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2 ASSESSMENT SCOPE AND METHODOLOGY

2.1 INTRODUCTION

2.1.1 This chapter explains the methodology used to prepare the technical chapters of this ES and describes its structure and content. In particular, it sets out the process of identifying and assessing the likely significant environmental effects of the Proposed Development.

2.2 GENERAL APPROACH TO ENVIRONMENTAL STATEMENT

2.2.1 The Environmental Statement must contain the information specified in regulation 18(3) and must meet the requirements of Regulation 18(4). It must also include any additional information specified in Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)¹ (the "EIA Regulations") which is relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected.

2.2.2 Regulation 18(3) and 18(4) states: -

- 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 -

¹ The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended).

- (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"

2.2.3 Schedule 4 states: -

Information for inclusion in environmental statements

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.

2.2.4 Accordingly, this ES comprises the following information:

- A description of the development comprising information about the site including the nature, size and scale of the development;
 - The data necessary to identify and assess the main effects which the development is likely to have on the environment;
 - A description of the likely significant effects of the development covering, direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects, explained by reference to the development's possible effect on cultural and archaeological heritage, landscape and the interaction between any of the foregoing material assets (as appropriate).
 - Where significant adverse effects are identified with respect to any of the foregoing, mitigation measures will be proposed in order to avoid, reduce or remedy those effects; and
 - A summary in non-technical language of the information specified above.
 - A statement outlining the relevant experience of the experts who have undertaken the assessment and drafted the technical chapters within the ES.

2.3 DEVELOPMENT PARAMETERS

2.3.1 The Proposed Development, which has been the subject of this EIA, is described in more detail within **Chapter 3: The Application Site and Proposed Development**. To ensure that the Proposed Development, as it evolves with the benefit of subsequent approvals and/or reserved matters, will remain the same as that assessed within this ES, Development Parameters and an accompanying Parameter Plans have been established and assessed. Together, these contain the parameters and controls defining those

aspects of the Proposed Development capable of having significant environmental effects, as defined in the EIA Regulations.

2.3.2 The matters encapsulated within the Development Parameters and Parameter Plans include:

- Land Use;
- Maximum Proposed Building Heights;
- Means of Access into the Site;
- Landscape and bunding areas within and on the perimeter of the Site;
- Indicative locations for Sustainable Drainage Systems (SuDS) infrastructure; and
- Existing woodland to be maintained and managed.

2.4 SCOPE OF ENVIRONMENTAL IMPACT ASSESSMENT

2.4.1 Following the EIA Screening Opinion from CDC and WNC on the 2nd and 3rd of March 2022, both Screening Opinions concluded an EIA is required based on the likely significant effects from traffics, emissions, noise, ecology, archaeology and local and wider landscape and visual impacts. Therefore the following environmental themes have been scoped in to the EIA.

2.4.2 No formal Scoping Request exercise has been undertaken for this ES, and submitted to CDC. It has been determined through the Applicant to address all environmental impact matters when considering the scheme with the known baseline environment and Schedule 4 of the EIA Regulations 2017 (as amended).

2.4.3 The environmental topics that are included in this assessment have been determined, based on the consideration of the possible effects on the local environment from the known baseline information.

2.4.4 Given the nature and intended longevity of the Proposed Development’s operational life, decommissioning has not been considered as part of this study. Accordingly, this EIA focuses on the potential likely significant effects of the Proposed Development during the construction and operational phases only.

2.4.5 Accordingly, the environmental themes scoped into or out of the EIA are provided in **Table 2.1**. Where a topic has been scoped out of the ES the reasoning is provided.

Table 2.1: Environmental Themes Scoped In / Out

EIA Topic	Scoped In / Out	How/Where addressed/Reason for Scoping Out
Population	Scoped In	Assessed in the Socio-Economics Chapter (Chapter 12). Matters relating to visual amenity are also assessed in the Landscape and Visual Chapter (Chapter 5), matters relating to Transport and Access (Chapter 8) and effects of the additional traffic is considered within Noise (Chapter 11) and Air Quality (Chapter 10).
Human Health	Scoped In	Assessed in the Socio-Economics Chapter (Chapter 11). Matters relating to impact of additional traffic

