

## 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 As stated in Chapter 1 of this Environmental Statement (ES) this document has been prepared and assessed using the 2017 EIA Regulations (as amended).

2.2.2 Schedule 4 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 *'Information for inclusion in environmental statements'* requires that an Environmental Statement should include at least the following information:

- *Part 1: 'A description of the development' - including information on the location of the development site, the physical characteristics of the development,*
- *Part 2: 'A description of the reasonable alternatives studied by the developer' - for example with regard to development design, technology, location, size and scale*
- *Part 3: 'A description of the relevant aspects of the current state of the environment (baseline scenario)'- including how the baseline might evolve if there development were not to proceed*
- *Part 4: 'A description of the factors specified in regulation 4(2) likely to be significantly affected by the development' - including with regard to 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*
- *Part 5: 'A description of the likely significant effects of the development on the environment' - including with regard to: construction and/or demolition works, the use of natural resources, emission of pollutants and the disposal of waste, the potential for accidents, cumulative effects with other developments, vulnerability with respect to climate change and the technologies and materials to be used. The description of the likely significant effects should cover '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'*
- *Part 6: 'A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment' - including*

*with regard to: technical deficiencies or lack of knowledge encountered compiling the required information and the main uncertainties involved.*

- ***Part 7: 'A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment' - including where appropriate with regard to: any proposed monitoring arrangements (for example the preparation of a post-project analysis). The 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.***
- ***Part 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'. 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.***
- ***Part 9: 'A non-technical summary of the information provided under paragraphs 1 to 8'.***
- ***Part 10: 'A reference list detailing the sources used for the descriptions and assessments included in the environmental statement'.***

2.2.3 Accordingly, this ES includes each of the elements set out above.

### **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 Site and the Proposed Development** and its accompanying Figures. 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 Plan have been established and assessed. These set out the basis on which the assessment of the potential for the the Proposed Development to result in significant environmental effects, as defined in the EIA Regulations, has been undertaken.

### **2.4 CONSIDERATION OF ALTERNATIVES**

2.4.1 As noted above, Schedule 4 (Part 2), Paragraph 2, of the EIA Regulations requires that the ES contain "A description of the reasonable alternatives studied by the developer". Furthermore, the published National Planning Practice Guidance (NPPG) on EIA (Paragraph 035) states that "Where alternative approaches to development have been considered, the Environmental Statement should include an outline of the main alternatives studied which are relevant to the proposed development and its specific characteristics and provide an indication of the main reasons for the choice made, including a comparison of the environmental effects".

2.4.2 Accordingly, this ES contains **Chapter 4: Alternatives Considered** setting out the main alternative development proposals (i.e. land uses) and/or design iterations (i.e., layouts, appearance, materials etc), as appropriate, as considered by the Applicant.

## 2.5 SCOPE OF ENVIRONMENTAL IMPACT ASSESSMENT

2.5.1 In order to determine the scope of the EIA, a formal request for a Scoping Opinion was submitted on behalf of the Applicant to Barnsley Metropolitan Borough Council in March 2021 (see **Appendix 2.1**). The request described the site context, the nature and purpose of the Proposed Development, and identified the proposed scope and structure of the EIA for the Council's consideration.

2.5.2 Barnsley Metropolitan Borough Council issued their formal Scoping Opinion in April 2021 (see **Appendix 2.2**), confirming the following technical assessment chapters should be included in the ES:

- *Landscape and visual effects*
- *Transport*
- *Archaeology and Cultural Heritage*
- *Ground Conditions*
- *Flood Risk and Drainage*
- *Air Quality*
- *Noise*
- *Socio-economics and Health*
- *Climate Change*

2.5.3 The Scoping Opinion also enclosed a number of the responses to the Scoping Request by third parties. These responses are identified below in **Table 2.1**.

**Table 2.1: Summary of Scoping Opinion Consultee Responses**

<b>Consultee and Issues Raised</b>	<b>How/ Where Addressed</b>
<b><i>Internal Barnsley MBC Consultees</i></b>	
Air Quality Pollution Control Officer – Chris Shields	Chapter 12 Air Quality
Biodiversity Officer – Trevor Mayne	Chapter 7 Ecology
Highways – Jason Thomas	Chapter 8 Transport
Public Rights of Way – Rik Catling	Chapter 6 LVIA, and Chapter 8 Transport
Conservation Officer – Tony Wiles	Chapter 9 Heritage
Noise Pollution Control Officer – Paul Denton	Chapter 13 Noise
Drainage – Wayne Atkins	Chapter 11 Flood Risk and Drainage
Tree Officer – Ed Jowett	Chapter 6 LVIA, and Chapter 7 Ecology
South Yorkshire Mining Advisory Service – Paul James	Chapter 10 Ground Conditions
Energy Team- Claire Miskell, Matthew Fox	Chapter 15 Climate Change
Enterprising Barnsley-Paul Johnson	Chapter 14 Socio-economics and Health

<b>Consultee and Issues Raised</b>	<b>How/ Where Addressed</b>
Design-Nik King	Chapter 6 LVIA
Public Health-Julie Tolhurst	Chapter 14 Socio-economics and Health
<b>External Consultees</b>	
Coal Authority	Chapter 10 Ground Conditions
Highways England	Chapter 8 Transport
Yorkshire Water	Chapter 11 Flood Risk and Drainage
Trans Pennine Trail Office	Chapter 6 LVIA, and Chapter 8 Transport

2.5.4 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 site remediation/construction and operational phases only.

