



Kings Meadow View

Environmental Impact Assessment Scoping Report

On behalf of **Aberdeen Standard Investments**

Project Ref: 332110588 | Rev: Final | Date: February 2023

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1 Introduction

1.1 Project Background

- 1.1.1 This Environmental Impact Assessment (EIA) Scoping Report has been prepared by Stantec on behalf of Aberdeen Standard Investments (the Applicant) in relation to an outline planning application for the redevelopment of Forbury Retail Park, Reading, RG1 3JD (hereafter referred to as the Site, which is defined on the site plan included in **Appendix A**).
- 1.1.2 The planning application will provide a residential-led mixed use scheme of up to 820 units and up to 5,500 sqm of commercial uses with vehicle access and landscaping in the centre of Reading (hereafter referred to as the Proposed Development). Further information about the Proposed Development can be found in **Chapter 3**. The Site is located within the administrative boundary of Reading Borough Council (RBC).
- 1.1.3 Due to the sensitivity of the environment and the characteristics of the Proposed Development, the applicant intends to voluntarily undertake an EIA of the Proposed Development which will be documented in an Environmental Statement (ES). The ES, which will be prepared in compliance with the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the EIA Regulations), will be submitted with the planning application.

1.2 Purpose of this Report

- 1.2.1 This EIA Scoping Report has been prepared to document the proposed scope of and approach to the EIA. The EIA will consider the likely significant effects resulting from the Proposed Development defined in the planning application, as well as the cumulative effects with other existing and/or approved developments in the local area. The EIA will also consider mitigation measures and enhancements to improve design, at both the construction and operational stages. This approach is intended to provide comprehensive and robust environmental information on the likely significant effects of the Proposed Development on the environment.
- 1.2.2 Understanding the likely significant effects that the Proposed Development may have on the environment is an integral part of the design process that is currently underway. Following an extensive period of pre-application discussions with officers at RBC, the design has now been amended to a near complete stage. The purpose of this Report is to document the scoping exercise that has been undertaken in order to identify the type and characteristics of any likely significant environmental effects associated with the Proposed Development.
- 1.2.3 The environmental topics that are proposed to be included in the EIA and those that are not (referred to as being 'scoped out') are presented respectively in **Chapters 7 – 13** and **Chapter 14**. Accordingly, this Report details how the environmental issues which have been included in the EIA scope are proposed to be examined and progressed as part of the EIA. The aim of the EIA is to protect the environment through minimising adverse environmental effects and to take advantage of opportunities for environmental enhancement. For those topics that are proposed to be 'scoped out' as significant effects in relation to such topics are not likely, this Scoping Report outlines an evidence-led approach to assessment.
- 1.2.4 This Report also provides information for the benefit of key consultees as set out in the EIA Regulations, and sets out the intended scope of the EIA and content of the ES. On the basis of this Report's content and approach, and in accordance with Regulation 15 of the EIA Regulations, the Applicant accordingly requests a Scoping Opinion from RBC.

1.3 Report Structure

1.3.1 This report continues with the following:

- Chapter 2: Site Description;
- Chapter 3: Proposed Development;
- Chapter 4: Planning Policy and Context;
- Chapter 5: EIA Process;
- Chapter 6: Proposed Scope of the EIA;
- Chapter 7 – 13: Topics included in the EIA Scope;
- Chapter 14: Topics Not included in the EIA Scope;
- Chapter 15: Summary and Next Steps; and
- Appendices.

2 Site Description

2.1 Site Location

- 2.1.1 The site of the Proposed Development is at Forbury Retail Park, Forbury Road, RG1 3JD in Reading Town Centre and located at grid reference SU720737 (Site Location Plan provided at **Appendix A**).
- 2.1.2 To the south and to the west of the Site is Forbury Road (A329), and to the east is Kenavon Drive. Located to the south of the Site is St James Church and the former HM Prison, and further beyond this lies the medieval Abbey Ruins. To the southwest is Forbury Gardens and adjacent to the site to the west lies two office blocks. To the north lies the Great Western Railway, and beyond this Napier Road and Kings Meadow. To the east of the Site boundary lies the area of Forbury Retail Park which is to remain after construction of the Proposed Development, which includes retail stores, car parking and fast-food drive throughs.

2.2 Site Description and Environmental Context

- 2.2.1 The existing Site is approximately 2.65 hectares (ha) in area and generally level at 43.5 m above ordnance datum (AOD). The majority of the Site comprises buildings and hardstanding. Around the Site entrance and car park there are some landscaped areas including semi-mature trees and mown grassland. The Site comprises retail stores including Home Sense and Furniture Village and the fast-food chain KFC. On the Site there is a surface car park with 290 spaces. None of the existing on-site buildings are listed. There are pedestrian and cycle ways within the Site.
- 2.2.2 A Thames Water trunk sewer crosses the Site, entering it from the south until the approximate centre of the Site before splitting east and west and crossing the Site laterally. The pipeline is 1400 mm in diameter at its smallest point.
- 2.2.3 The Site is not located within a landscape planning designation, Green Belt or Conservation Area. The closest statutorily designated area is Lodgewood and Sandford Mill Site of Special Scientific Interest (SSSI) which is located approximately 6 km east although it does not fall within any SSSI Impact Risk Zone relating to this designated site. The habitat consists of semi-mature trees and mown grassland, which are not ideal conditions for notable species. Species present may include a variety of bird species including Lapwings and potentially some species of bats. However, the Site mainly comprises buildings therefore the suitability to support birds and bats is likely to be low or negligible.
- 2.2.4 The Scheduled Monument of 'Reading Abbey: a Cluniac and Benedictine monastery and Civil War earthwork' is located to the south west of the Site in the Forbury Gardens area. There are a number of listed buildings surrounding the site including Reading Gaol, formerly Her Majesty's Prison (Grade II), Reading Abbey Ruins (Grade I), The Plummery Wall (Grade II), St James's Presbytery (Grade II), 10 Abbot's Walk (Grade II) and the archway connecting Forbury Gardens to Abbey Ruins (Grade II*).
- 2.2.5 The Site is approximately 160 m from apartments on Lucina View and Napier Road. There are houses located along Kennet Walk and Robert Parker Road approximately 350m away. There are flats along Kings Road and cottages along Forbury Road approximately 260 m from the Site.
- 2.2.6 Reading Station is approximately 475 m from the western Site boundary. Multiple bus stops are located within close proximity to the Site, providing links to places such as Reading Town Centre, Wokingham Town Centre and High Wycombe.

- 2.2.7 An Air Quality Management Area (AQMA) has been declared by RBC for an area covering all the major arterial roads in and out of the town as well as the central area. The AQMA encompasses the Site.
- 2.2.8 The main noise sources at the Site are vehicular movements on the surrounding road network (Forbury Road and Kenavon Drive), and train movements on the Great Western main line adjacent to the Site. The primary source of vibration at the Site is from the movements of trains on the Great Western main line.
- 2.2.9 The natural ground conditions on Site are expected to comprise White Chalk, overlain by River Terrace Deposits. However, historical borehole records held by the British Geological Survey (BGS) archive indicate the River Terrace Deposits are generally absent from the area of the Site. In addition, Made Ground associated with the previous and current development of the Site is expected to be present overlying the natural strata. The area also falls within an Area of Archaeological Potential under RBC policy.
- 2.2.10 The Site lies within Flood Zone 1 (Low Risk). Flood Zone 1 is defined as land which has less than 1 in 1000 annual probability of sea or river flooding.

3 Proposed Development

3.1 The Proposed Development

3.1.1 The description of development is as follows:

“Outline application for comprehensive redevelopment, including demolition of existing structures, comprising a residential-led mixed use scheme of up to 820 units (Class C3) and up to 5,500 sqm (GEA) of commercial uses (Class E) together with ancillary and associated development including new and enhanced pedestrian routes and vehicle access routes, open spaces, hard and soft landscaping, basement, and basement car parking providing up to 200 car parking spaces, up to 860 cycle parking spaces and servicing facilities, sewer diversion and associated works, with details of layout, scale, external appearance and landscaping reserved.”

- 3.1.2 The Proposed Development will provide up to 820 units across 1 bed, 2 bed and 3 bed configurations, with up to 200 car parking spaces located in the basement, and retail space. A dedicated secure cycle storage will be provided at ground floor level to the base of the residential blocks.
- 3.1.3 Vehicle access to the Site will be from Forbury Road. Pedestrian and cycle routes will be provided through the Site to improve site permeability and accessibility.
- 3.1.4 The buildings of the Proposed Development will be configured surrounding three courtyards. The Proposed Development is anticipated to be up to 12 storeys and with building heights graduating down towards the south and western sides of the Site.
- 3.1.5 The Proposed Development will include landscaping, some of which will be within the public realm at street level. The development will include Sustainable Urban Drainage Systems (SuDS), and steps will be taken to enhance the biodiversity and ecological value of the Site.
- 3.1.6 The Proposed Development will include the diversion of the Thames Water trunk sewer. The sewer will be relocated along Kenavon Drive and will run parallel to the perimeter of the southern, eastern and northern site boundaries.

4 Planning Policy and Context

4.1 Introduction

- 4.1.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that “*if regard is to be had to the development plan for the purpose of any determination to be made under the planning acts the determination must be made in accordance with the plan unless material considerations indicate otherwise*”.
- 4.1.2 Other documents which are material considerations include the National Planning Policy Framework 2021 (NPPF), national Planning Practice Guidance (PPG) and other Supplementary Planning Documents and Guidance (SPDs and SPGs) prepared and adopted by RBC.

4.2 National Policy

- 4.2.1 The NPPF sets out the Government’s approach to planning matters and is a material consideration in the determination of planning application. At the heart of the framework is a presumption in favour of sustainable development. Paragraph 8 sets out sustainable development with three overarching objectives:

“a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being; and

c) an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.”

- 4.2.2 This is supported by guidance in the PPG that helps to interpret policy for delivery of these objectives. It includes a section specifically to provide guidance on EIA.

4.3 The Reading Borough Local Plan

- 4.3.1 The Reading Borough Local Plan was adopted in November 2019. It sets out the planning policies for development in Reading up to 2036 and is a material planning consideration when determining planning applications. The objectives of relevance to the Proposed Development include those relating to making efficient use of the limited land supply in Reading, particularly using previously-developed land to create more homes. In addition, the Local Plan’s objectives seek to improve the quality of life for residents by enhancing accessibility to facilities and green space, and ensuring that new developments are erected in a sustainable manner.
- 4.3.2 The policies of relevance to the Proposed Development in the Reading Borough Local Plan include:
- CC1: Presumption in favour of sustainable development;

- CC2: Sustainable design and construction;
- CC7: Design and the public realm;
- CR2: Design in Central Reading;
- CR13b: Forbury Retail Park;
- RI5: Impact of main town centre uses.

4.4 The Reading 2050 Vision

- 4.4.1 The Reading 2050 Vision launched in September 2017, to assist in the delivery of a strategic, long-term vision to support growth and prosperity within Reading. A core focus of the vision was for Reading to become a sustainable and smart city by 2050.
- 4.4.2 The vision was produced by the University of Reading, Reading UK and Barton Willmore. It is not a statutory document but helps provide a context for the Local Plan and its policies. Some of the components of the vision which relate to the Proposed Development are sharing success to support and enable thriving communities, delivering a real sense of place and identity, and embedding technology to deliver innovation and low carbon living for all.

5 EIA Process

5.1 EIA Regulations

- 5.1.1 The process of EIA is governed by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the EIA Regulations). The EIA Regulations implement EC Directive 2014/52/EU and were enacted in the UK on 16th May 2017 to form the 2017 EIA Regulations.
- 5.1.2 The EIA Regulations set out the requirements for undertaking an EIA, and Regulation 18 and Schedule 4 detail the required information for inclusion in an ES. For ease of reference, Regulation 18 and Schedule 4 are presented in **Appendix B**.

5.2 Screening

- 5.2.1 Under the EIA Regulations, 'Screening' is a procedure used to determine whether a development is likely to have significant effects on the environment and therefore whether a planning application requires an EIA.
- 5.2.2 Through pre-application consultation with RBC it was agreed that an EIA of the Proposed Development will be undertaken voluntarily. This will be documented in an ES, in compliance with the requirements of the EIA Regulations.

5.3 Scoping

- 5.3.1 The purpose of Scoping is to document the scoping work that has been undertaken to identify the nature and extent of the likely significant environmental effects of a development. It also allows for the issues identified to be subject to the appropriate level of assessment, thereby providing a topic by topic focus for the EIA. Scoping also gives relevant stakeholders an opportunity to express their views on a development and to comment on the scope of the EIA.
- 5.3.2 This is the current stage of the EIA for the Proposed Development, and this EIA Scoping Report has been prepared to fulfil the above purpose.

5.4 Consultation

- 5.4.1 The design of the Proposed Development is being progressed through an iterative process of design, assessment and review. It is therefore the intention that the proposals submitted for planning permission will incorporate measures to mitigate potential adverse environmental effects, and to enhance environmental benefits, where possible through the designs for the Proposed Development in the context of the Site and its surroundings.
- 5.4.2 Consultation with relevant statutory and non-statutory bodies has informed some elements of this scoping stage and will continue to inform the iterative design and EIA processes which will be reported in the ES.
- 5.4.3 Specific consultation relating to those topics proposed to be scoped into the EIA and undertaken to date is set out in **Chapters 7 – 13**.
- 5.4.4 Consultation with statutory and non-statutory consultees, along with the local community, will continue to inform both the EIA and the design of the Proposed Development.

5.5 Assessment

- 5.5.1 In general terms, the main stages in the EIA are as follows:

- Data Review – draw together and review available data;
- Scoping – identify significant issues, determine the scope of the EIA;
- Baseline Surveys – undertake baseline surveys and monitoring;
- Assessment and iteration – assess likely significant effects of development, evaluate alternatives, provide feedback to the design team on adverse effects, incorporate any necessary mitigation or Site enhancements, assess the effects of the mitigated development; and
- Preparation of the ES.

5.5.2 The proposed scope of the EIA and approach to the assessment of likely significant effects is set out in **Chapter 7 – 13**.

5.5.3 The ES will include an assessment of cumulative effects, as outlined in **Section 6.4**.

5.6 Mitigation

5.6.1 One of the most important functions of the EIA process is to identify ways to mitigate adverse environmental effects and identify opportunities that the Proposed Development may have for environmental improvements. The EIA Regulations require an ES to contain: “A *description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment*”.

5.6.2 A hierarchy of methods for mitigating significant adverse effects will be followed; these are, in order of preference:

- **Avoidance** – designing a Proposed Development in such a way that avoids effects on the environment (such as imposing a maximum height restriction on new development);
- **Reduction** – designing the development or employing construction methodologies such that significant effects identified are reduced (for example, utilising renewable energy technologies to reduce greenhouse gas emissions);
- **Compensation** – providing off-site enhancements in order to compensate for where on-site mitigation has not been possible (such as financial contributions towards local infrastructure); and
- **Enhancement** – taking advantage of opportunities that the Proposed Development may provide to enhance the local and wider environment (like planting trees to enhance biodiversity).

5.6.3 It is anticipated that a framework Demolition and Construction Environmental Management Plan (DCEMP) will be secured by means of a planning condition which will outline methods to avoid, reduce and mitigate demolition and construction effects on the environment. This document will be updated as the Proposed Development progresses to enable the plan to be effective and account for any changes that occur during construction works.

5.6.4 The ES will identify mitigation measures for demolition, construction and operation the of the Proposed Development. Environmental effects remaining after mitigation measures have been incorporated are termed residual effects, and these will be fully described in the ES.

Primary and Tertiary Mitigation

- 5.6.5 There is a distinction between mitigation that is incorporated or 'embedded' into the design of the development (primary mitigation) and mitigation that is subsequently identified in order to prevent, reduce or offset any remaining significant adverse effects (secondary mitigation).
- 5.6.6 Primary mitigation measures are designed to be an inherent part of the scheme for which planning permission is sought (e.g. the inclusion of a noise bund, or massing of buildings). Primary mitigation evolves through the iterative design process, and early consideration of the likely significant impacts is an essential component of incorporating suitable primary mitigation measures into final design. Design principles for the Proposed Development have been established, and the ES will document the primary mitigation measures that have been employed within the design in response to the identification of potentially significant effects.
- 5.6.7 Tertiary mitigation measures are defined as actions that will be undertaken to meet other existing legislative requirements or actions that are considered to be standard practices used to manage commonly occurring environmental effects.
- 5.6.8 The ES, within each of the topic chapters as appropriate, will also document the secondary mitigation that is required to complement the primary and tertiary mitigation.

5.7 Monitoring

- 5.7.1 The 2017 EIA Regulations include requirements in relation to monitoring. The Regulations require *"the monitoring of any significant adverse effects on the environment of Proposed Development"*. It is important to note that the Regulations only require the monitoring of significant adverse effects. The ES will therefore ensure that it is clear to the reader which, if any, effects are both adverse and significant and may therefore require monitoring.
- 5.7.2 It is important to note that Regulation 26 (3) of the 2017 EIA Regulations state that planning authorities should:
- "(b) take steps to ensure that the type of parameters to be monitored and the duration of the monitoring are proportionate to the nature, location and size of the Proposed Development and the significance of its effects on the environment; and*
- (c) consider, in order to avoid duplication of monitoring, whether any existing monitoring arrangements carried out in accordance with an obligation under the law of any part of the United Kingdom, other than under the Directive, are more appropriate than imposing a monitoring measure."*
- 5.7.3 Schedule 4 of the 2017 Regulations identifies that an ES should identify *"any proposed monitoring arrangements"*. The ES will therefore provide a schedule of proposed monitoring to clearly identify the monitoring that is proposed in relation to any significant adverse effects that have been identified. Any such monitoring will be proportionate, as noted above.

5.8 Environmental Statement

- 5.8.1 The EIA process will be documented in an ES. This will:
- describe the Proposed Development and set out the policy context for it.;
 - give full detail of the EIA methodology and any technical methodologies and data used in support of the assessment;
 - present the assessment of likely significant environmental effects;

- detail any mitigation and enhancement measures that have been employed; and
 - provide a schedule of proposed monitoring arrangements.
- 5.8.2 The ES will also present the residual effects, and an assessment of the cumulative effects and impact interactions as described in **Chapter 6** below.
- 5.8.3 Under requirement 9 of Schedule 4 of the 2017 EIA Regulations a Non-Technical Summary of the ES shall also be provided.

5.9 Consideration of Alternatives

- 5.9.1 The 2017 EIA Regulations require an ES to include “A *description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.*”
- 5.9.2 This legal requirement is expressed in only general and high-level terms, requiring only the inclusion of a “*description*” of “*reasonable*” alternatives and an “*indication*” of “*main*” reasons. Although a full description of alternatives and a full assessment of their likely environmental effects are not required, sufficient detail should be provided to allow for a meaningful comparison between the alternatives and the Proposed Development.
- 5.9.3 It is a matter for the developer to decide which alternatives it intends to consider. The 2017 EIA Regulations do not expressly require that an applicant considers alternatives.
- 5.9.4 Notwithstanding this, the ES for the Proposed Development will fulfil the requirements of the 2017 EIA Regulations through identifying the reasonable alternatives considered by the developer and explain the main reasons for the choices made. A comparison of environmental effects will also be provided.

5.10 EIA Team

- 5.10.1 Regulation 18 of the 2017 EIA Regulations requires that, to ensure the completeness and quality of environmental statements, “*the developer must ensure that the environmental statement is prepared by competent experts*”.
- 5.10.2 In accordance with Regulation 18 the ES will be “*accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts.*” At this scoping stage, **Table 5.1** identifies the organisations that will contribute to the EIA and provides an outline of their relevant expertise.

Table 5.1: EIA Team and Relevant Experience

Organisation	Relevant Experience	Discipline
Stantec	Stantec is a founder member of the Institute of Environmental Management and Assessment's (IEMA) EIA Quality Mark scheme for quality in EIA. Stantec has a dedicated EIA team that specialises in leading the EIA process for development projects, including land development, regeneration, energy and infrastructure projects. Each of Stantec's EIA team has suitable academic and professional qualifications, with professional qualifications including Principal EIA Practitioner, Practitioner and Associate membership of IEMA, member of	EIA Coordination, Socio-Economics, Air Quality, Townscape and Visual

Organisation	Relevant Experience	Discipline
	Royal Town Planning Institute and Chartered Environmentalist.	
Montagu Evans	Montagu Evans is a highly professional firm of chartered surveyors and property consultants. Through our office network we have shaped some of the largest commercial, residential and mixed-use property projects in the UK. From our long experience of advising on projects located in sensitive locations, we recognise that our input requires senior involvement in order to advise and guide the project team. As a practice, our particular skill lies in combining research and analysis to a very high standard, in a planning context. That distinguishes us from other heritage and townscape consultants who approach the matter from an architectural perspective, without a clear understanding of the planning process. That approach, together with the firm's background as a practice of chartered surveyors, means our advice is commercial, focused on realising client objectives, while also managing and explaining risk to our clients.	Heritage and Planning Consultant
Orion Heritage	Orion Heritage is an archaeological and heritage consultancy with over 50 years collective experience. The company provides independent advice to the private sector aimed at resolving the often-conflicting demands of heritage conservation while also achieving profitable and sustainable development. The Directors bring with them a wealth of experience of providing advice to clients on all stages of the promotion and construction of proposed developments. Each of Orion's EIA team have suitable academic qualifications professional accreditation (Associate or Member of the Chartered Institute for Archaeologists) and a wealth of EIA experience.	Archaeology

6 Proposed Scope of the EIA

6.1 Technical Scope

- 6.1.1 The technical scope describes the environmental topics that should be addressed by an EIA, in accordance with the requirements of Regulations 4(2) and 18 and Schedule 4 of the EIA Regulations. Schedule 4 sets out that the ES must include a description of the aspects of the environment which are likely to be significantly affected by the Proposed Development.
- 6.1.2 This requirement and the broad categories set out in Schedule 4, along with others which are considered to have the potential to lead to significant environmental effects, have been interpreted and applied in the context of the Proposed Development. **Table 6.1** therefore sets out those topics that it is proposed to both scope into and out of the EIA.
- 6.1.3 Chapter references are provided to where these categories have been included within the EIA Scope. **Chapters 7 – 13** of this Report provides a detailed analysis of the resultant proposed technical scope of the EIA, while **Chapter 14** identifies those topics which it is proposed will be scoped out of the EIA as significant environmental effects are unlikely to occur.