		movements and particulates in the atmosphere are assessed in the Air Quality Chapter (Chapter 10) and Noise (Chapter 11).
Biodiversity	Scoped In	Assessed in the Ecology Chapter (Chapter 7).
Land	Scoped In	The alterations to the current land use for the Proposed Development will be considered in the relevant environmental assessments.
Soil	Scoped Out	There will be no consideration of the alteration to the soils at the Site within this ES. There is no known history of soil contamination on the site. The planning application will include a ground conditions survey. If contamination is found, it will be controlled during construction through the imposition of appropriate planning conditions to ensure any contamination risks are addressed. No significant effects are therefore anticipated and does not need to be considered in terms of EIA.
Water	Scoped In	Assessed in the Hydrology, Flood Risk and Drainage Chapter (Chapter 9).
Air	Scoped In	Assessed in the Air Quality Chapter (Chapter 10).
Climate	Scoped Out	To be considered within the Planning Statement and supporting application documents.
Material Assets	Scoped out	The nature and location of the application is not considered to be particularly hazardous or complex. This topic will be addressed to a lesser degree in technical chapters where considered relevant. It is not considered there are any further 'material assets' to those already addressed within other EIA topics.
Cultural Heritage including Architectural and Archaeological aspects	Scoped In	Assessed within with the Cultural Heritage and Archaeology Chapter (Chapter 6).
Landscape	Scoped In	Assessed in the Landscape and Visual Chapter (Chapter 5).
Risks of Major Accidents and Disasters	Scoped out	The nature and location of the development is not considered to be vulnerable to, or give rise to significant impacts in relation to the Risk of Accidents and Major Disasters.
Interrelationship between above factors	Scoped In	Assessed within each topic chapter under the heading Cumulative and Interactive Effects.

2.4.6 Any subsequent discussions regarding the scope of the assessment that has been undertaken separately to the EIA scoping process, is discussed within the relevant technical chapters.

2.5 ENVIRONMENTAL IMPACT ASSESSMENT METHODOLOGY

2.5.1 The content of the ES is based on the following:

- Review of the baseline situation through existing information, including data, reports, site surveys and desktop studies;
- Consideration of the relevant National Planning Policy Framework (NPPF) and accompanying National Planning Practice Guidance (NPPG), and the statutory extant and emerging development plan policies;
- Consideration of potential sensitive receptors;
- Identification of likely significant environmental effects and an evaluation of their duration and magnitude;
- Expert opinion;
- Modelling;
- Use of relevant technical and good practice guidance; and
- Specific consultations with appropriate bodies.

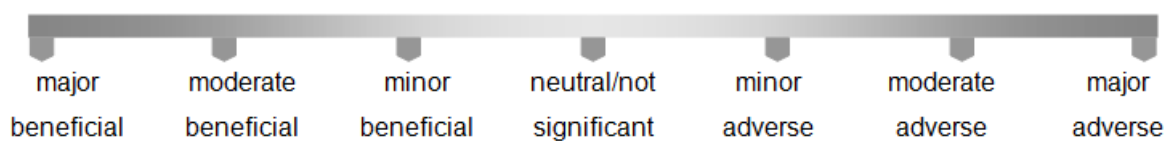
2.5.2 Environmental effects have been evaluated with reference to definitive standards and legislation where available. Where it has not been possible to quantify effects, assessments have been based on available knowledge and professional judgment.

2.6 DETERMINING SIGNIFICANCE

2.6.1 The purpose of the EIA is to identify the likely ‘significance’ of environmental effects (beneficial or adverse) arising from a Proposed Development. In broad terms, environmental effects are described as:

- Adverse – detrimental or negative effects to an environmental resource or receptor;
- Beneficial – advantageous or positive effect to an environmental resource or receptor; or
- Negligible – a neutral effect to an environmental resource or receptor.

2.6.2 It is proposed that the significance of environmental effects (adverse, negligible/neutral or beneficial) would be described in accordance with the following 7-point scale:-



2.6.3 Significance reflects the relationship between two factors:

- The magnitude or severity of an effect (i.e. the actual change taking place to the environment); and
- The sensitivity, importance or value of the resource or receptor.

2.6.4 The broad criteria for determining magnitude are set out in **Table 2.2**.

Table 2.2: Degrees of Magnitude and their Criteria

Magnitude of Effect	Criteria
High	Total loss or major/substantial alteration to elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.

Medium	Loss or alteration to one or more elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Low	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible / detectable but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development.
Negligible	Very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable, approximating to a 'no change' situation.

2.6.5 The sensitivity of a receptor is based on the relative importance of the receptor using the scale in **Table 2.3**.

Table 2.3: Degrees of Sensitivity and their Criteria

Sensitivity	Criteria
High	The receptor / resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Medium	The receptor / resource has moderate capacity to absorb change without significantly altering its present character, or is of high and more than local (but not national or international) importance.
Low	The receptor / resource is tolerant of change without detrimental effect, is of low or local importance.
Negligible	The receptor / resource can accommodate change without material effect, is of limited importance.

2.6.6 Placement within the 7-point significance scale would be derived from the interaction of the receptor’s sensitivity and the magnitude of change likely to be experienced (as above), assigned in accordance with **Table 2.4**, whereby effects assigned a rating of Major or Moderate would be considered as 'significant'.

Table 2.4: Degrees of Significance

Magnitude of Change	Sensitivity of Receptor				
		High	Medium	Low	Negligible
High		Major	Major	Moderate	Negligible
Medium		Major	Moderate	Minor to Moderate	Negligible
Low		Moderate	Minor to Moderate	Minor	Negligible
Negligible		Negligible	Negligible	Negligible	Negligible

2.6.7 The above magnitude and significance criteria are provided as a guide for specialists to categorise the significance of effects within the ES. Where discipline-specific methodology has been applied that differs from the generic criteria above, this is clearly explained within the given chapter under the heading of Assessment Approach.

