describes the method and approach employed in the assessment of likely significant effects, the criteria against which the significance has been evaluated, the sources of information used and any technical difficulties encountered. Relevant legislation is also identified.
Baseline Conditions	This section describes and evaluates the baseline environmental conditions i.e. the current situation and anticipated changes over time assuming the Site remains undeveloped.
Likely Significant Effects	This section identifies the likely significant effects on the environment resulting from the Development during construction and operational phases. A description of the likely significant effects of the Development and an assessment of their predicted significance is provided.
Mitigation Measures	This section describes the measures which would be implemented to mitigate against potential adverse impacts. Where possible, enhancement measures have also been proposed.
Residual Effects	The residual effects, i.e. the remaining effects of the Development assuming implementation of the proposed mitigation measures, have been estimated and presented.
Cumulative Effects	This section considers the cumulative effects of the Development with committed developments identified within the vicinity of the Site. Any likely significant effects on the environment arising in this respect are set out in this section.
Summary	Each technical chapter concludes with a brief summary outlining the potential residual effects for the construction phase (short/medium) and operation (medium/long-term) phase of the Development.

Likely Significant Effects

- 2.39 The assessment of impact significance has been undertaken using appropriate national and international quality standards. Where no such standards exist, the judgments that underpin the attribution of significance are described. The guidelines, methods and techniques used in the process of determining significance of effects are contained within each of the technical chapters presented.

Magnitude

- 2.40 The methodology for determining the scale, or magnitude, of effect is set out in Table 2.2 below.

Table 2.2: Methodology for Assessing Magnitude

Magnitude of Impact	Criteria for Assessing Effect
Major	Total loss or major/substantial alteration to key elements/features of the baseline 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.

Sensitivity

- 2.41 The sensitivity of a receptor is based on the relative importance of the receptor using the scale in Table 2.3 below.

Table 2.3: Methodology for Assessing 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.

Significance

- 2.42 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the impacts can be beneficial or adverse. Table 2.4 below shows how magnitude and sensitivity interact to derive effect significance.

Table 2.4: Methodology for Assessing Significance

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 - Negligible
Negligible	Negligible	Negligible	Negligible

- 2.43 The above magnitude and significance criteria have been provided as a guide for technical specialists to assess impact significance. Where discipline specific methodology has been applied that differs from the generic criteria above, this has been clearly explained within the given chapter under the heading of Assessment Methodology.

Mitigation

- 2.44 Any adverse environmental effects have been considered for mitigation at the design stage and, where practicable, specific measures have been put forward. Measures have been considered based on the following hierarchy of mitigation:

- Avoidance;

- Reduction;
- Compensation;
- Remediation; and
- Enhancement.

- 2.45 Where the effectiveness of the mitigation proposed has been considered uncertain, or where it depends upon assumptions of operating procedures, data and/or professional judgement has been introduced to support these assumptions.
- 2.46 Mitigation recommended during the demolition and construction phase would be set out in the CEMP to be agreed with RBKuT prior to the commencement of work and implemented throughout the duration of the works. Outline mitigation measures to be included in a future CEMP are set out in Chapter 5 Construction Methodology and Phasing.
- 2.47 Mitigation to be implemented during the operational phase would be secured through planning conditions and obligations.

Residual Effects

- 2.48 The likely significant effects on the environment, assuming the successful implementation of mitigation measures proposed, have been identified within each chapter.

Cumulative Effects

- 2.49 The ES considers the potential for likely significant cumulative effects on the environment. The assessment has been informed by Regulation 5(e) of the EIA Regulations which states:

"A description of the likely significant effects of the development on the environment resulting from, inter alia:

....

(e) the cumulation of effects with other existing and/ or approved projects..."

- 2.50 The ES duly considers the potential for likely significant effects on the environment resulting from 'existing and approved' developments in the area coming forward at the same time as the Development. In addition, any large schemes which may not yet have received planning permission but which may come forward in the lifetime of the Development have been included in the assessment as they could come forward at the same time as the Development.

2.51 Table 2.5 details the nearby cumulative schemes (shown on Figure 2.1), which have the potential to lead to likely significant effects on the environment. These have been agreed with RBKuT through the scoping process and are included in the consideration of likely significant cumulative effects on the environment.

Table 2.5: Cumulative Schemes

Scheme Name and Reference Number	Description	Planning Status	Direction and distance from the Site
65 Hampden Road, Kingston Upon Thames (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 (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 (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.	Pending Consideration	Approximately 800m northwest of the Site.

229 – 255 Kingston Road, New Malden, (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.	Approved	Approximately 900m west of the Site.

2.52 Each technical chapter (Chapters 6-10) and ES Volume 3 (TVIA) has assessed the potential for likely significant effects on the environment as a result of the above committed and reasonably foreseeable developments.

Assumptions and Limitations

2.53 The principal assumptions that have been made and any limitations that have been identified in preparing the ES are set out in each technical chapter. General assumptions include the following:

- Assessments assume the baseline conditions at the time of ES preparation (2019 and 2020) unless otherwise stated in the technical chapter;
- It is assumed that current surrounding land uses do not change, with the exception of the committed and reasonably foreseeable developments identified;
- Assessments are based on published sources of information and primary data collection. Sources are provided as necessary;
- Assessments are based on the description of development set out in Chapter 3 and the anticipated construction methodology and programme described in Chapter 5; and
- Assessments conclude the “worst case” effects that would arise from the outline element of the Development as defined by the parameters described in Chapter 3.

Objectivity

- 2.54 The technical studies undertaken within the ES have been progressed in a transparent, impartial and unbiased way with equal weight attached, as appropriate, to beneficial and adverse effects. Where possible, this has been based upon quantitative and accepted criteria together with the use of value judgments and expert interpretations.
- 2.55 The assessment has been explicit in recognising areas of limitation within the ES and any difficulties that have been encountered, including assumptions upon which the assessments are based. Where appropriate, the assessment of significance has been given confidence levels to give a judgement to the likelihood of an effect occurring.

REFERENCES

- ⁱ The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (2017 No. 571) (as amended) (2018 No. 695 and 2020 No.505)
- ⁱⁱ <https://www.gov.uk/guidance/environmental-impact-assessment>
- ⁱⁱⁱ Institute of Lighting Professionals (ILF) (2011) Guidance Notes for the Reduction of Obtrusive Light (GN01:2011)