Table 6.1: Technical Scope

EIA Regulations Topic	Scoped in / Scoped out?	Explanation within this Scoping Report
Population	✓	Chapter 7 Socio-Economics
Human Health	✓	Section 14.6 Health
Biodiversity (for example Flora and Fauna)	X	Section 14.3 Biodiversity
Land (for example land take)	X	Section 14.4 Ground Conditions
Soil (for example organic matter, erosion, compaction, sealing)	X	Section 14.4 Ground Conditions
Water (for example hydromorphological changes, quantity and quality)	X	Section 14.7 Water Environment
Air	✓	Chapter 9 Air Quality
Climate (for example greenhouse gas emissions, impacts relevant to adaptation)	X	Section 14.10 Climate Change
Material assets	✓	Section 14.8 Materials and Waste
Cultural heritage, including architectural and archaeological aspects	X	Section 14.5 Archaeology

EIA Regulations Topic	Scoped in / Scoped out?	Explanation within this Scoping Report
Landscape	✓	Chapter 13 Townscape and Visual
The inter-relationship between the above factors	✓	Chapter 15 Summary and Next Steps
The Risk of Major Accidents and/or Disasters	X	Section 14.11 Risk of Accidents and Disasters

6.1.4 The following documents are to be submitted alongside the planning application as stand-alone documents:

- Retail Impact Assessment (RIA)
- Health Impact Assessment (HIA)
- Energy Statement
- Sustainability Statement
- Waste Management Strategy
- Site Waste Management Plan (SWMP)
- Phase 1 Ground Condition Assessment
- Ecological Assessment Report (EAR)
- Transport Assessment
- Framework Travel Plan

6.1.5 The following sets out the principles for the temporal and spatial scope, and the approach to the assessment of effects, that will be applied to the EIA of the topics identified in **Chapters 7 – 13**.

6.2 Temporal Scope

Environmental Baseline

- 6.2.1 As a general principle, environmental effects will be assessed by comparing the predicted state of the environment without the Proposed Development with the state of the environment with the Proposed Development for a particular year.
- 6.2.2 The EIA Regulations require an outline of the likely evolution of the Site environment without implementation of the Proposed Development as far as changes from the baseline scenario can be predicted. This baseline evolution will include future trends such as air quality and traffic growth.
- 6.2.3 The EIA will take into account approved developments that are likely to come forward during the demolition and construction of the Proposed Development and, where appropriate, these will be factored into the definition of the baseline or identified as receptors at a relevant point

in time. Further details on the approach to approved developments are provided in **Section 6.4**.

Duration of Effects

- 6.2.4 Environmental effects will be classified as either permanent or temporary, as appropriate. Permanent changes are those which are irreversible or will last for the foreseeable future.
- 6.2.5 The duration of temporary environmental effects will be defined as short, medium or long term based on the likely durations of the demolition, construction and operational phases of the development. These definitions will be considered within the assessment of the likely significant effects and will be set out in the ES.
- 6.2.6 Where environmental effects will be infrequent or intermittent (such as effects related to activities that will not be continuous during demolition and construction) this will be noted in the ES; and the frequency of these activities will be considered in the assessment.

Phases of the Scheme

- 6.2.7 There are two discrete phases of the Proposed Development which will be considered in relation to the likely significant effects, namely the demolition and construction phase and its operation phase.

Demolition and Construction

- 6.2.8 Certain environmental effects will only occur during demolition and construction of the Proposed Development and will cease once demolition and construction activities have ceased. These will typically be the temporary effects of the scheme and will be described as “short-term” or “medium-term”, as appropriate, using the definitions determined to be appropriate and set out in the ES. Examples include but are not limited to:

- Creation of dust;
- Risk of pollution during demolition and construction;
- Disruption to the water environment;
- Permanent loss of assets; and
- Changes to views during construction.

Operation

- 6.2.9 Environmental effects that occur during the operation of the Proposed Development will typically be permanent or “long-term”. Examples of permanent effects which might occur during the operation of the scheme include but are not limited to:

- Changes to people’s key views;
- Changes to the setting of heritage assets; and
- Introduction of new sensitive receptors.

6.3 Spatial Scope

- 6.3.1 The spatial extent of each of the technical assessments will vary from one to another in accordance with the relevant policy and guidance for the assessment of that topic. In some

instances, the environmental effects will extend no further than the boundary of the Site, yet in others the assessment will extend beyond the Site boundary. The study area for each technical assessment will be identified and described as appropriate in each of the topic chapters of the ES.

6.4 Assessment of Effects

Types of Effects

- 6.4.1 In assessing the significance of effects identified during the EIA, account will be taken as appropriate as to whether effects are:
- Direct Effects – effects that are caused by activities which are an integral part of the Proposed Development (such as change in uses);
 - Indirect Effects – effects that arise indirectly from the demolition and construction or use of a development (for example, supply chain effects in the demolition and construction stage, or regeneration benefits attributed to the approved development);
 - Secondary Effects – effects that are 'knock-on' or one-step-removed effects arising in consequence of indirect effects (such as the decision of firms to locate to a particular area following increased custom resulting from new residents in that area);
 - Cumulative Effects – effects that singly are not significant, but when assessed together with others may be significant, as well as effects of the Proposed Development combined with and other developments approved locally;
 - Short-Term and Medium-Term – environmental effects that occur during the demolition and construction of a project will typically be Short or Medium Term;
 - Long-Term – environmental effects that occur during the operation of a project will typically be Long Term;
 - Temporary Effects – environmental effects that occur during the demolition and construction of a project will typically be temporary;
 - Permanent Effects – environmental effects that occur during the operation of a project will typically be permanent;
 - Positive Effects – effects that have a positive influence on the environment and individual topics; and
 - Negative Effects – effects that have a negative influence on the environment and individual topics.
- 6.4.2 For clarity within the assessment, the term 'impact' will be used in relation to the outcome of the project (such as the generation of emissions to air), while the term 'effect' will describe the consequent implication in environmental terms (continuing the above example, this could include the reduction in local air quality).

Residual Effects

- 6.4.3 The incorporation of mitigation measures, primarily as part of the scheme design and demolition and construction phase, will be reported where appropriate and likely significant

residual effects that remain will be described and assessed according to the significance criteria set out in **Table 6.2** below.

- 6.4.4 As noted above, the 2017 EIA Regulations require that the ES describes likely significant effects of the Proposed Development. However, there is no applicable definition of significance and interpretations differ. In accordance with the European Commission's Guidance on Scoping (revised 2017), the EIA will study those effects that will influence decision-making or those where there is uncertainty about their magnitude. This approach is consistent with best practice for EIA in the UK.
- 6.4.5 The significance of an effect is typically the product of two factors, namely the sensitivity of the environmental resource affected and the magnitude of the impact on it, while consideration may also need to be given to the likelihood of an effect occurring.
- 6.4.6 This approach to assessing and assigning significance to an environmental effect will rely upon such factors as legislative requirements, guidelines, standards and codes of practice, consideration of the EIA Regulations, the advice and views of statutory consultees and other interested parties and expert judgement. The following questions are relevant in evaluating the significance of likely environmental effects:
- Which risk groups are affected and in what way?
 - Is the effect reversible or irreversible?
 - Does the effect occur over the short, medium or long term?
 - Is the effect permanent or temporary?
 - Does the effect increase or decrease with time?
 - Is the effect of local, regional, national or international importance?
 - Is it a positive, neutral or adverse effect?
 - Are health standards or environmental objectives threatened?
 - Are mitigating measures available and is it reasonable to require these?
- 6.4.7 Specific significance criteria will be prepared for each specialist topic as appropriate, based on the above and the generic criteria set out in **Table 6.2** below and adapted to accord with topic-specific guidance.

Table 6.2: Significance criteria

Significance Level	Criteria
Substantial	Only adverse effects are assigned this level of significance as they represent key factors in the decision-making process. These effects are generally, but not exclusively, associated with sites and features of national or regional importance. A change at a borough scale site or feature may also enter this category.
Major	These effects are likely to be important considerations at a local or borough scale but, if adverse, are potential concerns to the project and may become key factors in the decision-making process.
Moderate	These effects, if adverse, while important at a local scale, are not likely to be key decision-making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or on a particular resource.
Minor	These effects may be raised as local issues but are unlikely to be of importance in the decision-making process. Nevertheless, they are of relevance in enhancing the subsequent design of the project and consideration of mitigation or compensation measures.
Negligible	Either no effect or an effect which is beneath the level of perception, within normal bounds of variation or within the margin of forecasting error. Such effects should not be considered by the decision-maker.

- 6.4.8 Effects that are described as ‘Substantial’, ‘Major’ or ‘Moderate’ are determined to be *significant*; and effects that are described as ‘Minor’ or ‘Negligible’ are determined to be *not significant* in the context of the EIA Regulations.

Cumulative Effects

- 6.4.9 The EIA Regulations require the consideration of the potential impact of inter-relationships and cumulative effects of “existing and/or approved development” with the Proposed Development.

- 6.4.10 The EIA will consider as appropriate:

- The likely significant cumulative effects of the Proposed Development and other relevant local existing and/or approved developments; and
- The potential for impact interactions leading to an aggregated environmental effect on a receptor being greater than each of the individual effects that have been identified (for example, local people being affected by noise, dust and increased traffic levels during the demolition and construction of the development, where those impacts are greater when experienced in combination than individually).

- 6.4.11 A review of approved developments and undetermined applications within the locality of the Proposed Development has been undertaken, and a list provided within **Appendix C** including major applications and applications subject to an EIA within 2 km of the Proposed Development). Through the EIA process, consideration of which approved developments have the potential to lead to significant cumulative effects with the Proposed Development will be made. Size, scale, massing and distance from the Site are considered factors within this process. Those which are likely to result in significant cumulative developments will be included within the EIA.

- 6.4.12 Notwithstanding this, agreement is sought from RBC on the approved developments which should be assessed in the cumulative assessments in the ES. It would be appreciated if RBC could confirm this position in issuing its formal Scoping Opinion. If the authority is aware of any other approved developments that it considers will need to be assessed in terms of

potential cumulative effects, it would be appreciated if these could be identified as part of the Scoping Opinion.

- 6.4.13 It should be noted that a separate list of approved developments may be agreed with RBC for the purposes of Transport Assessment (TA). For consistency in the assessment of transport-related effects, the assessment of noise and air quality effects associated with road traffic will be consistent with the assessment presented in the TA.
- 6.4.14 The assessment of likely significant cumulative effects of the Proposed Development and other local approved developments will be included within each of the topic chapters of the ES.

Impact Interactions

- 6.4.15 A dedicated chapter of the ES will assess the potential impact interactions; that is receptors being affected by more than one environmental effect and therefore potentially resulting in a more significant combined effect than the individual effects reported in each of the topic chapters.

6.5 Uncertainty and Difficulties Undertaking the Assessment

- 6.5.1 The prediction of future effects inevitably involves a degree of uncertainty. Where necessary, the ES will describe the principal factors giving rise to uncertainty in the prediction of environmental effects and the degree of the uncertainty.
- 6.5.2 Confidence in predictions will be engendered by employing accepted assessment methodologies supported by relevant environment industry bodies such as 'Guidance for Ecological Impact Assessment' by the Institute of Ecology and Environmental Management. Any uncertainty inherent within the prediction will be described.
- 6.5.3 Uncertainty also applies to the success or otherwise of measures to mitigate negative environmental effects. Where the success of a mitigation measure is uncertain, the extent of the uncertainty will be identified in the ES.
- 6.5.4 In accordance with Schedule 4 of the 2017 EIA Regulations the ES will identify any difficulties that have been encountered in undertaking the assessment.

7 Socioeconomics

7.1 Introduction

- 7.1.1 This Chapter of the Scoping Report identifies the proposed scope of the EIA to assess likely significant socio-economic effects from the Proposed Development. The scope of the assessment has been identified in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) and responds to the 'population' and 'health' EIA topics. A Health Impact Assessment (HIA) will be produced to support the EIA, as described in **Chapter 14**.
- 7.1.2 Socio-economics has been scoped into the EIA due to the potential for likely significant effects as a result of the demolition, construction and operational stages of the Proposed Development on sensitive receptors including the local labour and housing markets, key business sectors including retail, community infrastructure (such as schools and GP surgeries), recreation and public access through the Site and to surrounding areas, and on Town Centre vitality.
- 7.1.3 The assessment will be carried out based on the methodology proposed in this Scoping Report and RBC's subsequent Scoping Opinion. The assessment scope and methodology will take account of relevant socio-economic baseline and policy issues.
- 7.1.4 A standalone retail impact assessment (RIA) will be produced to support the planning application in relation to the potential loss of retail provision. The RIA will be prepared in tandem with this socio-economic assessment, and EIA findings will be used to support the formal assessment of likely significant effects which will be presented within the Socio-economics Chapter of the ES.

7.2 Baseline Conditions

Study Areas

- 7.2.1 The following Study Areas are proposed for the socio-economic assessment:

■ **Labour Market & Business Study Area:**

- The Central Berkshire Functional Economic Market Area (FEMA) has been selected as the Labour Market and Business Study Area as it corresponds with relevant travel to work areas (TTWAs), Housing Market Areas (HMA) and commercial property market areas to best represent the mobility of labour across relevant administrative boundaries. As detailed in the Berkshire Functional Economic Market Area Study (2016), the Central Berkshire FEMA takes account of the authority areas of Reading, Wokingham, Bracknell Forest and Windsor & Maidenhead¹. This aligns with the Office of National Statistic (ONS) defined Reading Travel to Work Area (TTWA) and the Upper M4 commercial property market area focused around the key M4 markets of Reading, Maidenhead, Bracknell and Wokingham, with strong economic relationships between these towns in terms of value, accessibility and labour force.
- This Study Area will be adopted to consider effects on the labour market, key business sectors (including retail), the vitality of Reading Town Centre and indirect retail expenditure effects resulting from the spending power of new residents

¹ It is acknowledged that Windsor and Maidenhead have been included within two FEMAs (Central and Eastern Berkshire) due to the varied characteristics and economic role associated with different parts of the Borough. The Borough's position within two FEMAs reflects the equally strong relationships that Windsor and Maidenhead exhibits with both more central parts of Berkshire as well as areas within South Bucks.

accommodated within the Proposed Development. The assessment will take into consideration the Western Berkshire Retail & Commercial Leisure Assessment (2016), which is supplementary evidence to the adopted Local Plan (2019).

■ **Housing Market Study Area:**

- According to the The Housing Market Study Area adopted for this assessment corresponds with the Western Berkshire HMA (covering Bracknell Forest, Wokingham Borough, Reading Borough and West Berkshire) as identified within the Berkshire (with South Bucks) Strategic Housing Market Assessment (SHMA, 2016).

■ **Education Study Area:**

- According to the Department of Education's New home to school travel and transport guidance (2014), the minimum statutory walking distance to school for children aged under 8 years is 2 miles (ONS Population Estimates, local authority five-year bands). The Study Area has therefore been defined as local schools (primary and secondary) within 2 miles of the Site. The Study Area takes account of existing schools, catchment areas and planned additional school capacity (including that identified within the Local Plan and supporting documents).

■ **Healthcare Study Area:**

- This is defined as the NHS Berkshire West Clinical Commissioning Group (CCG) which represents GP practices in Berkshire West (Newbury, Wokingham, North and West Reading and South Reading CCGs).

■ **Recreation and Public Access Study Area:**

- This is defined as the Site and surrounding area within 1km including access to Forbury Gardens, Reading Station and the Kennet & Avon Canal.

The Site and Proposed Development

- 7.2.2 The existing Site comprises an established retail park, comprised of 'big box' retail/warehousing, this is described in **Section 2.2**. The retail warehousing however is generally poor-quality built form with exposed dead frontages, side and rear elevations.
- 7.2.3 At a local level, the Site is allocated under Policy CR13b of the Reading Local Plan (2019). This is discussed further in **Chapter 4 – Planning Policy and Context**.
- 7.2.4 A description of the Site is provided in **Chapter 2**, with a description of the Proposed Development provided in **Chapter 3**.

Surrounding Area

Population and Density

- 7.2.5 The Central Berkshire FEMA comprises of Reading, Wokingham, Bracknell Forest and Windsor & Maidenhead. In 2020, the Central Berkshire FEMA has an estimated population of 609,700 of which 63.1% (384,500) were of a working age population (16-64 years). Within the FEMA, Wokingham has the largest population (173,900) followed by Reading (160,300) (ONS Population Estimates, Local Authority).
- 7.2.6 Reading has a higher density in comparison to the other Boroughs, with the Town Centre an established residential and commercial area. Developments often comprise vertically mixed uses.

7.2.7 The Reading Housing and Economic Land Availability Assessment (HELAA) (2017) details estimated dwelling densities within the Town Centre as follows:

- Town Centre residential new-build – 325 dwellings per hectare (dph);
- Town Centre fringe residential new-build – 200 dph; and
- Town Centre office new-build – plot ratio of 326%.

Labour Market

7.2.8 An analysis of 2011 Census travel-to-work patterns underlines the significant effect that Reading and West Berkshire have upon travel to work patterns in Berkshire. Census data points to a growing east-west labour market divide in the former County, driven by the increasing influence and draw of Heathrow Airport in commuting terms and declining influence of Reading upon travel to work flows with more eastern parts of Berkshire.

7.2.9 Particular clusters of professional services activity are accommodated within Bracknell Forest and Reading, while West Berkshire shares similar characteristics to adjoining Basingstoke & Deane and Wiltshire with regards to a strong representation of manufacturing employment. Within Reading Borough, the Berkshire Functional Economic Market Area Study (2016) identifies land between the Basingstoke Road and the A33 as the largest area of employment land within the Borough.

7.2.10 At a sub-regional level, commercial property markets areas are centred on the M3 and M4 strategic 'Western Corridor', driven by strong functional economic linkages to Heathrow Airport and the outer west London Boroughs. Within the Western Corridor, it is possible to identify specific sub-market areas, inducing a 'Core Thames Valley' or 'Upper M4' area focused on the key M4 markets of Reading, Maidenhead, Bracknell and Wokingham, with strong economic relationships between these towns in terms of value, accessibility and labour force.

7.2.11 The population within the Central Berkshire FEMA is relatively prosperous. The resident workforce has higher educational attainment than regional and national averages, with 53.0% being educated to NVQ Level 4 or above (2020). This correlates with a high economic activity rate of 82.6%, above that for the South East (81.6%) and England as a whole (79.5%) (2020).

Key Business Sectors

The 'Construction' (Code: F) industry supports some 13,500 employee jobs (2019) across the Central Berkshire FEMA. Within this, 44.4% (6,000) of construction jobs are located within Windsor & Maidenhead, 25.9% (3,500) within Wokingham, 16.7% (2,250) in Reading and 13.0% (1,750) in Bracknell Forest.

7.2.12 With regard to retail and as detailed in the Berkshire FEMA Study, Reading has the largest consumer market catchment in Berkshire. Reading's consumer market catchment extends along the M4, M3 and M40 corridors taking in all of Berkshire, as well as large parts of Oxfordshire, Buckinghamshire, Surrey and Hampshire. Other Berkshire authorities are viewed as having a more localised retail and consumer catchment areas, reflecting their lower order retail status and critical mass of occupiers.

7.2.13 The 'Wholesale and Retail Trade; Repair of Motor Vehicles And Motorcycles' (Code: G) industry supports some 54,000 employee jobs (2019) across the Central Berkshire FEMA. Within this, 29.4% (16,000) are located in Reading further indicating the strong retail presence of the town. A further 24.1% (13,000) jobs are located in Bracknell Forest and Windsor & Maidenhead, with 22.2% (12,000) located in Wokingham.

- 7.2.14 The Town Centre has large amounts of comparison retail with Broad Street, the Oracle and the Broad Street Mall identified in the Local Plan (2019) (all located within the Town Centre), being the focus of retail in Reading with the highest levels of footfall.