2.6.8 As can be seen from **Table 2.4** when an environmental effect is assessed as having a major or moderate degree of significance it is deemed to be "significant". These are the shaded cells in **Table 2.4**. When such a significant effect occurs consideration of mitigation solutions or enhancements to minimise the effect (which can include design alterations) will be considered. Once these mitigations and enhancements have been assessed the degree of significance may decrease to minor/moderate, minor or negligible.

2.7 MITIGATION

2.7.1 Standard measures and the adoption of construction best practice methods to avoid, minimise or manage adverse environmental effects, or to ensure realisation of beneficial effects, are assumed to have been incorporated into the design of the Proposed Development and the methods of its construction from the outset. Further information on the standard measures and construction best practice is detailed in **Chapter 3: The Application Site and Proposed Development**. Where outlined, the assessment is of the Proposed Development incorporating these measures.

2.7.2 Where mitigation measures are proposed that are specific to an environmental theme (i.e. ecological measures incorporated into the landscaping scheme etc) and incorporated into the design, these are also outlined within **Chapter 3**, and highlighted within the relevant technical chapter.

2.7.3 Where the assessment of the Proposed Development has identified potential for significant adverse environmental effects, the scope for mitigation of those effects has been considered and is outlined in the appropriate technical chapter. It is assumed that such measures would be subject to appropriate planning conditions or obligations.

2.7.4 Where the effectiveness of the mitigation proposed has been considered uncertain, or where it depends upon assumptions of operating procedures, then data and/or professional judgment has been introduced to support these assumptions.

2.8 CUMULATIVE AND IN-COMBINATION EFFECTS

Cumulative Effects

2.8.1 With respect to inter-project cumulative effects, the EIA Regulations state that consideration should be given to "other existing and/or approved projects" (Schedule 4, paragraph 5(e)) in relation to cumulative effects. This is also re-iterated in Planning Practice Guidance on EIA (Para 024, Revised 28/07/2017). The ES considers existing or proposed schemes (subject to a valid planning application) with the potential to cause cumulative effects in combination with the Proposed Development.

2.8.2 The following scheme has been identified with the potential to generate cumulative effects in construction or operation:

- **Land adjacent to M40 Junction 11, Banbury (21/02467/F)**- this proposal is for a mixed-use development including a 240- bed hotel, 4 storey office building, roadside services, coffee shop drive-through and petrol filling station with ancillary retail store. The proposal is intended to be determined at an April 2022 Planning Committee. The development was deemed to not need an EIA. This planning application under determination is immediately west to the Application Site. If granted planning permission, it is likely the development will be under construction when the Application Site's development begins.

2.8.3 This cumulative site is shown on **Figure 2.1: Cumulative Plan**.

In-Combination Effects

2.8.4 In-combination effects arise where effects from one environmental element bring about changes in another environmental element. These effects are also reviewed in each of the technical chapters of this ES. Examples of the main types of interactive effects are as follows:

- Effects of traffic on noise;
- Effects of traffic on air quality;
- Effects of water discharges on ecology; and
- Effects of landscaping on ecology.

2.9 GENERAL ASSUMPTIONS AND LIMITATIONS

2.9.1 The principal assumptions that have been made and any limitations that have been identified in preparing this ES are set out below:

- All of the principal land uses adjoining the Site remain as present day, except where redevelopment proposals have been granted planning consent. In those cases it is assumed the redevelopment proposals will be implemented or would but for the development being implemented;
- Information received from third parties is complete and up to date;
- The design, construction and completed stages of the Proposed Development will satisfy legislative requirements; and
- Conditions will be attached to the planning permission with regards "mitigation", where considered necessary to make the development acceptable.

2.10 STRUCTURE OF TECHNICAL CHAPTER

2.10.1 Throughout the EIA process, the likely significant environmental effects of the Proposed Development will be assessed. The information which will inform the EIA process has generally been set out in the following way:

- **Introduction** – to introduce the topic under consideration, state the purpose of undertaking the assessment and set out those aspects of the Proposed Development material to the topic assessment;
- **Assessment Approach** – to describe the method and scope of the assessment undertaken and responses to consultation in relation to method and scope in each case pertinent to the topic under consideration;
- **Baseline Conditions** – a description of the baseline conditions pertinent to the topic under consideration including baseline survey information;
- **Assessment of Likely Significant Effects** - identifying the likely effects, evaluation of those effects and assessment of their significance, considering both construction and operational and direct and indirect effects;
- **Mitigation and Enhancement** - describing the mitigation strategies for the significant effects identified and noting any residual effects of the proposals;
- **Cumulative and In-combination Effects** - consideration of potential cumulative and in-combination effects with those of other developments; and
- **Summary** – a non-technical summary of the chapter, including baseline conditions, likely significant effects, mitigation and conclusion.