Housing Market

- 7.2.15 From a housing market perspective, Berkshire is influenced by household migration and TTWA from the range of surrounding authorities. The Berkshire SHMA details there to be an expected growth of 86,600 jobs in employment over the 2013-2036 period. To account for this, and the mobility of the labour force within the Western Berkshire HMA, there is an Objectively-Assessed Housing Need (OAN) of 2,855 homes per annum. For Reading, a need of 699 new dwellings each year is identified.
- 7.2.16 The OAN informs the overall residential spatial strategy of the Local Plan and notes that economic development and housing are intrinsically linked. The Local Plan states that the need for new homes in the area is related to the area's role as a key driver of the national economy. New homes will further contribute the 'Reading 2050 Vision' in establishing Reading as an internationally-recognised and economically successful city region. The Site's allocation for residential development will support the objectives on the Local Plan in making the most efficient use of Reading's limited land, particularly previously development land, to ensure that as many new homes as possible are delivered to meet identified needs, including affordable housing.
- 7.2.17 The spatial strategy for Central Reading detailed within Section 5 of the Local Plan identifies around 7,600 homes (around 49% of the total planned for) will be delivered during the Plan period. Once built the Site development would positively contribute towards this target.

Education and Health Infrastructure

- 7.2.18 Education infrastructure identified within two miles of the Site comprises:
- Primary: Caversham Primary School; New Town Primary School; Redland Primary School; Katesgrove Primary School; Coley Primary School and Nursery; and Deenway Montessori School (Primary).
 - Secondary: The Wren School; Leighton Park School; Maiden Erlegh School; Highdown School and Sixth Form Centre; Hamilton School; Kendrick School; and Deenway Montessori School (Secondary).
- 7.2.19 The NHS Berkshire West CCG Annual Report 2020-201 indicates the CCG comprises 45 member GP Practices, serving a registered patient population of 557,501 people.
- 7.2.20 Reading Walk-in Health Centre, located within Broad Street Mall of Reading Town Centre, is the nearest GP service within proximity to the Site.

Recreation

- 7.2.21 Reading has a well-established cycle network, with the Site in proximity to the following locally designated cycle routes:
- R3: Bulmershe, Palmer Park, Newtown to Central Reading;
 - R4: Caversham Park Village, Henley Road and Starr Road to Reading Station; and
 - R5: Tilehurst Station, The West Village & Oxford Road to Reading Town Centre.

7.2.22 In addition, Reading hosts the intersection of several National Cycle Networks (NCN), including:

- NCN 4: a long-distance route between London and Fishguard via Reading, Bath, Bristol, Newport, Swansea, Carmarthen, Tenby, Haverfordwest and St. Davids. The route follows, roughly, the course of the River Thames from London to Reading then from Reading follows the River Kennet to Bath through Newbury and Hungerford.
- NCN 5: A long-distance route which connects Reading and Holyhead via Oxford, Banbury, Stratford-upon-Avon, Redditch, Bromsgrove, Birmingham, Walsall, Stafford, Stoke-on-Trent, Chester, Colwyn Bay and Bangor. However, the section between Walsall and Stafford is still under development. NCN5 begins in Reading and follows the northern half of the Thames Valley cycle route crossing the Chiltern Hills and passing through Wallingford, Didcot and Abingdon.
- NCN 23: Runs south from Reading to Southampton via Basingstoke, Alresford, Winchester and Eastleigh with a spur to Alton. The route continues on the Isle of Wight from Cowes and Sandown via Newport with a ferry running between Southampton and Cowes.

7.2.23 Recreational and public access routes within the Site and the Study Area linking the Proposed Development to the railway station, employment areas, the Town Centre and wider residential areas will be assessed with regard to maintaining and enhancing connectivity and public access as part of the Proposed Development. This will draw upon conclusions presented within the Transport Chapter.

7.2.24 Reading is located on the Kennet & Avon canal and River Thames (both north of the Site). The Kennet & Avon Canal extends 87 miles, linking London with the Bristol Channel. Within Reading, it links the River Thames with the River Avon near Bath and the Thames Path to the Cotswold Way National Trails.

7.2.25 West of the A33 and north of the Kennet & Avon canal lies the Kennet Meadows, which is an important local area for recreation. The Meadows contains a network of watercourses, including the River Kennet, Kennet & Avon Canal, Foudry Brook and Holy Brook and their tributaries.

7.3 Consultation

7.3.1 Consultation will be sought with RBC to agree the methodology and approach to the socio-economic assessment. Where possible, further detail regarding education infrastructure, healthcare infrastructure, and recreation and public access will be sought from the Council.

7.4 Potential Significant Effects

7.4.1 All new developments have the potential to generate socio-economic effects at the local, regional and/or national level, principally in relation to changes in economic development, employment, community infrastructure provision and usage, retail expenditure and public access to recreational assets. However, the range of likely significant socio-economic effects generated by a development proposal depends upon the characteristics of the individual development combined with the baseline socio-economic conditions (including labour and housing markets) to which the development would be introduced.

7.4.2 With regard to the Proposed Development and the characteristics of the Site it is considered that the following socio-economic effects are likely to be significant and therefore require further consideration through the EIA process:

Demolition and Construction

- Direct capital expenditure and supply chain impacts;
- Labour market effects resulting from direct and indirect employment generated by temporary demolition and construction activity;
- Direct, indirect and induced Gross Value Added (GVA) generation associated with employment effects; and
- Direct and indirect effects on recreation through restrictions on public access in and around the Site (drawing upon the assessment presented within the Transport chapter).

Operation

- Housing market effects resulting from the provision of up to 820 homes within the Proposed Development. As the Site has been allocated for housing delivery under Policy CR13b of the Reading Local Plan, no assessment of wider demographic effects is considered necessary;
- Effects on primary and secondary school and GP practice infrastructure provision and use;
- Effects on recreation (drawing upon the assessment presented within the Transport chapter);
- Economic effects resulting from the loss of some retail provision and employment, including effects on the performance of relevant key business sectors (such as retail) and on Reading Town Centre vitality; and
- Indirect retail expenditure effects resulting from additional spending power of new residents.

7.5 Not Significant Effects

- 7.5.1 The assessment will draw upon relevant conclusions from other EIA technical assessments and consider any relevant secondary socio-economic effects resulting from these. However, to avoid duplication and maintain assessment proportionality, amenity-related environmental effects on local residents are not included in the socio-economic assessment as they will be reflected elsewhere in the ES where relevant.

7.6 Assessment Methodology

- 7.6.1 There are no specific methodological guidelines or requirements for socio-economic assessments within the context of EIA. However, the proposed assessment methodology to be adopted (below) has been informed by the principles outlined in The Green Book: Appraisal and Evaluation in Central Government (HM Treasury, 2020).
- 7.6.2 The level and significance of predicted socio-economic effects will be judged with reference to the nature and sensitivity of the affected receptor and the nature of the effect (the magnitude of effect). Definitions of receptor sensitivity will be confirmed in the methodology section of the Socio-economics chapter of the ES.
- 7.6.3 In overall terms, the sensitivity of the labour market (FEMA) will be defined in relation to:
- The availability of skilled labour relative to national averages;
 - The proportion of employment in relevant sectors (such as construction);

- The availability of labour (including the unemployed); and,
 - Relevant education and training provision.
- 7.6.4 Plentiful labour and/or skills capacity results in a low sensitivity, whilst limited labour and/or skills capacity results in a high sensitivity. Sensitivity criteria which will be applied to the labour market considered in this assessment.
- 7.6.5 The assessment will consider the extent to which the net loss and additional employment created by the demolition/construction/operational phases of the Proposed Development will be accommodated without creating labour market distortions in the identified study areas. The significance of potential effects on the labour market will be defined by the combination of the sensitivity of identified receptors and the magnitude of change upon them.
- 7.6.6 For wider socio-economic effects, receptor sensitivity, will be determined with reference to the importance and susceptibility of the relevant receptor: that is, the extent to which any change could affect socio-economic performance. In economic terms this will measure the ability of each receptor to adapt to external changes which could result in socio-economic effects.
- 7.6.7 Where appropriate, magnitude of change levels will be fixed to relevant quantitative thresholds. Specifically, net employment change will be calculated based on the gross employment potential of the Proposed Development (demolition/construction) and taking account of additionality factors:
- Deadweight: what would happen in the absence of the Proposed Development;
 - Leakage: the proportion of employment opportunities accessed by people living outside the Study Area;
 - Displacement: the proportion of Proposed Development benefit accounted for by a reduction in benefit elsewhere;
 - Substitution: when a firm substitutes one activity for another to take advantage of public sector assistances; and
 - Multipliers: to estimate further economic activity associated with additional income and supplier purchases.
- 7.6.8 A standalone RIA will be produced to support the planning application in relation to the potential loss of retail provision. The RIA will be prepared in tandem with this socio-economic assessment and EIA findings will be used to support the formal assessment of likely significant effects which will be presented within the Socio-economics Chapter of the ES.
- 7.6.9 A matrix showing the relationship between receptor sensitivity and predicted magnitude of change will be applied to define, firstly, the level of pre-mitigation socio-economic effects, and then the level and significance of residual effects, taking account of all proposed mitigation and enhancement measures. Where an effect could be one of two gradings (for example where a Low impact interacts with a Medium sensitivity receptor resulting in a Slight or Moderate effect), professional judgement will be used to determine which effect is applicable.
- 7.6.10 This approach will apply both for socio-economic effects from the Proposed Development and for any likely significant cumulative socio-economic effects from the Proposed Development in combination with relevant approved developments. Effects predicted to occur at levels of Moderate to Substantial will be considered significant in the context of the EIA Regulations.

- 7.6.11 Following the identification of likely socio-economic effects, the need for any secondary mitigation or enhancement measures to address predicted adverse effects or to enhance the socio-economic performance of the Proposed Development will be considered.
- 7.6.12 The assessment will conclude by reporting the level and significance of likely residual socio-economic effects from the Proposed Development, taking account of all proposed mitigation and enhancement measures in the ES.

7.7 References

- Berkshire West Clinical Commissioning Group (2021) Annual Report 2020-2021. Available at: <https://www.berkshirewestccg.nhs.uk/media/5265/bw-ccg-annual-report-accounts-2020-21.pdf>
- GVA Planning (2016) Western Berkshire Retail & Commercial Leisure Assessment. Available at: <https://info.westberks.gov.uk/CHttpHandler.ashx?id=44210&p=0>
- GL Hearn Limited (2016) Berkshire (including South Bucks) Strategic Housing Market Assessment. Available at: https://images.reading.gov.uk/2019/12/Berkshire_Strategic_Housing_Market_Assessment_Feb_2016.pdf
- HM Treasury (2020) Green Book: Appraisal and Evaluation in Central Government. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf
- Nathaniel Lichfield & Partners (2016) Berkshire Functional Economic Market Area Study. Available at: https://images.reading.gov.uk/2019/12/Berkshire_FEMA_Study_Report_Feb16.pdf
- Reading Borough Council (2019) Local Plan. Available at: https://images.reading.gov.uk/2019/12/Local_Plan_Adopted_November_2019.pdf
- Reading Borough Council (2021) Affordable Housing Supplementary Planning Document. Available at: <https://images.reading.gov.uk/2019/12/Affordable-Housing-SPD-Adopted-March-2021.pdf>
- Reading Borough Council (2017) Reading Housing and Economic Land Availability Assessment. Available at: https://images.reading.gov.uk/2019/12/HELAA_November_2017_Volume_1.pdf
- ONS (2020) Population estimates - local authority based by five year age band
- ONS (2020) annual population survey (Jan 2020-Dec 2020)
- ONS (2019) Business Register and Employment Survey

8 Noise and Vibration

8.1 Introduction

- 8.1.1 This Chapter sets out how the noise and vibration assessment will be reported in the Noise and Vibration chapter of the ES. The proposed methodologies and scope of assessment are provided below.
- 8.1.2 The assessment will review the impacts on both the proposed residential units and existing residential receptors surrounding the Site.

8.2 Baseline Conditions

- 8.2.1 The main noise and vibration sources likely to affect the site are trains using the railway to the north of the site and vehicles on the surrounding road network, namely Forbury Road and Kenavon Drive.
- 8.2.2 Sound and vibration surveys will be undertaken for the EIA at representative locations to quantify the noise and vibration climate on the Site and at nearby receptors.
- 8.2.3 A computer-generated acoustic model of the Site and surrounding areas will be prepared using industry standard software SoundPLAN version 8.2. The noise model will be used to evaluate the baseline noise climate across the site. The sound survey measurements will be used to calibrate and validate the acoustic model.

8.3 Potential Significant Effects

Demolition and Construction

- 8.3.1 It is likely that the main construction phase works which have the potential to be a significant source of noise would include site levelling and clearance, ground excavation, concreting works and building construction. The building construction phase, and the servicing and fitting out of new buildings, is normally not a significant source of noise or vibration for local receptors. Construction and demolition phase effects will be considered as temporary effects on nearby sensitive receptors.

Operation

- 8.3.2 There is the potential for noise and vibration to affect the proposed residential receptors on the Site. Sources of noise and vibration having a potentially significant effect have been identified as:
- Transportation noise affecting proposed residential dwellings; and
 - Transportation vibration from the railway affecting proposed residential dwellings.

8.4 Not Significant Effects

- 8.4.1 During demolition and construction of the Proposed Development, significant changes in traffic flows are unlikely compared to the existing high levels of traffic associated with the existing use of the Site. The assessment of noise associated with construction traffic from the Proposed Development has therefore been scoped out.

- 8.4.2 For the same reason, reduction in traffic flows resulting from the Proposed Development once it is operational means that the assessment of noise associated with traffic from the Proposed Development has also been scoped out.

8.5 Assessment Methodology

- 8.5.1 The assessment will have regard for the relevant sections of the following documents:
- The NPPF and PPG;
 - Local Planning Guidance; and
 - Noise Policy Statement for England (HMSO 2010).
- 8.5.2 In accordance with national policy, the Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adverse Effect Level (SOAEL) for each source of noise and vibration will be defined based on appropriate guidance and standards.
- 8.5.3 The LOAEL and SOAEL will form the basis of the assessment of significance of noise and vibration effects. Based on the IEMA Guidelines for Environmental Noise Assessment and relevant guidance, the relationship between the noise impact, adverse effect level, noise effect, and significance is described in **Table 8.1**.

Table 8.1: Relationship between Noise and Vibration Impact, Effect and Significance

Magnitude (Nature of Impact)	Response	Description of Effect (on a specific receptor)	Significance
Major Beneficial	Very Noticeable Improvement	Causes a material change in behaviour and/or attitude, e.g. individuals begin to engage in activities previously avoided due to preceding environmental noise conditions. Quality of life enhanced due to change in character of the area.	More likely to be Significant
Moderate Beneficial	Noticeable Improvement	Improved noise climate resulting in small changes in behaviour and/or attitude, e.g. turning down volume of television; speaking more quietly; opening windows. Affects the character of the areas such that there is a perceived change in the quality of life.	
Minor Beneficial	Just Noticeable Improvement	Noise impact can be heard but does not result in any change in behaviour or attitude. Can slightly affect the character of the area but not such that there is a perceived change in the quality of life.	Less likely to be Significant
Negligible	No Response	Not Applicable or No discernible effect on the receptor	Not Significant
Minor Adverse	Present and Not Intrusive	Noise impact can be heard, but does not cause any change in behaviour or attitude, e.g. turning up the volume of television; speaking more loudly; closing windows. Can slightly affect the character of the area but not such that there is a perceived change in the quality of life	Less likely to be Significant
Lowest Observed Adverse Effect Level (LOAEL)			

Magnitude (Nature of Impact)	Response	Description of Effect (on a specific receptor)	Significance
Moderate Adverse	Present and Intrusive	Noise impact can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; closing windows. Potential for non-awakening sleep disturbance. Affects the character of the area such that there is a perceived change in the quality of life.	More likely to be Significant
Significant Observed Adverse Effect Level (SOAEL)			
Major Adverse	Present and Disruptive	Causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion. Potential for sleep disturbance resulting in difficulty getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in character of the area.	
Severe Adverse	Very Disruptive and Harmful	Significant changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Significant

Demolition and Construction

- 8.5.4 Precise construction methodologies are unlikely to be defined until the construction contractor is appointed, which is likely to be after the submission of the ES. However, in the absence of this data, an outline construction programme and identification of noise generating construction equipment will be developed based on knowledge and experience of other similar developments.
- 8.5.5 The quantification of impacts will be undertaken by comparison with relevant guidance and standards including BS5228:2009+A1:2014 Code of Practice for noise and vibration control on construction and open sites, or local legislative requirements. The assessment will outline suitable measures for the mitigation of construction impacts.

Operation

Transportation Noise

- 8.5.6 Transportation noise will be calculated using noise prediction procedures as detailed in the Department of Transport and Welsh Offices' 'The Calculation of Road Traffic Noise' (CRTN) and Department of Transport 'Calculation of Railway Noise' (CRN).
- 8.5.7 Using the measured sound levels and acoustic modelling, noise levels will be predicted for a 'With Development' scenario.
- 8.5.8 Based on the calculated With Development sound levels, an assessment of the suitability of the Site for residential use will be undertaken. The assessment of the magnitude and effect of noise on the Proposed Development will reference relevant industry standards including:

- BS 8233:2014: Guidance on sound insulation and noise reduction for buildings
- Institute of Acoustics: ProPG: Planning & Noise(Institute of Acoustics) – New Residential Development
- World Health Organisation: Environmental Noise Guidelines for the European Region
- World Health Organisation: Guidelines for Community Noise

Transportation Vibration

8.5.9 The assessment of the magnitude and effect of vibration from train movements on the railway line will reference relevant industry standards including BS 6472:2008:

8.6 References

- Department for Communities and Local Government (2012); National Planning Policy Framework. London: HMSO.
- Department for Environment, Food and Rural Affairs (2010); Noise Policy Statement for England. London: HMSO.
- Department for Communities and Local Government (2016); National Planning Practice Guidance. <https://www.gov.uk/government/collections/planning-practice-guidance> [accessed: 12/12/2017]
- British Standards Institution (2014); BS 8233:2014 Guidance on sound insulation and noise reduction for buildings. London: BSI.
- British Standards Institution (2014); BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open Sites Part 1 Noise. London: BSI.
- British Standards Institution (2014); BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open Sites Part 2 Vibration. London: BSI.
- British Standards Institution (2008); BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings Part 1 Vibration sources other than blasting. London: BSI.

9 Air Quality

9.1 Introduction

- 9.1.1 This chapter of the Scoping Report sets out the technical details of the air quality assessment which will be reported in the ES.
- 9.1.2 Air quality will be scoped into the ES due to the potential for significant effects relating to emissions to air which are primarily associated with emissions from traffic during the operational stage. The assessment will review air quality during both demolition and construction and operation. It will include mitigation requirements to provide suitable air quality for proposed dwellings, if required. The proposed methodologies and scope of the assessment are provided in the following sections.

9.2 Baseline Conditions

- 9.2.1 RBC has investigated air quality within its administrative boundary as part of its responsibilities under the Local Air Quality Management (LAQM) regime. An AQMA has been declared for an area covering all the major arterial roads into and out of the town as well as the central area for exceedances of the Annual Mean Nitrogen Dioxide (NO₂) objective. The site is located within this AQMA.
- 9.2.2 In 2019, RBC undertook automatic (continuous) monitoring at three sites for NO₂, PM₁₀ and PM_{2.5} particulates as well as non- automatic (passive) monitoring of NO₂ at 60 locations. There is no monitoring in the vicinity of the site. 2020/2021 monitoring is not considered to be representative of baseline conditions due to COVID-19 restrictions in place.
- 9.2.3 The main source of pollution likely to affect the Site are vehicles on the surrounding road network, namely Forbury Road and Kenavon Drive.
- 9.2.4 The emission of air pollutants associated with traffic NO₂ are predicted to decrease in the future primarily due to the expected reduction in vehicle emissions resulting from renewal and increased uptake of electric vehicles.

9.3 Consultation

- 9.3.1 Consultation with the Environmental Health Officer (EHO) at RBC will be undertaken prior to submission of the Environmental Statement to agree the proposed approach to the air quality assessment.

9.4 Potential Significant Effects

Demolition and Construction

- 9.4.1 During demolition and construction, dust from on-site activities and off-site trackout by construction vehicles has the potential to impact on sensitive human receptors within the air quality Study Area; the main potential impacts are loss of amenity (as a result of dust soiling) and deterioration of human health (as a result of concentrations of PM₁₀).

Operation

- 9.4.2 Given the location of the Proposed Development within the Reading AQMA, there is the potential for impacts on the proposed residential receptors during operation from the existing road network. The impact of road traffic emissions on air quality at proposed receptor locations will be assessed.

9.4.3 The principal air pollutants of concern with respect to the development will be:

- nitrogen dioxide (NO₂); and
- fine airborne particles (PM₁₀ and PM_{2.5}).

9.5 Not Significant Effects

9.5.1 The following potential non-significant effects have been 'scoped out' of the air quality assessment of the EIA and will not be considered further.

- While car parking is proposed as part of the development, compared to the existing retail use of the site, there will be limited change in traffic generation from the Proposed Development and therefore impacts are not likely to be significant;
- The train line to the north of the site is electrified and therefore the majority of trains are electric and are not considered an issue for air quality;
- While there will be short periods of peak HGV movements during demolition and construction these will be short term and temporary, so taken together with the implementation of the DCEMP, construction traffic is not considered to have significant impacts on human health receptors in the area;
- There is no combustion-based energy generation proposed as part of the development and therefore an assessment of the impacts on existing receptors is not required; and
- There are no ecological receptors which may be susceptible to air quality changes in close proximity to the Site and therefore an assessment of air quality changes on such receptors is not required.

9.6 Assessment Methodology

Demolition and Construction

- 9.6.1 There is the potential for sensitive existing receptors (mainly residences) located within up to 350 m from the Site boundary and 50 m from the route(s) used by demolition and construction vehicles to experience impacts.
- 9.6.2 A qualitative assessment of construction dust impacts will be undertaken in accordance with the Institute of Air Quality Management's *Guidance on the Assessment of Dust from Demolition and Construction (2014)*.
- 9.6.3 In addition, there is the potential for impacts on air quality as a result of emissions of NO₂, PM₁₀ and PM_{2.5} from demolition and construction vehicles associated with the Proposed Development. These impacts have the potential to occur at sensitive existing receptors (again mainly residences) that are located in close proximity to roads along which the demolition and construction traffic will travel.
- 9.6.4 It is expected that the Proposed Development will result in an increase in traffic flows on the surrounding road network during the construction phases. However traffic flows are currently unknown at this time. If the traffic generation for the Proposed Development exceeds the IAQM/EPUK criteria detailed within the IAQM guidance a detailed air quality assessment will be undertaken as part of the planning application.

Operation

- 9.6.5 Information regarding baseline air quality will be obtained by collating the results of monitoring carried out by RBC and referring to maps of AQMAs and exceedances of the EU Limit Values. Background concentrations will be defined based on the national pollution maps published by

Defra in 2020. To create a robust model, verification will be undertaken to compare the results of modelling against those from monitoring.

- 9.6.6 Concentrations of NO₂, PM₁₀ and PM_{2.5} will be predicted for a baseline year and future opening year for a range of worst-case locations for human health exposure. The baseline year has been chosen to reflect the most recent year for which sufficient data are expected to be available with which to model the verification site and carry out model verification. 2019 is expected to be an appropriate baseline assessment year as it is the most recent year for which suitable annual mean monitoring data will be available, due to covid-related changes in travel patterns in 2020/2021.
- 9.6.7 Concentrations of NO₂, PM₁₀ and PM_{2.5} at identified residential receptors will be modelled using the ADMS-Roads dispersion model (v5), which is the industry standard. Emissions associated with the traffic will be calculated using the most recent version of the Emissions Factor Toolkit (EFT), currently v11.0. Traffic data will be entered into the EFT to provide emissions rates for each of the road links modelled.
- 9.6.8 There has been an acknowledged disparity between national road transport emissions projections and measured annual mean concentrations of nitrogen oxides (NO_x) and NO₂ for many years. However, recent monitoring has shown that reductions in concentrations are now being measured in many parts of the country (Air Quality Consultants Ltd., 2020a) and current toolkits used to quantify pollutant emissions are representative (Air Quality Consultants Ltd., 2020b). Whilst there is still some uncertainty regarding the rate at which NO_x emissions will reduce in the future, the existing toolkit incorporates very limited uptake of Electric Vehicles (EV) and therefore is likely to over-predict NO_x emissions in future years, so its application is therefore considered sufficiently precautionary.
- 9.6.9 The impact of cumulative schemes will be considered in relation to the potential for interacting construction activities and by the incorporation of traffic data from the schemes in the assessment.
- 9.6.10 Practical and reasonable measures which can be implemented to mitigate detrimental impacts associated with construction and operation of the proposed scheme will be considered and highlighted within the Air Quality chapter of the ES.
- 9.6.11 The results of the assessments will be summarised in an appropriate ES chapter with supporting figures. All technical data used in the air quality assessment will be appended to the ES.

9.7 References

- Air Quality Consultants Ltd. (2020). 'Nitrogen Oxides Trends in the UK 2013 to 2019'
- Air Quality Consultants Ltd. (2020b). 'Comparison of EFT v10 with EFT v9'
- Environmental Protection UK and the Institute of Air Quality Management (EPUK / IAQM) (2017). '*Land-use Planning & Development Control: Planning for Air Quality*'. V1.2. The Institute for Air Quality Management, London
- Institute of Air Quality Management (2014). '*Assessment of Dust from Demolition and Construction*', IAQM, London

10 Heritage

10.1 Introduction

- 10.1.1 The Built Heritage Impact Assessment (BHIA) will identify the likely effects of the Proposed Development on 'built' or 'above ground' heritage receptors. This will be scoped into the ES.
- 10.1.2 The Heritage chapter of the ES and BHIA will be prepared by Montagu Evans LLP.

10.2 Baseline Conditions

- 10.2.1 The current buildings on Site are large, utilitarian, warehouse-like buildings which contain several retail outlets at ground floor. The rest of the Site comprises vacant hardstanding of the car park which extends to the edge of Forbury Road.
- 10.2.2 Heritage receptors include World Heritage sites, listed buildings, Scheduled Monuments (with upstanding remains), Conservation Areas, Registered Parks and Gardens and non-designated heritage receptors, such as locally listed buildings.
- 10.2.3 A review of desktop sources, including the local list contained on the RBC website and statutory list on the Historic England website, was undertaken to ascertain baseline heritage receptors. In addition the identification of the built heritage baseline has been informed by secondary resources, including:
- A. The RBC website;
 - B. The National Heritage List for England (NHLE);
 - C. Conservation Area Appraisals; and
 - D. Site observations.
- 10.2.4 This review confirmed that the Site is not located in a Conservation Area and does not include any statutorily or locally listed buildings. There are no heritage assets adjacent to the Site.
- 10.2.5 The map at **Appendix D** identifies all the heritage receptors within a 500m radius of the site boundary. This is the Study Area which has been identified in accordance with the methodology described below.
- 10.2.6 In summary there are 2 Conservation Areas, 49 listed buildings, 2 Scheduled Monuments, 1 Registered Park and Garden (RPG) and 4 non-designated heritage buildings within 500m of the Site.
- 10.2.7 However there a number of significant heritage assets located directly opposite the Site on the south side of the Forbury Road and which need to be considered in the BHIA. They include:
- Reading Gaol (Main Building) (Grade II) – approximately 115m south of the Site.
 - Reading Abbey (Scheduled Monument) – approximately 135m southwest of the Site.
 - Church of St James's (Grade II) – approximately 155m southwest of the Site.
 - St James Presbytery and St James Former School Buildings (Grade II) – approximately 165m southwest of the Site.

- Reading Abbey Ruins (Grade I) – approximately 160m southwest of the Site.
 - Forbury Gardens (Grade II Registered Park and Garden (RPG)) – approximately 175m southwest of the Site.
 - Shelter at North-East corner of Forbury Gardens (Grade II) – approximately 175m southwest of the Site.
 - The Plummery Wall (Grade II) – approximately 205m southwest of the Site.
 - Walls between Forbury Road and Abbott's Walk to West of St James's Church (Grade II) – approximately 185m southwest of the Site.
 - Archway connecting Forbury Garden to Abbey Ruins (Grade II*) – approximately 195m southwest of the Site.
 - 10 and 11 Abbotts Walk (Grade II) – approximately 200m southwest of the Site.
 - Anglican Cross (Grade II) – approximately 225m southwest of the Site.
- 10.2.8 Across longer distances there are heritage assets located within and surrounding the Town Centre. These are primarily concentrated to the west of the Site and are located within the Market Place/London Street Conservation Area, some 365m away from the centre of the Site (see **Appendix D**). They include highly graded assets (Grade I and II*) including the Church of St Laurence (Grade I), the Town Council Chamber and Offices with Clock Tower (Grade II*) and the Simeon Monument (Grade II*).
- 10.2.9 Identified Designated and Non-Designated Heritage Assets are set out in the Heritage Asset Plan located in **Appendix D**.
- 10.2.10 An Historic Environment Record search will be undertaken as part of the ES process.

10.3 Consultation

- 10.3.1 Consultation for the BHIA will be undertaken with relevant stakeholders during the planning pre-application process, including with Historic England. This will be subject to an understanding of whether proposals have the potential to affect the setting of Grade I, II* or II listed buildings. Consultation has been undertaken with RBC's Design and Conservation Officer within the pre-application engagement meetings for the Proposed Development.

10.4 Potential Significant Effects

- 10.4.1 For the purposes of the Built Heritage Assessment, professional judgement will be used to select those built heritage receptors that are likely to experience change to their setting as a result of the Proposed Development, and by extension, their heritage value. For many heritage receptors in the area there is no setting relationship to the Site. Therefore, those assets that are both physically and functionally separated from the Site will not be assessed, as the heritage value of these assets is unlikely to be affected
- 10.4.2 The EIA will address the following potential heritage effects:
- Temporary change in the setting of heritage receptors, during demolition and construction works; and
 - Permanent changes to the setting of heritage receptors, at the operational stage.

Demolition and Construction

- 10.4.3 The demolition and construction of the Proposed Development may cause indirect effects on built heritage receptors as a result of a change to the receptor's setting. Due to the proximity of a large number of such receptors, this will largely be limited to visibility of equipment associated with construction (cranes, hoarding, etc.). The effects during demolition/construction will be temporary.
- 10.4.4 The potential effects at this stage on heritage receptors which are located nearest to the Site could also include environment effects such as noise, dust and vibration. The sensitivity of the heritage receptors nearest the Site to this type of setting impact will be considered as part of the BHIA.
- 10.4.5 Particularly sensitive receptors to be considered within the assessment are those listed in **Section 10.2.7** above.

Operation

- 10.4.6 Change to the setting of an asset may change the way in which the heritage value of the receptor is appreciated or understood as a result of a change to its setting caused by the Proposed Development. An effect on the setting of a built heritage receptor is regarded as an indirect effect.
- 10.4.7 Significant effects during the operational stage are identified as those which accumulate a Moderate or Major effect, using the assessment methodology outlined below.
- 10.4.8 Visibility over a longer distance have a lower potential for significant effects. Sensitive receptors would be that same as for the demolition and construction stage.

10.5 Not Significant Effects

Demolition and Construction

- 10.5.1 Construction activities and associated works, including visibility of cranes and partially completed buildings on the skyline may have the potential to result in adverse effects on the wider and extended setting of heritage assets located over a 200 m distance from the Site. The magnitude of impact must consider the duration and reversibility of the heritage effect which, for the construction period, will be short-term and leading to the completed development; as a consequence, the magnitude of impact would be relatively low.
- 10.5.2 The effects of the visibility of the constructions works to heritage assets outside the Site boundary, are unlikely to be considered significant and will not be considered within the ES.

Operation

- 10.5.3 There are four non-designated heritage assets within a 500m radius of the Site. The Proposed Development may have an adverse effect on the setting of non-designated heritage assets with a 500m radius of the Site's red line boundary, being visible and experienced as part of an asset's immediate, wider and extended settings. This may arise through a visual impact of change to the ability of one's appreciation of the significance of the asset. The effect is calibrated by the value of the receptors which are generally low given their status as non-designated heritage assets (not statutorily listed).
- 10.5.4 The magnitude and direction (beneficial, adverse or neutral) of effect would be dependent upon mitigation that will be embedded into the design of the Proposed Development through

detailed design development, including the spatial arrangement of the buildings and their elevation treatment.

- 10.5.5 The changes to the setting and significance of non-designated heritage assets within 500m from the Site are unlikely to be considered significant and will not be considered within the ES.

10.6 Assessment Methodology

- 10.6.1 The BHIA will be prepared in accordance with legislation, planning policy and best practice guidance. In particular, the heritage assessment will be carried out in accordance with:
- The Planning (Listed Buildings and Conservation Areas) Act 1990;
 - Section 16 of the NPPF (2021)
 - The accompanying parts of the PPG;
 - Good Practice Advice in Planning from Historic England, specifically dealing with the definition of significance, the setting of heritage assets, and tall buildings guidance;
 - The Principles of Cultural Heritage Impact Assessment (2021) prepared by the Institute of Historic Building Conservation (IHBC), the Institute of Environmental Management and Assessment (IEMA) and the Chartered Institute for Archaeologists (CIfA); and
 - Conservation Area appraisals prepared by RBC.
- 10.6.2 All above-ground designated and all non-designated heritage assets within the Study Area will be assessed.
- 10.6.3 The Study Area assessment will be further informed by site observations, a manual desk-based review of OS maps, characterisation studies and the relevant heritage receptors already identified. It will include consideration of building locations and heights, topography and townscape features and an understanding of the scale of the Proposed Development.
- 10.6.4 A Zone of Theoretical Visibility (ZTV) may be used to determine whether any heritage assets across longer distances will be impacted by the Proposed Development. Where a number of less highly graded assets, such as non-designated heritage assets and grade II listed buildings, are located within a Conservation Area these may be assessed under the relevant Conservation Area section, if their setting considerations are judged to be coterminous. Professional judgement will be used in order to determine this.
- 10.6.5 Non-designated heritage assets for the purposes of the assessment are locally listed buildings identified by RBC and other structures which meet the terms of a non-designated heritage asset as set out in the NPPF, that is, those buildings or structures which have a degree of architectural or historic significance meriting consideration in the planning process. These are to be identified by appropriately qualified staff undertaking the assessment and through the consultation process with RBC.

Demolition and Construction

- 10.6.6 The Site does not comprise any designated or non-designated heritage buildings and therefore the assessment of demolition and construction works will be based on the typical impacts associated with a development of the proposed nature and scale taken in conjunction with the particular site and its sensitivities and its views from there to the Site and vice versa. Effects of this nature would only be temporary.

Operation

- 10.6.7 An assessment will be made of the significance of the identified heritage assets in their existing states, cross-referenced with the townscape and visual baseline. This will be based on study of the historic development of the area with reference to relevant publications, and study of the present-day condition of the area based on site visits, study of maps and aerial photographs, and relevant publications. These assessments will be proportionate to the significance of the assets and the likely effect of the Proposed Development on them. In line with paragraph 194 of the NPPF they will demonstrate an understanding of the potential impact of the proposal on their significance.
- 10.6.8 The sensitivity to change of each heritage asset or groups of assets will be considered in relation to impacts (taking into account both direct and indirect effects). This is based on the designation and grade of the heritage asset and an assessment of its heritage significance (in light of NPPF policy), specifically what elements of its fabric and/or constituent parts and setting contribute to its heritage significance. It will be assessed as High, Medium or Low.
- 10.6.9 The likely level of effects is derived through consideration of the magnitude of impact and the sensitivity to change of the heritage assets. This assessment takes into account the heritage significance of the particular heritage asset and how the Proposed Development would impact on this.
- 10.6.10 The Proposed Development may have a nil or negligible effect to a receptor. Where effects are identified they will also be assessed qualitatively as beneficial, adverse, or neutral in respect of their effect on the heritage significance of the heritage asset. This is in recognition of the fact that an effect on a heritage asset or its setting can enhance its heritage significance (a beneficial effect), harm its heritage significance (an adverse effect) or be overall neutral (a neutral effect). This consideration is independent of whether it is a Major, Moderate or Minor effect.
- 10.6.11 This assessment also takes into account the nature and condition of the heritage asset and its setting as it is found today and how these contribute to its heritage significance. Whether the effect is significant or not will be informed by professional judgement alongside other material evidence.
- 10.6.12 The impact of the Proposed Development on heritage assets will include consideration of the overall impact on the historic environment of the area.

Cumulative Effects

- 10.6.13 An assessment will be given of cumulative effects. The approach to cumulative assessment for built heritage will be to focus on the combination of the Proposed Development with other approved projects. The cumulative schemes are to be agreed with the LPA through scoping and pre-application engagement.
- 10.6.14 The assessment of cumulative effects will be presented in the ES in accordance with the methodology set out in **Section 6.4** of this Scoping Report.

10.7 References

- Historic England, 2017. The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Notes 2 and 3.
- Historic England, 2022. Tall Buildings Historic England Advice Note 4.
- IEMA, IHBC, ClfA (2021) Principles of Cultural Heritage Impact Assessment in the UK

11 Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare

11.1 Introduction

- 11.1.1 This chapter of the EIA Scoping Report has been prepared by EB7 and sets out the technical details of the daylight, sunlight, overshadowing, light pollution and solar glare assessments which will be reported in the ES.
- 11.1.2 Daylight, sunlight and solar glare will be scoped into the ES due to the potential for significant effects on surrounding existing and proposed receptors as result of the Proposed Development. The assessment will be undertaken in accordance with the Buildings Research Establishment (BRE) Guidance 2022. The proposed methodologies and scope of the assessment are provided in the following sections.

11.2 Baseline Conditions

- 11.2.1 The Site is currently occupied by one- and two-storey retail stores and surface car parking. The site is primarily surrounded by commercial uses of varying height, located to the north, east and west. To the south lies the two- and four-storey HM Prison (Reading Gaol) to the south which is vacant and a two-storey church to the south west. The site is bound by train lines to the north.
- 11.2.2 In respect of this assessment the main residential receptors include the new build development, Huntley Wharf at Kenavon Drive to the south east, which is currently under construction. The massing for the blocks on Kenavon Drive will vary in height up to 10 storeys.

11.3 Consultation

- 11.3.1 RBC will be consulted about any potential significant effects through the pre-application process and identified during the EIA.

11.4 Potential Significant Effects

Demolition and Construction

- 11.4.1 The demolition and construction phases of the proposed development would present effects that are short-term and temporary and the full effects will only occur once the Proposed Development is completed (i.e. when the buildings have reached their maximum massing).
- 11.4.2 Therefore, there are no significant effects expected as a result of the demolition and construction phase of the Proposed Development beyond those described in the operational phase.

Operation

- 11.4.3 The neighbouring St James Roman Catholic Church located to the south west of the Site has the potential to be impacted in terms of daylight and sunlight levels in view of its proximity. In addition there is a neighbouring committed residential development at Huntley Wharf which is relevant for cumulative assessment. Therefore, it is proposed that the impact on daylight and sunlight within surrounding properties will be 'scoped in' to the EIA.
- 11.4.4 Due to the proximity to the train lines to the north of the site and the road junctions to the south, there is potential for the Proposed Development to have an impact on passing train and

or car drivers from solar glare. Therefore, it is proposed that the impact on solar glare to surrounding drivers and trains will also be 'scoped in' to the EIA.

Cumulative

- 11.4.5 Due to the proximity to the proposed neighbouring residential properties at the Huntley Wharf development on Kenavon Drive, which are currently under construction, there is potential for impacts to the daylight and sunlight levels experienced by the future residents within these receptors.
- 11.4.6 Therefore, it is proposed that a cumulative daylight and sunlight assessment considering the effects of the Proposed Development on the future residents within Huntley Wharf, is 'scoped in' to the EIA.

11.5 Not Significant Effects

- 11.5.1 A review of the Site and the surrounding area indicates that there is no relevant amenity space within a reasonable distance (100m) located to the north, east or west of the Site that would be impacted in terms of this assessment. Therefore it is considered that the Proposed Development will not have a significant effect on overshadowing to surrounding amenity spaces, so an overshadowing assessment will be 'scoped out' of the EIA and not considered further.
- 11.5.2 It is proposed that the scheme is designed to be in line with the industry standards set out in the Institute for Lighting Practitioners' (ILP) Guidance Note Guidance Note 01/21 and the BRE's Obtrusive Light from Proposed Developments DG:529. This will be ensured by the production of a Light Strategy submitted as part of a planning condition. On this basis it is expected that the Proposed Development would not have a significant effect on Light Pollution to surrounding receptors. It is proposed that a Light Pollution assessment will be 'scoped out' of the EIA and not considered further.

11.6 Assessment Methodology

Demolition and Construction

- 11.6.1 The demolition and construction phases of the Proposed Development are not considered relevant for the assessment of daylight, sunlight and overshadowing because these effects would only be short-term and temporary and the full effects will only occur once the Proposed Development is completed (that is when the buildings have reached their maximum massing). Nevertheless, a qualitative summary of the short-term effects of demolition and construction phase covering daylight, sunlight and overshadowing on the adjacent sensitive receptors will be provided in the relevant chapter of the ES.

Operation

- 11.6.2 In accordance with the BRE guidance, the sensitive receptors that will be assessed are habitable rooms in residential dwellings, and all rooms within St James Roman Catholic Church and Presbytery in Abbots Walk where the occupants have a reasonable expectation of daylight and sunlight (excluding bathrooms, hallways, stairwells etc).
- 11.6.3 In accordance with the guidance, potential impacts on commercial properties which have an expectation to be reliant on artificial light, such as offices, will not be assessed as these are not considered sensitive receptors. As the HM Prison to the south of the Site has been closed since 2013 and currently does not have an active use, and as it is understood that there are no consented or pending developments planned for this Site, it has not been considered relevant for assessment.

- 11.6.4 To inform the baseline analysis, a digital 3D model of the existing baseline scenario will be constructed. The model will be analysed to ascertain the baseline levels of daylight and sunlight amenity within the surrounding residential properties by reference to the Visible Sky Component (VSC), No Sky Line (NSL) and Annual Probable Sunlight Hours (APSH) methods.
- 11.6.5 For the impact assessments, the 3D model will include the Proposed Development (once completed) and all relevant surrounding buildings. Both VSC and NSL assessments of surrounding sensitive receptors will be undertaken for the completed and operational development scenario. The results will be analysed in the context of the established baseline conditions.
- 11.6.6 Where new developments are proposed on adjacent sites, but not yet built or occupied, the BRE guide suggests the Daylight Factor (DF) and Daylight Illuminance (DI) tests may be used rather than the VSC and NSL tests. The Average Daylight Factor (ADF) test of the 2011 BRE Guidance will have been used during the design of these apartments to establish whether a suitable amount of daylight is provided. Therefore, the ADF test will therefore also be presented to allow for comparison to be made and therefore determine the continuing acceptability of daylight conditions within them.
- 11.6.7 The BRE guide provides the following in this regard:
- “Appendix F – paragraph F9*
- However, there are some situations where meeting a set daylight factor or illuminance target values with the new development in place could be appropriate as a criterion for loss of light:*
- (ii) as a special case of (i), where the existing building is proposed and not built. A typical situation might be where the neighbouring building has received planning permission but not yet been constructed.”*
- 11.6.8 With regard to solar glare, road junctions/signals and train signals are particularly sensitive in relation to solar glare as instances of reflection may obscure the view of traffic signals or temporarily blind drivers and thus result in accidents. Due to the close proximity of the site to surrounding road junctions and train lines, effects on these locations would be considered in the assessment.
- 11.6.9 The assessment will identify the time of day and year that solar reflections will be visible from the assessed viewpoints, as well as their relationship to a driver's line of sight. The assessment will not measure the intensity of the reflection but merely the occurrence and duration.
- 11.6.10 Criteria for determining the significance of solar glare effects will be established using professional judgement and taking into consideration the duration of solar reflections and the location of these in relation to a driver's line of sight.
- 11.6.11 The potential for daylight and sunlight availability within the proposed residential units and the proposed amenity space within the Site is dependent on the design of the Proposed Development and is a design consideration rather than an EIA issue. Therefore, the assessment of daylight and sunlight availability (including overshadowing) within the Site itself will not form part of the ES but will be presented as a separate standalone report submitted in support of the planning application.
- Cumulative**
- 11.6.12 In accordance with the BRE guidance, as there are to be residential receptors within the adjacent future developments, these will be assessed in accordance with the BRE guidance

methodology set out for the Operational phase. This will include both the Middle and West Blocks of the Huntley Wharf scheme.

11.7 References

- British Research Establishment. (2022). Site layout planning. A Guide to Good Practice.
- Institute of Lighting Practitioners. (2021). Guidance Note GN01/21. The Reduction of Obtrusive Light.

12 Wind and Microclimate

12.1 Introduction

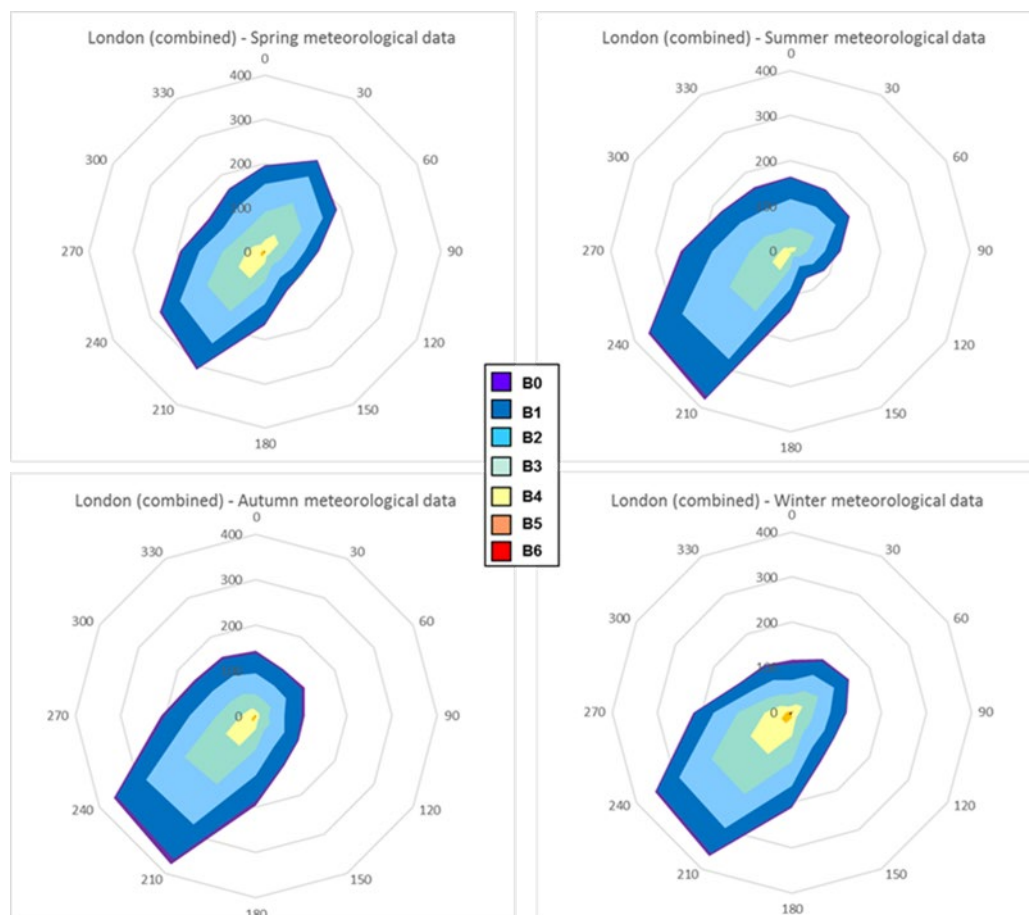
12.1.1 This chapter sets out the baseline conditions and the potential for significant effects related to Wind and Microclimate as these are likely to be significant effects relating to the construction of a number of buildings such as are proposed. This chapter also details the methodology for Computation Fluid Dynamics (CFD) Assessment that will be undertaken by RWDI.

12.2 Baseline Conditions

12.2.1 The baseline conditions on the Site and the immediate surrounding area will be quantified as part of the assessment. Winds for the Reading area are predominantly from the south west, with a secondary peak from the north east during spring. Winds are typically stronger in the winter season, and lighter throughout the summer.

12.2.2 Wind roses for the Reading area per season, based on data taken at Heathrow Airport, the nearest location, over a period of 30 years, are shown in **Figure 12.1**. These show the percentage hours per season that the wind speed exceeds the particular velocity range.

Figure 12.1 Seasonal wind roses for Reading (in Beaufort Force) - (Radial axis indicates the hours for which the stated Beaufort Range is exceeded).



12.3 Consultation

- 12.3.1 It is anticipated that no specific targeted consultation will be undertaken in relation to the Wind and Microclimate, as is typical for this topic area. It is however anticipated that wind microclimate may be discussed as part of the any consultations conducted during the planning process.

12.4 Potential Significant Effects

Operation

- 12.4.1 Undesirable wind speeds can make spaces uncomfortable or unsafe for pedestrian use. Potentially significant effects associated with the interaction of the local wind microclimate conditions with the Proposed Development once it is constructed relate to wind comfort and safety.
- 12.4.2 Within the site effects would be experienced at ground level at pedestrian thoroughfares and public realm and amenity space, and at any potentially accessible elevated levels such as roof terraces.
- 12.4.3 Wind comfort and safety conditions outside the site would be experienced at ground level pedestrian thoroughfares (such as along Forbury Road and Kenavon Drive), at surrounding buildings including their entrances and pedestrian routes around them, and at nearby public amenity spaces like King's Meadow.

12.5 Not Significant Effects

- 12.5.1 The demolition of existing buildings on the Site is not expected to significantly increase the exposure of sensitive surrounding receptors. Potential effects on the local wind microclimate during construction would therefore gradually transition from the existing Site wind microclimate (baseline conditions) to those of the completed Development wind microclimate and therefore would not be specific to construction. As such, construction effects will be scoped out of the ES.

12.6 Assessment Methodology

- 12.6.1 The assessment will quantify the likely changes to wind speeds from the baseline conditions as a result of the Proposed Development, at locations both within and around the Site. Wind speeds will be classified in accordance with the London Docklands Development Corporation's (LDDC's) Lawson Comfort Criteria (LCC) and will establish the suitability of key locations for a range of pedestrian activities in terms of pedestrian comfort.
- 12.6.2 The assessment will focus on the proposed end uses that are potentially sensitive to changes in wind conditions, such as pedestrian routes or 'thoroughfares', entrance locations for buildings, and amenity spaces. Wind speeds will be predicted for the full 360° range of approach angles at 30° increments.
- 12.6.3 CFD simulations will be carried out to establish the baseline wind conditions at the Site and surrounding area to establish future wind conditions once the Proposed Development is constructed and fully operational.
- 12.6.4 For the purpose of the outline planning permission the Proposed Development will be modelled in accordance with plans and designs available at the time of submission. Simulations will be carried out for the following three configurations:
- The existing Site (Baseline);

- The Proposed Development with existing surrounding buildings; and
 - The Proposed Development with other committed developments for the cumulative assessment.
- 12.6.5 Simulations will be conducted in the absence of any hard or soft landscaping in order to provide a worst-case assessment (landscaping normally softens the impact). The mean and gust wind speeds will be predicted within and around the Site. Predicted mean wind speeds will be combined with long-term meteorological climate background data for the Reading area.
- 12.6.6 The study area will comprise the Site and its immediate surroundings within an approximately 400m radius from the centre of the Site as per guidance.
- 12.6.7 Mean and gust wind speeds will be classified in accordance with the LCC to determine the suitability of the different areas, both within and surrounding the Development, for sitting, standing, entering a building, strolling, walking and a further category of 'uncomfortable' where wind conditions would be too windy for any targeted use. The suitability of the wind conditions and the likely effect at particular locations will be determined according to the significance criteria outlined in the Lawson Safety Criteria. The Lawson Safety Criteria state that wind speeds that exceed 15m/s for more than 0.025% (2.2 hours) of the year pose a potential safety issue for more vulnerable pedestrians. Gust winds are considered to be significant as soon as the threshold is exceeded, regardless of the magnitude of exceedance.
- 12.6.8 Where required, mitigation measures will be developed in conjunction with the design team to help create suitable conditions for planned pedestrian activities within the Site and an acceptable residual effect on surrounding conditions. Guidance for detailed design stages, to help ensure compliance with the ES commitments, will also be provided along with any requirements for more detailed studies to be carried out in support of Reserved Matters Applications.

12.7 References

- Lawson T, (2001); Building Aerodynamics.

13 Townscape and Visual

13.1 Introduction

- 13.1.1 This chapter sets out the proposed approach and methodology for undertaking the Townscape and Visual Impact Assessment (TVIA) which will be reported in the Townscape and Visual chapter of the ES.
- 13.1.2 Townscape is defined by the Landscape Institute (LI) in paragraph 1.2 of its Technical Information Note 05/2017: Townscape Character Assessment, as:
- “...the landscape within the built-up area, including the buildings, the relationship between them, the different types of urban open spaces, including green spaces and the relationship between buildings and open spaces.”*
- 13.1.3 Townscape is also defined in the Department for Transport's Transport Analysis Guidance (WebTAG) Unit A3, chapter 7: Impacts on Townscape (2019), paragraphs 7.1.1 and 7.1.2:
- “7.1.1 Townscape is the physical and social characteristics of the built and unbuilt urban environment and the way in which we perceive those characteristics. It is this mix of characteristics and perceptions that make up and contribute to townscape character and give a ‘sense of place’ or identity.*
- 7.1.2 The physical characteristics of a townscape are expressed by the development form of buildings, structures and spaces. The development form influences the pattern of uses, activity and movement in a place and the experience of those who visit, work and live there.”*

13.2 Baseline Conditions

Townscape

- 13.2.1 Background data has been collected and reviewed to establish the baseline townscape and townscape character information, including topography, townscape planning designations and published sources of townscape character.
- 13.2.2 The Site is not within a Green Belt, area with a landscape planning designation or Conservation Area and there are no listed buildings within the Site. The Heritage chapter of this Report identifies other built environment features close to the Site.
- 13.2.3 There are no Public Rights of Way within the Site, though the Site lies adjacent to the A329 Forbury Road and highway footway. The mainline railway adjacent to the Site's northern boundary together with the linear built form of Napier Court functionally separates the Site from the King's Meadow open space and the River.
- 13.2.4 The Site is located within NE's National Character Area Profile 115 Thames Valley – NE379, which contains a diverse landscape of urban and sub-urban settlements, infrastructure, transport corridors, fragmented agricultural land, historic parks and is of an urban character. The Character Area also is defined as environmentally important.

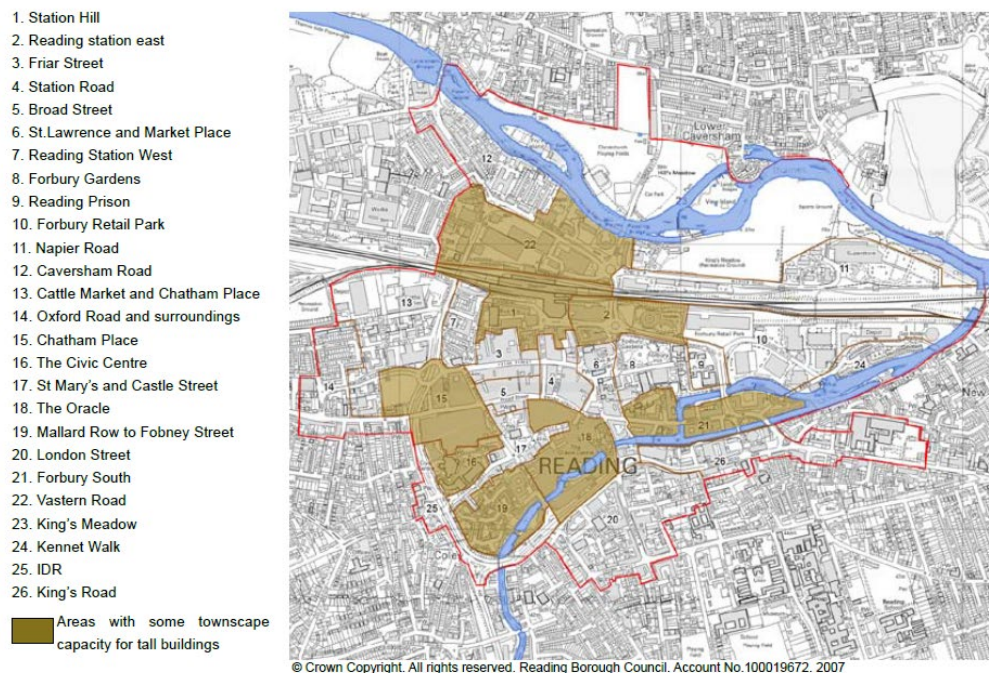


Figure 4.1: Townscape capacity for tall buildings

READING TALL BUILDING STRATEGY 14



Figure 13.1: Extract from Reading Tall Building Strategy 2008, Reading Borough Council – Townscape Character Areas and Capacity for Tall Buildings

13.2.5 RBC published a Tall Building Strategy (TBS) in 2008 which was reviewed in 2018 as an Update Note (EV031). A tall building in Reading is defined as one which is ten storeys or more high, recognising the context of existing building heights within Reading. The TBS 2008 identified 26 Townscape Character Areas (TCAs) and their capacity to accommodate tall buildings. The site lies within TCA 10: Forbury Retail Park, which was not identified as having some townscape capacity for tall buildings. Key characteristics include:

- Recent large-scale office developments, retail warehouses, car parks and commercial / office developments;
- Buildings predominantly late 20th century;
- Large-scale townscape;
- An indifferent townscape condition due to scattered buildings and expansive parking areas;
- Key views within the character area from Kenavon Drive to the red brick wall and façade of Reading Prison;
- Key views into the Character Area from the elevated position of Caversham Park, Balmore Park and Horse Close;
- Built form within the Character Area contributes to the view of central Reading; and
- It has a Medium townscape sensitivity to tall buildings.

13.2.6 The Medium townscape sensitivity for TCA 10 is described at Page 92 of the 2008 TBS:

“Medium: The area is characterised by large blocky structures. Therefore a tall building would not appear uncharacteristic in terms of urban grain and townscape scale. There are few key views which characterise the area and therefore tall buildings would not jeopardise the visual experiences of the area. However, there are no buildings over 10 storeys within the area. A significantly taller building would become visually prominent, although assuming careful consideration is given to the design and placing, the building could provide focus to the area.”

(our emphasis)

13.2.7 To the western boundary of the site lies TCA 2: Reading Station East, which was identified as having capacity for tall buildings.

13.2.8 The 2018 review of the TBS states at Paragraph 3.22: “Whilst there have been, in some cases, quite substantial changes to townscape, this has not fundamentally altered the conclusions on which sites have low sensitivity...”.

13.2.9 Sensitive receptors in the vicinity of the Site include people’s views from roads and public open spaces, the Forbury Garden RPG and the Reading Abbey Scheduled Monument and associated listed buildings. Review of aerial photography indicates that there are mature trees at the boundary of the RPG and Scheduled Monument with the A329 Forbury Road.

13.2.10 The Proposed Development comprises several new buildings, which individually would be of reduced mass and scale in comparison to the existing building, but taller. The proposed maximum heights of the Proposed Development range from 1 storey to 12 storeys.

13.2.11 It is noted that there are existing tall buildings or new tall buildings being built or planned as future development in the area surrounding the Site. For example, to the south east of the Site the Huntley Wharf development will be 12 to 13 storeys.

Views / Visual Receptors and Consultation

13.2.12 Visual receptors can be defined as people and the views that they experience at particular places). They may include for example: people using Public Rights of Way, public open spaces, public realm areas or other outdoor recreational facilities; people who may be visiting, living or working within a particular area; and people travelling by road and rail.

13.2.13 Consultation with RBC was undertaken in February 2022 to agree a view locations assessment. A visual survey was undertaken that month to record the baseline conditions during the winter months which is considered the worst-case scenario due to the lack of foliage on deciduous vegetation. The representative view locations are set out in Table 13.1 below, with reasonings for their selection. VL1 to VL7 inclusive were selected by Stantec’s Landscape Architecture Team. VL8 to VL10 inclusive were requested by RBC’s Principal Planner in an email. It is intended to utilise the winter 2022 baseline survey photography to support the TVIA.

13.2.14 It is anticipated that RBC will require the TVIA to be supported by verified views, with locations, types and level of detail required to be agreed with RBC.

Table 13.1: Visual Receptor Selection for the TVIA

Representative views:	Representative of people's views and visual amenity from within the townscape, public spaces and road network in the area around the Site. Key views to and from the Forbury Retail Park townscape character area have also been considered in the selection
Potential visual receptors:	Residents and workers, visitors, road users, PRow users.
Approach:	Visual assessment from each representative view location, supported by a photograph representing the baseline view.
View Reference and Location	Reasoning for Inclusion in TVA
VL1 Forbury Road (south)	Short distance view from busy vehicular and pedestrian route. Framed view of the Site which contains views of the red brick wall and façade of Reading Prison which are recognised key views with the Forbury Retail Park townscape character area. Likely high level of perceptible change due to proximity and nature of the Proposed Development.
VL2 Forbury Gardens	Short distance view, representative of users of the Grade II Registered Parks and Garden of Special Historic Interest (RPG). Highly sensitive receptor due to designation. The Proposed Development is likely to be partially visible above the tree line and roofline of Church of St James's, causing as perceptible change to the view.
VL3 Reading Abbey ruins	Short distance view, from Grade I Listed Building and important landmark within reading townscape. Highly sensitive receptor due to designation and amenity value. Also contains partial view of Reading Prison to the east which has local importance to landscape character. Potential glimpsed views of the Proposed Development are anticipated between Abbey Ruins and Reading Prison, causing a perceptible change to the view.
VL4 Kenavon Drive, adjacent to Riverside Museum	Short distance, framed view from busy vehicular and pedestrian route. Likely high level of perceptible change due to proximity and nature of the Proposed Development.
VL5 Kings Meadow Open Space	Short distance view from recreational space which has many users. Likely high level of perceptible change due to proximity and nature of the Proposed Development.
VL6 Thames Path National Trail and National Cycle Network Route	Important recreational route with many users whose attention is likely to be focussed on the visual environment. Likely perceptible change due to proximity and nature of the Proposed Development.
VL7 Balmore Park and National Cycle Network Route	Recognised medium distance, key view from elevated landform into the Forbury Retail Park townscape character area. Important recreational route with many users whose attention is likely to be focussed on the visual environment. The Proposed Development anticipated to be a just perceptible change to skyline.
VL8 Forbury Road (adjacent to St James Roman Catholic Church)	Requested by RBC. Justification on the same basis as VL1 to VL3.

VL9 Forbury Road (west)	Requested by RBC. Justification on the same basis as VL1 to VL3.
VL10 Huntley Wharf	Requested by RBC. Takes into account the new public realm created within the Huntley Wharf development and route to the waterfront of the River Kennet. <i>Note: In February / March 2022 this location was an active construction site</i>

Key Views:

13.2.15 RBC's Tall Buildings Strategy (2018) identifies a number of key views which have been assessed under two headings, 'views within the city centre' and 'views into central Reading'. Each of the key views has been attributed a sensitivity judgement. This is a judgement of the sensitivity of the view to the addition of a tall building. The criteria for making the sensitivity judgement are included in **Table 3.1.** of the tall buildings strategy.

13.2.16 The Proposed Development may be visible in the following views and therefore the TVIA and heritage (**Section 10**) will consider these:

Views within Reading Town Centre:

- View B – View along Friar Street to Lawrence Church and Town Hall.
- View O – View from Kenavon Drive towards Reading Prison
- View M – View east along Castle Street

Views into Central Reading:

- View 10 – From A329 adjacent to Gower Street
- View 18 – From the Thames Path, east of Reading
- View 19 – From Palmers Park
- View 21 – From Reading Bridge
- View 23 – From the A4155, adjacent to Coley Hill
- View 27 – View from Coley Place towards Central Reading

13.3 Potential Significant Effects

13.3.1 Considering the heights of existing built-form in the vicinity of the Site, and taking into account that the Proposed Development would be seen in context with surrounding existing, new and planned buildings which are part of the regeneration and planned change within its vicinity, the proposed 12-storey height and the mass of the Proposed Development has the potential to lead to significant and adverse visual effects for some views of visual receptors. Adverse and significant visual effects are likely to occur in people's local views during construction.

13.3.2 It is anticipated that there would be significant adverse effects upon townscape character of the site and townscape features of the Site during the construction period, as a result of the construction activity and physical changes taking place.

13.3.3 At completion, significant and positive changes would occur to townscape character, arising from the new site layout, buildings and structures, public realm and new high-quality

landscape treatments. Effects on townscape features are also expected to include positive changes, such as improved pedestrian and cycle routes through the Site, enhancements to the public realm and landscaped areas.

13.4 Not Significant Effects

- 13.4.1 Due to the scale and urban nature of the existing Site, the Proposed Development is not anticipated to result in adverse significant effects on National Landscape Character.
- 13.4.2 The mature trees at the boundary of the Forbury Gardens RPG and Reading Abbey Scheduled Monument are anticipated to provide effective visual screening, in summer and winter, and therefore significant adverse effects on people's views from those locations are not anticipated.
- 13.4.3 Once the Proposed Development has been completed, there is potential for some enhancements or neutral change to occur to people's views of the site from the surrounding area, which are not anticipated to be significant.

13.5 Assessment Methodology

- 13.5.1 The methodology for the TVIA is based on professional experience of townscape assessment and tall building studies, the LI's and IEMA's Guidelines for Landscape and Visual Impact Assessment (GLVIA3) (2013) and, where appropriate, the Transport Analysis Guidance (WebTAG) Chapter 7: Impacts on Townscape, TAG Unit A3 Environmental Impact Appraisal (May 2019). In addition, the TVIA methodology takes into account the principles set out in LI Technical Information Notes and guidance including Note 05/2017: Townscape Character Assessment (2018) and Note 06/19: Visual Representation of Development Proposals (2019).
- 13.5.2 The TVIA will consider the effects on townscape (including townscape character) and people's views and visual amenity as separate assessment components. The TVIA will identify and assess the negative and positive effects and significance of change arising from the Proposed Development on the townscape as an environmental resource in its own right and on people's views and visual amenity. The TVIA will consider the proposed buildings' taller height and new scale and mass within the existing townscape, compared to the existing buildings of the Site; and will be informed by a Zone of Theoretical Visibility (ZTV).
- 13.5.3 The assessment of townscape and visual effects will make comparison with the baseline year, and will include assessment during the construction period, on completion of the development and, where appropriate, 15 years after completion of the development when new tree planting is assumed to have successfully established and grown to provide effective mitigation.

Townscape and Visual Effects Context

- 13.5.4 Within urban locations, there is often a preference for: regeneration, redevelopment and renewal; the efficient use of land to adapt and change; and for the anticipation of change to views within the townscape taking place over time. In other words, an urban environment is not static; change and renewal are an integral part of that urban environment. Accordingly, the expected changing nature of the urban environment is to be taken into account within the TVIA.
- 13.5.5 New buildings may create several beneficial or adverse effects upon the urban environment, or a combination of both. The evaluation of the quality of architectural design and appearance of buildings is a subjective issue, and one which does not form part of the TVIA process. Instead, it is assumed that the quality of the design of the proposals would be appropriate to the existing urban context, as will be set out in a separate Design and Access Statement for the Proposed Development. The TVIA will therefore be based on assessing the key design

principles of the Proposed Development and the consequential effects upon townscape elements and townscape character.

- 13.5.6 Whether new development located within a townscape leads to a positive or adverse visual change in the composition of views, is largely subjective. The assessment of visual effects in the TVIA will have regard to the level of anticipated change and renewal of the urban environment, for example through the planned regeneration and development for an area, as set out in adopted Local Plan policies, together with consideration of the changes to visual compositions.

Assessment Stages

- 13.5.7 A three-stage assessment process will be adopted for the TVIA, in accordance with GLVIA3. Firstly, the nature of receptors (sensitivity) will be assessed. Secondly the nature of effects (magnitude) likely to result from the Proposed Development will be assessed. Lastly, the significance of the identified townscape and visual effects on receptors will be assessed.

Assessment of Townscape Effects

- 13.5.8 This will assess how the Proposed Development will affect the components of the urban environment (the 'townscape fabric', for example land use, scale, street trees, street pattern and layout, urban grain and massing, legibility, public realm and appearance), and the key characteristics which contribute to its distinctive character (the 'townscape character').
- 13.5.9 A methodical consideration of each effect upon each identified townscape receptor will be undertaken, in order to determine the significance of effects, in terms of:
- a. Value and susceptibility to change (sensitivity of the townscape receptor); and
 - b. Size and scale, extent, duration and reversibility (magnitude of the townscape effect).

Sensitivity of Townscape Receptors

- 13.5.10 The assessment of townscape receptor sensitivity will combine judgements on the value attributed to the townscape receptor and the 'susceptibility to change' of the receptor to the specific type of development proposed.
- 13.5.11 The value of potentially affected townscape receptors will be assessed, including townscape character and the individual elements or features which contribute to that townscape character. Townscapes may be valued at community, local, national or international levels. Existing townscape designations will be taken as the starting point for the assessment, and the value of undesignated townscapes will also be assessed.

Magnitude of Townscape Effects

- 13.5.12 New buildings can create either beneficial or adverse effects upon the urban environment. However, the evaluation of the architectural design and appearance of buildings is a subjective issue, and one which does not form part of the TVIA. Instead, for the purposes of the assessment, it is assumed that the quality of the design of the proposals will be appropriate to the existing urban context, as set out in a separate Design and Access Statement. The assessment will be based on the scale and massing of the Proposed Development and the consequential effects upon townscape, townscape character and people's views and visual amenity.
- 13.5.13 The magnitude of a townscape effect will be assessed in terms of its size or scale, the geographical extent of the area influenced and its duration and degree of reversibility.

13.5.14 The size or scale of change in the townscape relates to the loss or addition of features in the townscape which are likely to result from the Proposed Development, and takes into account:

- a. The extent/proportion of townscape elements that are lost or added;
- b. The contribution of those elements to townscape character and the degree to which aesthetic and/or perceptual aspects are altered; and
- c. Whether the effect is likely to change the key characteristics of the townscape, which are critical to its distinctive character.

Assessment of Effects on Views and Visual Amenity

13.5.15 The TVIA will assess how the Proposed Development would affect the views available to people and their visual amenity. A methodical consideration of each visual effect upon each identified visual receptor will be undertaken, in order to determine the significance of effects, in terms of:

- a. Value and susceptibility to change (sensitivity of the visual receptor, or viewer); and
- b. Size / scale, extent, composition, duration and reversibility (magnitude of the visual effect).

Sensitivity of Visual Receptors

13.5.16 The assessment of visual receptor sensitivity will combine judgements on the value attributed to the visual receptor and the 'susceptibility to change' of the receptor to the specific type of development proposed.

13.5.17 The value assigned to views will have regard to a number of factors, including:

- a. Recognition through planning designation or heritage assets; and
- b. The popularity of the viewpoint, its appearance in guidebooks, literature or art, on tourist maps, and the facilities provided to enable enjoyment of the view.

13.5.18 The susceptibility of people to changes in views is a function of:

- a. The occupation or activity of the viewer at a given location; and
- b. The extent to which a person's attention or interest may therefore be focussed on a particular view and the visual amenity experienced.

Magnitude of Visual Effects

13.5.19 The magnitude of a visual effect will be assessed in terms of its size or scale, the geographical extent of the area influenced and its duration and degree of reversibility.

13.5.20 The size or scale of change in the view relates to the degree of contrast to, or integration with, the visual composition, which is likely to result from the Proposed Development; and is influenced by the relative time over which a view is experienced and whether it is a full, partial or glimpsed view.

Townscape and Visual Mitigation Measures

13.5.21 Measures proposed for preventing/avoiding, reducing or, where possible, offsetting or compensating for significant adverse townscape or visual effects will be described. Mitigation measures comprise:

- a. Primary measures – developed through the iterative design process, and which have become integrated or embedded into the project/scheme design, such as site layout, retention of existing trees, use of vernacular materials or appropriate form, detailed design, colours and finishes, new street tree planting or incorporation of key views and vistas;
- b. Standard construction and operational management practices – for avoiding and reducing environmental effects, such as hoardings around buildings or tree protection fencing; and
- c. Secondary measures – further mitigation measures or proposals to address potential adverse effects which remain after primary measures and standard construction practices have been incorporated into the scheme, for example, additional new planting.

13.5.22 Primary mitigation measures and standard construction and operational management practices will be described in the project description in the ES and also the separate Design and Access Statement.

13.5.23 Secondary mitigation measures, if required, will be described in the TVIA.

Levels of Significance of Townscape and Visual Effects

13.5.24 The levels of significance of townscape and visual residual effects, including cumulative effects, vary with location, townscape context and the type of development that is proposed.

13.5.25 A three-stage assessment process is adopted for the TVIA, in accordance with GLVIA3. Firstly, the nature of receptors (the receptor's sensitivity) which is likely to be affected is assessed. Secondly the nature of effects (magnitude) likely to result from the proposed development is assessed. Lastly, the levels of significance of the identified townscape and visual effects on receptors are determined, by combining judgements of sensitivity and magnitude, as required by the EU Directive 2011/92/EU, and as amended by 2014/52/EU and UK Regulations. The TVIA assessor will make those judgements based upon the combinations set out in **Table 13.2**.

13.5.26 Effects that are identified in the TVIA to have a significance level of 'Minor' or 'Negligible' are determined as being 'Not Significant'; and effects that are assessed as being of 'Moderate', 'Major' or 'Substantial' levels of significance are determined to be 'Significant' in the context of the EIA Regulations.

Table 13.2: Levels of Significance of Townscape and Visual Effects

Sensitivity of Receptor	Magnitude of Effect				
	Major Effect	Moderate Effect	Slight Effect	Negligible Effect	Neutral Effect
High	Substantial or Major to Substantial	Major	Moderate	Minor (not significant)	Negligible (not significant)

Sensitivity of Receptor	Magnitude of Effect				
	Major Effect	Moderate Effect	Slight Effect	Negligible Effect	Neutral Effect
Medium	Major	Moderate	Minor (not significant)	Negligible (not significant)	Negligible (not significant)
Low	Moderate	Minor (not significant)	Minor (not significant)	Negligible (not significant)	Negligible (not significant)

13.5.27 A substantial level of significance would typically be assigned where a townscape or visual effect or cumulative townscape or visual effect is considered to be a key factor in decision-making. The 'substantial' level of significance of effect is generally, but not exclusively, associated with altering the integrity of sites and features of national or regional importance. A change at a district scale to a site or feature might also enter this category, though the assessment is subject to professional judgement and will be proportional to the type and extent of development that is being assessed. Where there is a combination of a receptor's high sensitivity and a major magnitude of effect, professional judgement may be applied to determine a 'major to substantial level of significance', where it is considered by the TVIA assessor that the effect either does not represent a key factor in the decision-making process, or where the development effects would be limited such that it would not alter the integrity of sites and features of national or regional importance.

14 Topics Not Included in the EIA Scope

14.1 Introduction

- 14.1.1 In accordance with best practice, EIA guidance and the PPG (paragraph 35), the ES should be focused, documenting only the assessment of likely significant environmental effects, both adverse and beneficial. Therefore those effects which are not likely to be significant should not be included in the ES, and therefore should be scoped out of the EIA.
- 14.1.2 The following section sets out those topics that have been determined not to be significant and therefore are not included in the EIA, as well as those that will be addressed independently in separate assessments. The rationale for scoping these topics out of the EIA is also provided.

14.2 Transport

- 14.2.1 This section reviews the likelihood of whether there will be any significant transport-related environmental impacts as a result of the Development Proposals.

Assessment Criteria

- 14.2.2 The IEMA 'Guidelines for the Environmental Assessment of Road Traffic' suggest that the study area for the EIA from a traffic and transport perspective should consider highway links which comply with two rules:
- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of Heavy Goods Vehicles (HGV) will increase by more than 30%); and
 - Rule 2: Include any other specifically sensitive area where traffic flows will increase by 10% or more.
- 14.2.3 The 30% threshold of Rule 1 is based upon research and experience, with less than a 30% increase in traffic flow generally resulting in imperceptible changes in the environmental effects of traffic and transport. At a simple level, the guidance considers that projected changes in total traffic flow of less than 10% creates no discernible environmental effects, hence the threshold of Rule 2.

Study Area

- 14.2.4 To assess the change in traffic from the development, the Study Area for transport has been determined to be Forbury Road between the Vastern Road roundabout and the Kenavon Drive roundabout.
- 14.2.5 The IEMA guidelines specify sensitivity receptors which include types of buildings and land uses that are considered to be sensitive areas in terms of their use based upon a 'High, Medium, Low or Negligible' rating. A review of the surrounding area to the site and the Forbury Road indicates there are no 'High Sensitivity' receptors in close proximity.
- 14.2.6 The baseline annual average daily flow (AADF) for Forbury Road has been obtained via the Department for Transport (DfT) traffic statistics, for manual count point site number 99741. To provide a comparison to pre-Covid19 pandemic traffic not affected by Government lockdown restrictions, the AADF for 2019 has been obtained from the DfT statistics. The 2019 total two-way vehicle count for Forbury Road was 20,934. This number has therefore been used as baseline for this assessment.

Construction

- 14.2.7 Construction of the development will generate additional traffic in relation to the movement of material, machinery and the workforce. The proposals will be delivered in a phased manner, with a basement level car parking area for the residents and ground floor car parking for visitors.
- 14.2.8 The level of construction traffic generated is not considered likely to exceed 10% of the baseline traffic flows on a given day, as this would equate to circa 2,093 vehicles a day.

Operation

- 14.2.9 The emerging development proposals consist of up to 820 units. (Class C3) and 5,500 sqm of commercial space. The estimated vehicle trip generation has been quantified for the development proposals for the weekday AM and PM peak hours and for 12-hour daytime (07:00-19:00) and 24-hour period.
- 14.2.10 This assessment results in a forecast of circa 3,187 two-way vehicles across the 12-hour daytime and circa 3,665 two-way vehicles over a 24-hour period (assuming a robust uplift of 15% from the 12-hour flow). It should be noted that forecasted traffic flows do not allow for reduction in traffic as a result of the loss of retail at the existing retail park. In reality the net change in the traffic generated from the Site will be considerably lower given the existing retail park generates vehicle trips.
- 14.2.11 **Table 11.2** confirms the 2019 recorded traffic, the Proposed Development traffic generation and the resultant increase in traffic caused by the development, not taking the loss of retail park traffic into account.

Table 11.2: Forbury Road Traffic Increase

2019 Recorded Two-way Traffic	Proposed Two-way Traffic Generation	Increased Traffic Generation
20,934	3,665	+17.5%

- 14.2.12 On the basis of the above, the estimated increase in traffic is not anticipated to meet the threshold of Rule 1 or Rule 2 of the IEMA guidelines. Therefore, no further detailed assessment of transport impacts is required within the EIA. However a Transport Assessment and Framework Travel Plan will be submitted as part of the planning application. This is to be agreed with RBC following consultation.

14.3 Biodiversity

- 14.3.1 A number of potential effects have been identified on ecological features within the Site or within the Site's potential zone of influence, as described below. However, these potential effects are not likely to be significant and therefore Biodiversity will not be considered further through the EIA process or reported in the ES. Instead, a stand-alone Ecological Assessment Report (EAR) will be submitted with the planning application setting out best practice construction measures and appropriate mitigation measures for the design, to ensure compliance with legislative and policy requirements during both construction and operation. Such measures, where appropriate, will also be detailed within a DCEMP secured by means of a planning condition.

Baseline Conditions

- 14.3.2 Publicly available information was obtained through a review of open-source information from the Magic interactive mapping website for statutory nature conservation sites and Site of

Special Scientific Interest (SSSI) Impact Risk Zone (IRZ) information. IRZs are a GIS tool developed by Natural England (NE) to make a rapid initial assessment of the potential risks posed by development proposals to : Sites of Special Scientific Interest (SSSIs). They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse effects on those designated sites.

- 14.3.3 The NE and Joint Nature Conservation Committee (JNCC) websites were also used to gather further information about statutory nature conservation sites and Priority Habitat and Ancient Woodland data sets.
- 14.3.4 A search for non-statutory designated sites of local nature conservation interest have not been completed. However, a review of RBC's Local Plan has been undertaken. This identifies those areas which are either protected by local policy or require further consideration where planning applications are to be submitted. Aerial images and Ordnance Survey mapping was also reviewed to identify any waterbodies within 500 m of the Site and other habitat of potential ecological value.
- 14.3.5 An extended phase 1 habitat survey of the Site was completed on 5th October 2021 during which the habitats present within and immediately adjacent to the Site were recorded and an assessment made of their potential to support protected or otherwise notable species.
- 14.3.6 The River Thames is located approximately 250 m from the Site but there appears to be no obvious, direct hydrological connectivity between the Site and the River. The River Kennet, a tributary of the River Thames, lies approximately 150 south of the Site, but there also appears to be no direct hydrological connectivity between the Site and that River.

Designated Areas

- 14.3.7 No statutory designated areas of European, International or National importance for nature conservation are located within or adjacent to the Site. The closest national site is Lodgewood and Sandford Mill SSSI which is located approximately 6 km to the east. Other nationally-designated sites are present within a 10 km radius of the Site. However the Site does not fall within any SSSI IRZ. There are no European/ International designated sites within 10 km of the Site.
- 14.3.8 The Local Plan identified that the Site is not covered by any nature conservation policy designation. However the adjacent train line which runs parallel to the northern boundary of the Site and its associated embankments supporting scattered trees and scrub is partly designated as an 'Area of Identified Biodiversity Interest' under Policy EN12 of the Local Plan.

Habitats and protected species

- 14.3.9 Currently the Site largely comprises buildings, hardstanding and car parking areas with some areas of formal landscaping comprising closely-mown grassland and semi-mature trees. The potential for these habitats to support projected or otherwise notable species is limited, with common and widespread bird species most likely to be using the trees for breeding and potentially common species of bats using the landscape areas for occasional foraging.
- 14.3.10 The buildings currently on the Site are modern retail units with negligible suitability to support roosting bats or a significant roost of bats. No other protected or notable species are considered likely to be associated with the Site.
- 14.3.11 The landscape areas included small leaved Cotoneaster which is a non-native invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) which, would need to be appropriately dealt with prior to any construction works commencing.

Potential Effects

Demolition and Construction

- 14.3.12 Given the distance between the statutory designated site and the Site itself, as well as the lack of any obvious direct hydrological connectivity, no impacts as a result of the demolition and construction phase of the proposals on the statutory designated sites or on nearby waterbodies are expected.
- 14.3.13 Although unlikely to be directly affected by the proposals, the rail line may be indirectly affected by pollution, noise and dust during construction works. However, it is anticipated that these would be controlled through the implementation of best practice pollution prevention measures, such as the use of dust suppression methods and correct storage and disposal of fuel and other chemicals and secured through the DCEMP. On this basis, no significant effects on habitats within the Site or within the adjacent Area of Identified Biodiversity Interest are anticipated from those potential impacts.
- 14.3.14 Demolition and construction work have the potential to contravene the legal protection afforded to breeding birds through the destruction of an active nest. However, it is considered highly unlikely that the Site supports a population of breeding birds which would be of local or greater value. As such, any impacts would not be significant and ultimately can be avoided or mitigated for through appropriate survey work and timing of works. The appropriate approach will be confirmed in the subsequent EAR, with reference to the results of site survey work and a review of information which will be secured from the Thames Valley Environmental Records Centre (TVEAC). It is anticipated that any mitigation measures recommended within the EAR would be secured through a suitably worded planning condition attached to any grant of permission.

Operation

- 14.3.15 Given that Site is already developed, and the surrounding land use is predominantly residential and commercial no significant operational impacts are anticipated on habitats and species within the Site or within proximity of the Site.
- 14.3.16 Dependent on the confirmed nature of the 'Area of Identified Biodiversity Interest' there may be a requirement to consider the potential influence of lighting from the proposed development on the feature. However, it is anticipated any such concerns can be addressed through sensitive design. Any such design requirements would be confirmed in the EAR, with reference to the results of site survey work and a review of information which will be secured from the TVEAC. As with the Construction period it is anticipated that any measures recommended within the EAR would be secured through a suitably worded planning condition.

14.4 Ground Conditions

Existing Baseline

Geology and Geomorphology

- 14.4.1 The Site is situated close to the main axis of the London Basin Syncline, an elongated, roughly triangular sedimentary basin which extends from the Thames Estuary to West Berkshire. It comprises a large east-west fold dipping north and south on either side of the main axis. The natural ground conditions on the Site are expected to comprise White Chalk. Historical water well records held in the British Geological Survey (BGS) archive indicate the White Chalk is likely to extend to at least 100 m below ground level.
- 14.4.2 River Terrace Deposits are shown overlying the White Chalk on the southern part of the Site. However historical borehole records held by the BGS archive indicate that River Terrace

Deposits are generally absent from the area of the Site. In addition, Made Ground associated with the previous and current development of the Site is expected to be present overlying the natural strata.

- 14.4.3 The natural geomorphology in the vicinity of the Site comprises the valley of the River Thames. The Site is situated on the floor of the valley within the historic flood plain of the River. To the south a gently undulating landscape resulting from erosion and downslope mass movement forms the southern valley slope. To the north a more pronounced slope rising to a low escarpment formed by the White Chalk forms the northern valley slope.
- 14.4.4 There are no designated geological or geomorphological sites or features of conservation value in the area affected by the Proposed Development.

Mineral Resources

- 14.4.5 In accordance with the Central and Eastern Berkshire Joint Minerals and Waste Plan (June 2020), the area of the Site is located within a Sand and Gravel Safeguarded Resource area. The potential sand and gravel resources on the Site relate to River Terrace Deposits, although as noted above borehole records indicate that these are generally absent from the area of the Site, possibly as a result of excavation in the formation of the development platform.
- 14.4.6 On this basis, the materials on the Site are not considered to represent workable land-based reserves of aggregate.

Unstable Ground and Hazards

- 14.4.7 The geology and geomorphological setting of the Site is such that the potential for unstable ground to be present is assessed to be very low. The exception relates to a potential hazard associated with ground dissolution given the susceptibility of the White Chalk to the development of natural cavities.
- 14.4.8 The unexploded bomb (UXB) hazard map and risk mitigation map prepared by Zetica Ltd indicate that the risk for UXBs to be present on the site is Low.

Land Use

- 14.4.9 Historically the Site was primarily occupied by a series of railway sidings and associated buildings until the mid-1960s. The topography of the Site and adjacent areas indicates the railway sidings were laid on a platform cut into a shallow ridge between the valleys of the River Thames and the River Lodden, a tributary of the River Thames.
- 14.4.10 Following the closure of the railway sidings a light industrial unit was constructed on the southeast part of the Site and in the late-1990s this unit was demolished and the Site redeveloped with the construction of the existing retail park.
- 14.4.11 Given the use of the Site for commercial and industrial activities there is a potential for contamination to be present in the ground. Therefore, due consideration will need to be given to associated potential adverse effects on human health, controlled waters and the environment associated with the Proposed Development.

Potential Effects

Geology and Geomorphology

- 14.4.12 Relative to the scale of the geological and geomorphological features, the Proposed Development will have no material effect on the geology and geomorphology in the vicinity of the Site.

Mineral Resources

14.4.13 Given the materials on the Site are not considered to represent workable land-based reserves of aggregate, the Proposed Development will have no material effect on the mineral resources in the vicinity of the Site.

Unstable Ground

14.4.14 Given that the geology and geomorphological characteristics of the Site are such that the potential for unstable ground to be present is very low, the Proposed Development will have no material effect on the stability of the ground in the vicinity of the Site.

14.4.15 The exception relates to ground dissolution where the potential for natural cavities to be present can result in subsidence and consequent damage to buildings, structures and infrastructure.

Land Use

14.4.16 There is a potential for contamination to be present in the ground that may adversely affect human health, the environment and the Proposed Development.

14.4.17 The potential risks are presented in **Table 11.4** with respect to potential receptors.

Table 11.4: Potential Risks Associated with Ground Contamination

Potential Receptor	Description/Comment
Site Workers (1)	Skin contact, inhalation, or ingestion of contaminated soils and groundwaters Asphyxiation death or injury by inhalation or explosion of ground gases and vapours Death or injury by inhalation of harmful in ground vapours.
Site Users/ Neighbours	Skin contact, inhalation, or ingestion of contaminated soils and groundwaters Asphyxiation death or injury by inhalation or explosion of ground gases and vapours Death or injury by inhalation of harmful in ground vapours
Ground and Surface Waters	Movement of contaminants by surface water infiltration, groundwater flows and drainage Leaching of contaminants from the near surface soils
Ecology and Wildlife	Phytotoxic effects on plant species Toxic effects on fauna Indirect effects via contamination of water resources
Built Environment	Chemical attack and decay of buried concrete structures, including pile foundations Permeation of water supply pipes by contaminants Damage by explosion of ground gases and vapours

Note: (1) Site workers are taken to be workers involved in demolition, construction and/or maintenance works on the site.

Scope for Mitigation

Geology and Geomorphology

14.4.18 Given the Proposed Development will have no material effect on the geology and geomorphology in the vicinity of the Site mitigation and management actions are not deemed necessary.

Mineral Resources

14.4.19 Given the Proposed Development will have no material effect on the mineral resources in the vicinity of the Site mitigation and management actions are not deemed necessary.

Unstable Ground

14.4.20 Given the potential for unstable ground to be present is generally assessed to be very low, mitigation and management actions are, in general, not deemed necessary.

14.4.21 The exception relates to ground dissolution, and in this regard due allowance will be made for the investigation of the ground to identify the nature and extent of any natural cavities present on the Site such that appropriate foundation design solutions can be adopted to mitigate potential significant effects related to ground dissolution.

Land Use

14.4.22 The adoption of measures to mitigate potential risks during demolition and construction will be managed through a DCEMP and agreed in advance with RBC.

14.4.23 With regard to the completed development, the presence of the buildings and hard surfaces of the Proposed Development together with the provision of a layer of clean soil cover to areas of at-grade soft landscaping is expected to be sufficient to limit the potential risk of ingestion and uptake of contaminants by future site users. Remediation and/or mitigation measures in advance of or in addition to the construction works are not expected to be required.

14.4.24 The Proposed Development is not expected to adversely affect the potential for migration of potential contaminants nor to change the potential risk to ground and surface waters, ecology and wildlife.

14.4.25 The expected mitigation measures and remediation works represent well understood and common practice and will be designed to mitigate any potentially adverse effects on human health, the environment and the built environment such that there will be no significant effects related to land contamination.

14.4.26 A Phase 1 Ground Condition Assessment will be undertaken to support the planning application. This will include qualitative assessments of (i) the potential risks and hazards associated with existing or potential future contamination in the ground, and (ii) the geological hazards and potential ground stability risk arising from artificial cavities; natural cavities; and other potential adverse foundation conditions together with initial comments in relation to likely remediation strategies.

14.4.27 Based on a preliminary assessment of the existing baseline conditions, the overall potential for significant contamination to be present on the site is assessed to be borderline Low/Moderate, whilst the potential for hazardous ground gases to be present is assessed to be Very Low. As such it is anticipated that a ground investigation will not be required to verify the preliminary assessment of land contamination risks in support of the planning application for proposed redevelopment of the Site, and that the Phase 1 Ground Condition Assessment will be sufficient for this purpose.

14.4.28 In summary, no significant effects with regards to ground conditions and land contamination that cannot be managed by well understood methods and common practice are anticipated as a result of the Proposed Development. For these reasons ground conditions and land contamination will be scoped out of the EIA and will not be included in the ES.

14.5 Archaeology

14.5.1 The Site will be subject to an archaeological desk-based assessment (DBA), researched and prepared by Orion Heritage. The DBA has been informed by a review of the Berkshire Historic Environment Record (BHER) data, the National Heritage List for England (NHLE) held by Historic England, a review of historic mapping and a site visit.

- 14.5.2 Consultation with Berkshire Historic Environment (BHE) was undertaken to agree a suitable study area for the desk-based assessment. A 300m search of the BHER was recommended by the BHE as sufficient to establish the below ground archaeological potential of the site.

Baseline Conditions

- 14.5.3 The DBA reveals that there are no Prehistoric remains noted within the Site. The nearest activity is a 'findspot' of Neolithic flint flakes approximately 65m to the south of the Site. Roman activity within the Study Area is limited to a findspot of pottery and a coin c.70m to the south of the site.
- 14.5.4 Early maps show the Plummery Ditch running through the Site, which is a former watercourse which connected the River Thames to the River Kennet. The ditch is no longer shown on maps after 1879.
- 14.5.5 The study site was previously part of the Southeastern and Chatham Railway. Historic maps show that subsidiary railway lines, embankments and railway sheds were present across the Site. According to the 1973 map the railway and associated features had been replaced by a car park. The 1999 map shows the Forbury Retail Park and its associated car park had been constructed. An additional drive-thru takeaway building was added towards the south of the Site by 2021.
- 14.5.6 During the site visit it was noted that the Site sits lower in the landscape than Forbury Road which indicates that the site levels may have been reduced in the past. It can therefore be assumed that past development may have removed or truncated archaeological deposits within the Site should they have been present previously.
- 14.5.7 The Site has a low potential to contain finds and features from the Prehistoric and Roman periods, and a moderate potential to contain fragmentary and truncated finds and features from the Saxon, early medieval, medieval and post-medieval periods.
- 14.5.8 The Site contains no designated archaeological assets. As such, the proposed development would not have a direct physical impact on them. The Site is however recognised in RBC's policies as an Area of Archaeological Potential.
- 14.5.9 The 300m Study Area includes the Reading Abbey Scheduled Monument which is located approximately 25m to the south of the Site (see **Chapter 10**). Based on the site visit and given the current urban context of the Scheduled Monument, the below-ground elements are not considered sensitive to change by the Proposed Development.

Consultation

- 14.5.10 Consultation will be completed with all relevant heritage consultees during the planning application including the Archaeological Advisor to RBC and HE.

Potential Significant Effects

Demolition and Construction

- 14.5.11 Demolition and Construction effects on archaeology may arise from physical impacts to potential below-ground non-designated archaeological remains. Such effects may arise from the foundations of new buildings, landscape works, changes to hydrological conditions and requirements such as trenches for new utilities and services.
- 14.5.12 The Site contains no known designated or non-designated archaeological remains. There is considered low potential for fragmentary sub-surface remains of Local Significance. This is based on the anticipated condition of the sub-surface remains due to 19th and 20th century

development. Based on the anticipated significance of the archaeological remains, significant effects to archaeology are not anticipated so this element has been scoped out of the EIA and will not be covered in the ES.

- 14.5.13 Demolition and construction effects may also include temporary effects to the setting and significance of designated and non-designated archaeological assets in the vicinity of the proposed development. The scheduled remains of Reading Abbey are identified as a potential receptor. Taking into consideration the urban context of the Site and the fact that its scheduling principally relates to below-ground evidence, the significance of the asset will remain principally intact during the proposed demolition and construction. For this reason this element has been scoped out of the EIA and will not be covered in the ES.

Operation

- 14.5.14 It is anticipated that there will be no impacts on buried archaeological assets as impacts would only occur during the demolition and construction phase. Operation effects to archaeology may include effects to the setting and significance of designated and non-designated archaeological assets in the vicinity of the Proposed Development.

- 14.5.15 The only asset concerned is Reading Abbey. Taking into consideration the urban context of the Site and the fact that the scheduling principally relates to below-ground evidence, the significance of the asset will remain principally intact during the operation of the Proposed Development. For this reason this element has been scoped out of the EIA and will not be covered in the ES.

- 14.5.16 The assessment has identified that the Proposed Development may result in minor to negligible effects to archaeology. It is therefore recommended that the DBA is appended to the ES.

14.6 References

- DCMS, 2013. Scheduled Monuments & nationally important but non-scheduled monuments. DCMS
- Department of Communities and Local Government. 2019. Planning Practice Guidance
- Department for Communities and Local Government. 2021. National Planning Policy Framework DCLG
- Historic England 2015. Historic Environment Good Practice Advice in Planning: 2 – Managing Significance in Decision-Taking in the Historic Environment
- Historic England. 2017. Historic Environment Good Practice Advice in Planning Note 3 – The Setting of Heritage Assets

14.7 Health

- 14.7.1 This section sets out the proposed approach to assessment of the beneficial and adverse effects of the Proposed Development on human health through the EIA and the planning application. The EIA Regulations require an ES to identify the likely significant effects of development on human health.

Baseline Conditions

- 14.7.2 A local health profile for Reading produced by the Office for Health Improvement and Disparities notes that the health of people in the town is more varied than the England

average. Life expectancy is 78.8 years for men, and 82.6 years for women. Both are significantly worse than the national averages.

- 14.7.3 The scores are significantly worse because of: older people living in poverty, older people living alone, overcrowded houses, unemployment, emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD), emergency hospital admissions for intentional self-harm, incidence of prostate cancer, deaths from all causes (under 75 years), deaths from all cancer (under 75 years), deaths from causes considered preventable (under 75 years), deaths from all causes (all ages), deaths from all cancer (all ages), and deaths from respiratory diseases (all ages).

Potential Effects

- 14.7.4 Risks to human health associated with the Proposed Development may principally result from effects relating to air quality, noise and vibration, water quality, contaminated land and socioeconomics. In addition to this, there may also be potential effects on general health and wellbeing associated with landscape and visual impacts and biodiversity.
- 14.7.5 A rapid Health Impact Assessment (HIA) will be prepared for the EIA which will utilise the NHS London Healthy Urban Development Unit (HUDU) 'Rapid Health Impact Assessment Tool' (2019), as this provides a useful framework of health determinants for the assessment of urban development projects. The HUDU Tool include sets out a series of assessment criteria against the following themes:
- housing design and affordability;
 - access to health and social care services and other social infrastructure;
 - access to open space and nature;
 - air quality, noise and neighbourhood amenity;
 - accessibility and active travel;
 - crime reduction and community safety;
 - access to healthy food;
 - access to work and training;
 - social cohesion and inclusive design;
 - minimising the use of resources; and
 - climate change.
- 14.7.6 It is anticipated that where there is potential for likely significant effects associated with the characteristics of the Proposed Development on the health determinants, as outlined in the HUDU Tool, so they will be assessed through the rapid HIA. The rapid HIA will draw on other discipline conclusions such as the air quality assessment, and will set out recommended mitigation measures or enhancement actions to help reduce any identified adverse effects, where relevant.
- 14.7.7 It is therefore proposed that human health will not be assessed within the ES but will be assessed as through a standalone HIA in accordance with best practice.

14.8 Water Environment

- 14.8.1 The Environment Agency (EA) Flood Zone map shows that the Site is located within Flood Zone 1 'Low probability' area, which implies a less than a 1 in 1000 (0.1%) annual probability of flooding from rivers or the sea which is determined to be a very low risk. The majority of the Site is within Flood Zone 1. However, there are small areas of low and medium risk surrounding the existing retail units, and a very small area of high risk at the most southerly part of the site opposite the Forbury Roundabout.
- 14.8.2 The EA 'Flood Risk from Reservoirs Map' indicates that the Site is not located within an area at risk of inundation from reservoir failure.
- 14.8.3 The Site is located in an area at low risk of fluvial flooding and therefore the Proposed Development will have no impact on fluvial flood risk either on the Site or elsewhere.
- 14.8.4 The Proposed Development provides opportunities for the provision of sustainable drainage techniques and wider amenity benefits. Given the highly developed nature of the Site, it is considered that the Proposed Development will not have a significant negative impact.
- 14.8.5 Whilst there is potential for construction activities to give rise to the contamination of surface water from spilled hydrocarbons or petrochemicals and the mobilization of silts or contaminants, it is anticipated that any potential impacts identified during construction will be identified within a DCEMP and subsequently managed in accordance with its findings.
- 14.8.6 The impermeable area at the Site will either be slightly reduced or remain the same and as such there will be no increase, or may be a betterment provided in, surface water runoff rates before secondary mitigation requires to be considered.

14.9 Materials and Waste

- 14.9.1 Waste generation during the demolition and construction phase is likely to result from the demolition of existing buildings, excavation and wastes generated from the construction of the new buildings. Consideration will be given throughout the design process to the specification of suitable materials, including their sustainability and environmental implications, to support an environmentally sensitive and high-quality development. As a result, the Proposed Development is not likely to have any significant effects in relation to materials.
- 14.9.2 Waste management will be considered carefully throughout the design of the Proposed Development and managed during construction in accordance with recommendations in the DCEMP. Where appropriate, building materials will be recycled / re-used from the existing retail park buildings. Consequently compliance with prevailing legislation associated with waste disposal would remove potential adverse impacts.
- 14.9.3 Given the scale and nature of the Proposed Development, materials required for the construction of the Proposed Development are unlikely to be particularly scarce or environmentally sensitive, nor is the Proposed Development likely to result in materials become scarce.
- 14.9.4 During the operation of the Proposed Development, dwellings are not anticipated to be major generators of waste, and these would not significantly affect the capacity of local waste infrastructure. The development will be designed to enable suitable access for service vehicles during operation.
- 14.9.5 As a result, significant environmental effects are not anticipated in relation to waste so it is proposed to scope waste out of the EIA. However, given the relative significance of the issue as a whole, a Waste Management Strategy and Site Waste Management Plan will be

prepared for submission with the planning application to document the waste arrangements at the Site once it is developed.

14.10 Energy and Sustainability

- 14.10.1 Energy and sustainability will be incorporated into the design process for the Proposed Development in accordance with Local Plan policy and energy demands. Given the significance of this issue, a standalone Energy Statement and Sustainability Statement will be submitted with the application.
- 14.10.2 Non-residential buildings will be targeting a BREEAM rating of 'Excellent'. Air source heat pumps are the current proposed heating strategy for the Proposed Development.
- 14.10.3 It is considered that sustainability and energy, as environmental topics, do not require specific assessment and coverage within the ES so it is not proposed that they should form part of the scope of the EIA. Topics with relevance to creation of a sustainable development, such as socio-economic effects, sustainable drainage and sustainable transport impacts will be addressed through individual technical assessments of other environmental topics.

14.11 Climate Change

- 14.11.1 Regulation 4(2)(a) of the 2017 EIA Regulations requires significant effects on climate to be considered, as appropriate, within the EIA process. In addition, Schedule 4 to the 2017 EIA Regulations requires likely significant effects resulting from "*the impact of the project on climate...and the vulnerability of the project to climate change*" to be addressed within an ES.
- 14.11.2 With regard to the impact of the Proposed Development on climate change, it is acknowledged that the construction of the Proposed Development would utilise energy intensive materials (such as concrete and metals) as well as fossil fuels for construction plant and vehicles. Once occupied the Proposed Development would import resources (including electricity) from the National Grid for commercial consumption. However, the scale of the development is limited in the context of RBC as a whole. Drawing upon IEMA's 'Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance', such activities, during both construction and operation, will not have a significant effect on the climate.
- 14.11.3 With regards to the vulnerability of the Proposed Development to climate change, potential climate-related flood risks will be considered within the FRA. In accordance with planning policy, suitable mitigation will be incorporated into the Proposed Development to ensure that it is not at a significant risk of flooding, even allowing for the impact of climate change.
- 14.11.4 As a result, the Proposed Development is not considered to have significant effects on the climate or to be significantly affected by climate change. It is therefore proposed to scope climate change out of the EIA and not include a specific chapter in the ES.

14.12 Risk of Accidents and Disasters

- 14.12.1 Schedule 4 to the EIA Regulations requires an ES to include "*a description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned*".
- 14.12.2 Although only the resulting expected significant adverse environmental effects (together with any required prevention, preparedness, mitigation and response measures) need to be addressed within an ES, it is first necessary to identify a project's vulnerability: that is, the identification of relevant risks. The second stage is then to determine whether this would result in likely significant environmental effects.

14.12.3 The terms 'risk, vulnerabilities, major accidents and disasters' are all undefined within the 2017 EIA Regulations. To remain proportionate, consideration of this topic should focus on the risks of major accidents and/or disasters which have the potential to result in serious damage, which for this EIA is defined as:

"The loss of life or permanent injury and/or permanent or long-lasting damage to an environmental receptor which cannot be restored through minor clean up and restoration efforts."

14.12.4 Taking account of the location and characteristics of the Proposed Development, and the likelihood of significant environmental effects outlined in this Scoping Report, the major risks identified relate to:

- potential accidents during the demolition and construction phase resulting in disturbance, injuries and/or fatalities to construction workers or members of the public;
- road traffic accidents; and
- pollution incidents to ground and watercourses during the construction phase, resulting in potential pollution migration and adverse effects on specific receptors including soils, habitats and species.

14.12.5 As detailed throughout this Scoping Report, mitigation will be included within the Proposed Development to address these risks and manage potential environmental effects. Health and safety is a key consideration in the construction sector and will be managed in accordance with legal requirements and best practice.

14.12.6 The impacts of the Proposed Development on road traffic accidents will be assessed within the TA. This will include an analysis of personal injury collision in the local area which will be used to identify potential significant adverse effects and mitigation measures necessary to these effects to an acceptable level.

14.12.7 In addition the DCEMP will seek to avoid, minimise and mitigate construction effects on the environment such as pollution events. This document will be updated as the project progresses to enable the plan to be effective and account for any changes that occur during construction works.

14.12.8 As a result, the Proposed Development is not considered to be vulnerable to major accidents and/or disasters which would otherwise lead to significant adverse environmental effects. As a result, it is proposed to scope the risks from major accidents and/or disasters out of the EIA.

15 Summary and Next Steps

15.1 Summary

- 15.1.1 This document has been prepared to provide an overview of the likely significant environmental effects that have been considered in scoping the EIA for the Proposed Development at Forbury Retail Park (referred to as Kings Meadow View).
- 15.1.2 This Scoping Report has provided information regarding the Proposed Development, set out the intended EIA scope and methodologies for the assessment of likely significant environmental effects, and outlined the content of the ES (**Chapter 6**). The aim is to ensure that the Proposed Development has due regard for the environment, mitigates adverse environmental effects where possible, and take advantage of opportunities for environmental enhancement.

15.2 The Environmental Statement

- 15.2.1 The outcome of the EIA process is the production of an ES to accompany the planning application. An ES, which will be prepared in compliance with the EIA Regulations, and that achieves the following:
- Describes the Proposed Development;
 - Outlines the main alternatives considered;
 - Describes the baseline environment;
 - Describes the likely significant effects;
 - Describes the measures to mitigate adverse effects; and
 - Includes a non-technical summary.

15.3 Next Steps

- 15.3.1 The Scoping Report has proposed that the following topics are scoped into the EIA:
- Socioeconomics;
 - Noise and Vibration;
 - Air Quality;
 - Heritage;
 - Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare;
 - Wind and Microclimate; and
 - Townscape and Visual.
- 15.3.2 The Scoping Report has proposed that the following topics are scoped out of the EIA for the reasons stated in this Scoping Report:
- Transport;

- Biodiversity;
- Ground Conditions;
- Archaeology;
- Health;
- Water Environment;
- Materials and Waste;
- Human Health;
- Energy and Sustainability;
- Climate Change; and
- Risk of Accidents and Disasters.

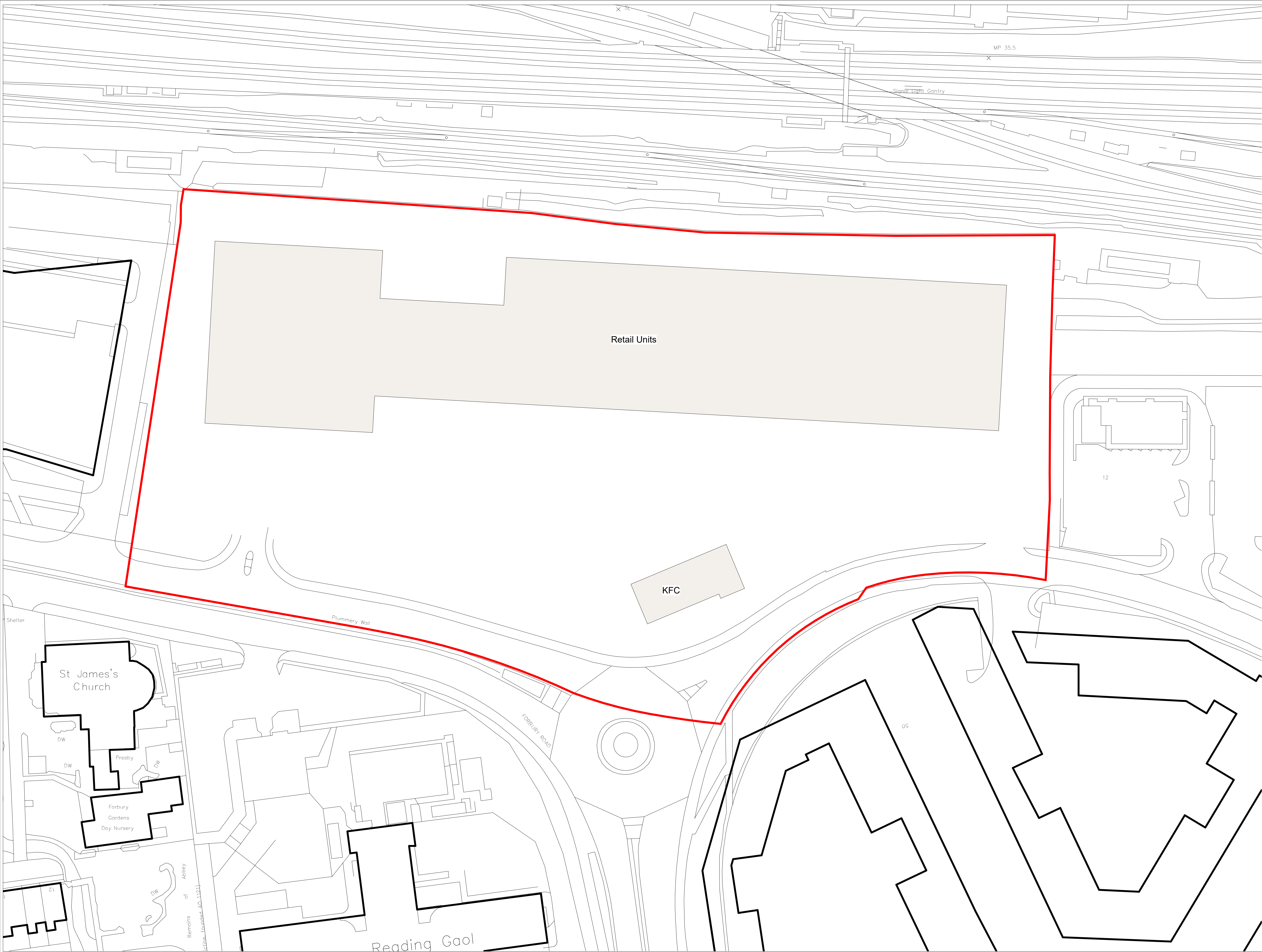
15.3.3 The next steps in the EIA process are as follows:

- Receipt of formal Scoping Opinion by RBC (expected March 2023);
- Continued consultation with relevant statutory and non-statutory bodies (February and March 2023); and
- Submission of the ES with planning application (April 2023).

15.3.4 Comments on this Scoping Report should be provided to:

Planning Control
Civic Offices
Bridge Street
Reading
RG1 2LU

Appendix A Site Area Plan



Do not scale from this drawing. All dimensions to be checked on site. All omissions and discrepancies to be reported to the Architect immediately

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Key:

Site Boundary

Issued For Information	06/12/22	ST	A
Description	Date	Chk	Rev

SQUIRE & PARTNERS

Squire and Partners LLP
The Department Store
248 Ferndale Road, London SW9 8FR
T: 020 7278 5555

info@squireandpartners.com
www.squireandpartners.com

Project

Kings Meadow View

Title

**Existing
Site Plan**

Status

Pre-planning

Drawn	Date	Scale @ ISO A1	Job Number
SQP	06/12/22	1:500	18111
Drawing Number	Revision		
18111-SQP-ZZ-GF-DR-A-PP00001	A		

Appendix B Regulation 18 and Schedule 4 of the EIA Regulations

Regulation 18 Environmental Statements

18.—(1) Subject to regulation 9, an EIA application must be accompanied by an environmental statement for the purposes of these Regulations.

(2) A subsequent application is to be taken to be accompanied by an environmental statement for the purpose of paragraph (1) where the application for planning permission to which it relates was accompanied by a statement referred to by the applicant as an environmental statement for the purposes of these Regulations, but this is subject to regulation 9.

(3) An environmental statement is a statement which includes at least—

(a) a description of the proposed development comprising information on the site, design, size and other relevant features of the development;

(b) a description of the likely significant effects of the proposed development on the environment;

(c) a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;

(d) a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment;

(e) a non-technical summary of the information referred to in sub-paragraphs (a) to (d); and

(f) any additional information specified in Schedule 4 relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected.

(4) An environmental statement must—

(a) where a scoping opinion or direction has been issued in accordance with regulation 15 or 16, be based on the most recent scoping opinion or direction issued (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion or direction);

(b) include the information reasonably required for reaching a reasoned conclusion on the significant effects of the development on the environment, taking into account current knowledge and methods of assessment; and

(c) be prepared, taking into account the results of any relevant UK environmental assessment, which are reasonably available to the person preparing the environmental statement, with a view to avoiding duplication of assessment.

(5) In order to ensure the completeness and quality of the environmental statement—

(a) the developer must ensure that the environmental statement is prepared by competent experts; and

(b) the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts.

Schedule 4 of the EIA Regulations

1. A description of the development, including in particular:

(a) a description of the location of the development;

(b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;

(c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;

(d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.

2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

4. A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions,

impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.

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

(a) the construction and existence of the development, including, where relevant, demolition works;

(b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;

(c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;

(d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);

(e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;

(f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;

(g) the technologies and the substances used.

The description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project, including in particular those established under Council Directive 92/43/EEC(1) and Directive 2009/147/EC(2).

6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.

8. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are

relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(3) of the European Parliament and of the Council or Council Directive 2009/71/Euratom(4) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

9. A non-technical summary of the information provided under paragraphs 1 to 8.

10. A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.

Appendix C Committed Developments

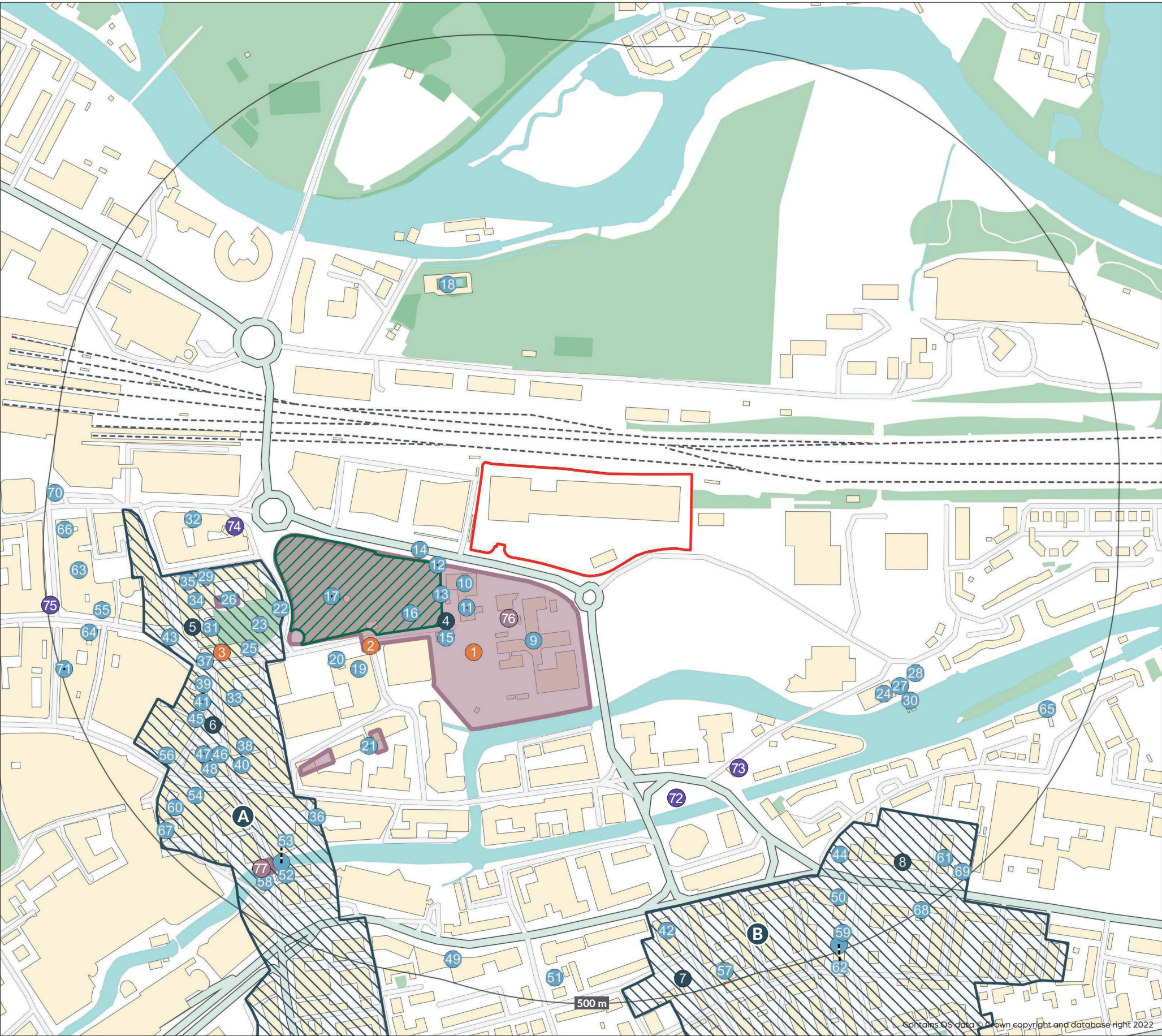
APPENDIX C: COMMITTED DEVELOPMENTS BRISTOL & WEST ARCADE, MARKET PLACE

Site	Summary of scheme	Distance from development	Grid References (Easting, Northing)	Status of application / Key dates	In/Out?
80 Caversham Road (ref. 182252)	Outline Application 620 residential units 2 to 24 storeys	500m	471411, 174009	Discussed at committee March 2022 Recommended for approval subject to legal agreement.	In
Broad Street Mall (ref. 182137)	Full Application Up to 422 residential units 5 to 20 storeys above the mall 1,501 sqm of ground floor retail units	1 km	471225, 173389	It was discussed at RBC's committee on 13 January 2021 with a recommendation for approval. The application has since been approved.	In
Gas Holder Site, Alexander Turner Close (ref. 190627)	Full Application 130 residential units 2 to 9 storeys	500m	472902, 173685	It was discussed at RBC's committee on 13 November 2019 where it was resolved to grant planning permission. Planning permission was granted on 16 th July 2021	In
Bristol and West Arcade Market Place (ref. 210163)	Full Application 182 bed hotel 8 storeys 7,879 sqm non-resi floorspace (4,490 sqm net additional)	100m	471645, 173522	It was discussed at RBC's committee in July 2021 where it was resolved to grant planning permission. Planning permission was granted on 2 nd August 2022	In
Plot F Station Hill Reading (ref. 190441) (ref. 201533)	Ref. 190441 = Outline application Ref 201533 = Subsequent reserved matters 184 BTR units 762 sqm flexible retail/leisure/business 12 storey	500m	471392, 173638	Discussed at committee February 2021 and recommended for approval subject to legal agreement. Application approved 23 July 2021	In

Site	Summary of scheme	Distance from development	Grid References (Easting, Northing)	Status of application / Key dates	In/Out?
Plot E Station Hill (ref. 190442) (ref. 201537)	Ref. 190442 = Outline application Ref 201537 = Subsequent 415 BTR units 722 sqm flexible commercial and leisure 12 storey	500m	471327, 173605	Discussed at committee February 2021 and recommended for approval subject to legal agreement Application approved 23 July 2021.	In
29-35 Station Road (ref. 181930)	Full Application 135 bed hotel 22 storey 8,333 sqm non residential (6,679 sqm net additional)	500m	471491, 173684	Discussed at committee July 2019. Recommended for approval subject to legal agreement. Approved 29 October 2019	In
52-55 Friar Street (ref. 162210)	Full Application 135 residential units 6 to 12 storeys 660 sqm non residential	750m	471348, 173626	Discussed at committee December 2017 Recommended for approval subject to legal agreement Approved 20th March 2018	In
Former Cooper BMW Premises (ref. 162166)	Full Application 315 residential units 12 to 23 storeys	350m	471842, 173867	Discussed at committee September 2017 Recommended for approval subject to legal agreement. Approved 23 rd November 2017	In
115 Chatham Street Reading (ref. 210349)	Full Application 54 residential units 3 to 5 storeys (-1,366 sqm net additional commercial floorspace)	2 km	470851, 173483	It was discussed at committee 13 th July 2021, and was resolved to grant planning permission. Approved 17 th December 2021.	Out
The Printworks, Cox & Wyman, Cardiff Road (ref. 171814)	Full Application 96 residential units	1.1 km	470936, 174118	Approved 19 November 2018. Discussed at committee again in May 2021 to amend the S106.	Out

Site	Summary of scheme	Distance from development	Grid References (Easting, Northing)	Status of application / Key dates	In/Out?
20 Hosier Street (ref. 182054)	Full Application 101 bed hotel 7 to 8 storey 3,948 sqm non residential	1 km	471265, 173315	Discussed at committee July 2019. Approved 4 November 2019	Out
Car Park, East Street (ref. 181849)	Full Application 135 units of purposed built student accommodation 4 to 5 storeys	600m	471872 , 173164	Discussed at committee March 2019. Recommended for approval subject to legal agreement. Approved 7 th July 2019	Out
Former Reading Family Centre (ref. 181652) (ref. 191659)	ref. 181652 = Outline Application ref. 191659 = Reserved matters application 2.5 – 4.5 storeys comprising 47 apartments (30% affordable)	1.2 km	470916 , 173660	Discussed at committee November 2018 Recommended for approval subject to legal agreement Outline approved 12 th March 2019 Reserved matters approved 17 September 2020	Out
Clarendon House (ref. 180909)	Full Application 43 residential units 6 to 9 storeys	400m	472192, 173267	Discussed at committee October 2018 Recommended for approval subject to legal agreement Approved 7th February 2019	Out
119 Henley Road (ref. 180418)	Outline application – reserved matters not yet submitted 42 residential units	1.5 km	472955, 175219	Discussed at committee October 2018 Recommended for approval subject to legal agreement Approved 7th January 2019	Out
Alexander House (ref. 162057)	Full Application 56 residential units 4 to 7 storeys	900m	473035, 173240	Discussed at committee March 2017 Recommended for approval subject to legal agreement Approved 17 th May 2017	Out

Appendix D Heritage Asset Plan



HERITAGE ASSET PLAN

- Application Site

Conservation Areas

A. Market Place and London Street CA

B. Eldon Square CA
- Listed Buildings
- Grade I

1. Reading Abbey Ruins

2. Abbey Gate

3. Church of St Laurence
- Grade II*

4. Archway connecting Forbury Gardens to Abbey Ruins. Including retaining Walls Flanking Path to Abbey Ruins

5. Town Council Chamber and Offices With Clock Tower

6. The Simeon Monument
- Grade II

9. Reading Gaol (Main Building) Former Her Majesty's Prison

10. Church of St James's

11. St James's Presbytery, and St James Former School Buildings

12. Shelter at North-East Corner of Forbury Gardens

13. Wall between Forbury Road and Abbott's Walk to West of St James's Church

14. The Plummery Wall

15. 10, and 11 and 12, Abbot's Walk

16. Anglian Cross

17. Maiwand Memorial

18. Kings Meadow Swimming Pool

19. Assize Courts

20. Shire Hall

21. Abbey Mill Ruins

22. Wall and Gatepiers of St Laurence's Graveyard

23. Tracery Fragments to South of No 10

24. The Engine House

25. St Laurence's Church and Churchyard, and Twelve Tombs in St Laurence's Churchyard

26. Municipal Buildings

27. The Screens House

28. 47-48, Kenavon Drive

29. Former School of Art

30. The Pump and Turbine House

31. Small Town Hall

32. Walter Parsons Corn Stores

33. National Westminster Bank

34. The Concert Hall

35. Reading Museum

36. House at Rear of Nos 18 and 20 Kings Road

37. Drinking Fountain on South Side of St Laurence's Tower

38. 1 and 2, Market Place

39. 23-26, and 27 and 28, Market Place

40. The High, and 7, High Street

41. The Coopers Public House, and 32, Market Place

42. Wesley Methodist Church

43. Queen Victoria Jubilee Statue

44. 163, King Road

45. Trustee Savings Bank, and Corn Exchange Arcade Entrance

46. 10, High Street

47. 48 and 49, and 50 and 51, Market Place

48. Barclays Bank

49. Queen's Crescent

50. 196-200, Kings Road

51. 3 and 5, Sidmouth Street

52. Coroner's Court

53. High Bridge

54. 17 and 18, King Street

55. 11, 12, 13, and 14, Friar Street, and 15 Friar Street and Numbers 1 and 26 Harris Arcade, Reading

56. 2 and 3 and 3a, Broad Street

57. Church of St John The Evangelist

58. 2 and 4, London Street

59. 2, Eldon Road

60. The George Hotel

61. 185, Kings Road

62. 4 and 6, Eldon Road

63. Numbers 8-10 Station Road and 2-25 Harris Arcade, Reading

64. 154, and 155, Friar Street

65. Fisherman's Cottage Inn

66. Great Western House

67. Building on South East Corner

68. 220 and 222, Kings Road

69. 187 and 189, Kings Road

70. The Statue of King Edward VII

71. 1-31, Queen Victoria Street

72. Kings Road Garden, Kings Road

73. Huntley and Palmers Social Club, Kings Road

74. Rising Sun PH

75. King Edward Buildings, 1 Station Road/22 Friar Street
- Scheduled Monuments

76. Reading Abbey: a Cluniac and Benedictine monastery and Civil War earthwork.

77. High Bridge
- Registered Park and Gardens

78. The Forbury Garden (Grade II)