2.5.5 Accordingly, the environmental themes scoped into or out of the EIA are given in **Table 2.2**.

**Table 2.2: Environmental Themes Scoped In / Out**

<b>Environmental Theme</b>	<b>Scoped In/Out</b>	<b>How/ Where Addressed / Reason for Scoping Out</b>
Human Beings	In	Chapter 6 LVIA, Chapter 12 Air Quality, Chapter 13 Noise, Chapter 14 Socio-economics and Health, and Chapter 15 Climate Change
Fauna and Flora	In	Chapter 7 Ecology
Soil	In	Chapter 10 Ground Conditions
Water	In	Chapter 11 Flood Risk and Drainage
Air	In	Chapter 12 Air Quality
Climatic Factors	In	Chapter 15 Climate Change
Cultural and Archaeological Heritage	In	Chapter 9 Archaeology and Cultural Heritage
Landscape	In	Chapter 6 LVIA
Inter-relationship between above factors	In	Where applicable, within each topic chapter (Chapters 6 to 14) under the heading Cumulative and In-combination Effects. Also consideration of each element together given in Chapter 15 Climate Change

**2.6 ENVIRONMENTAL IMPACT ASSESSMENT METHODOLOGY**

2.6.1 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.

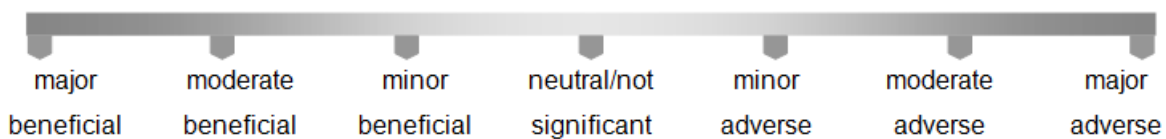
2.6.2 Environmental effects have been evaluated with reference to definitive standards and legislation where available. Where it has not been possible to quantify effects, assessments have been based on available knowledge and professional judgement.

**2.7 DETERMINING SIGNIFICANCE**

2.7.1 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.

2.7.2 The significance of environmental effects (adverse, negligible/neutral or beneficial) are generally described in the ES in accordance with the following 7-point scale, unless where specifically explained otherwise :-



2.7.3 Significance generally 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.

2.7.4 The broad criteria for determining magnitude are set out in **Table 2.3**.

**Table 2.3: Degrees of Magnitude and their Criteria**

<b>Magnitude of Effect</b>	<b>Criteria</b>
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.

2.7.5 The sensitivity of a receptor is based on the relative importance of the receptor using the scale in **Table 2.4**.

**Table 2.4: Degrees of Sensitivity and their Criteria**

<b>Sensitivity</b>	<b>Criteria</b>
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.

2.7.6 Placement within the 7-point significance scale is generally 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 2.5** below, whereby effects assigned a rating of Major or Moderate would be considered as 'significant'.

**Table 2.5: Degrees of Significance**

<b>Magnitude of Change</b>	<b>Sensitivity of Receptor</b>				
		<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Negligible</b>
<b>High</b>		Major	Major	Moderate	Negligible
<b>Medium</b>		Major	Moderate	Minor to Moderate	Negligible
<b>Low</b>		Moderate	Minor to Moderate	Minor	Negligible
<b>Negligible</b>		Negligible	Negligible	Negligible	Negligible

2.7.7 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.

2.7.8 A significance of effect is assigned both before and after mitigation, where any measures have been set out.

## **2.8 MITIGATION**

2.8.1 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 Site and the Proposed Development**. Where outlined, the assessment is of the Proposed Development incorporating these measures.

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

2.8.3 Where the assessment of the Proposed Development has identified potential for adverse environmental effects, the scope for mitigation of those effects, for example by way of compensatory measures, 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.

2.8.4 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.

## **2.9 CUMULATIVE AND IN-COMBINATION EFFECTS**

### **Cumulative Effects**

2.9.1 Within EIA, cumulative effects are generally considered to arise from the combination of effects from the Proposed Development and from other proposed or permitted schemes in the vicinity, acting together to generate elevated levels of effects. Examples of these kinds of effects that can be readily appreciated could include:

- Traffic generated from developments, affecting the surrounding road network;
- Air quality effects from developments; and
- Discharges to the water environment.

### **In-Combination Effects**

2.9.2 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 where relevant. 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;

- Effects of landscaping on ecology;
- Effects of waste on traffic; and
- Effects of land contamination on air and water quality.

**Cumulative Schemes**

2.9.3 It is noted that in the vicinity of the site, there is an application for 140 dwellings (*App 2020/0977- Applicant: Countryside Properties PLC*), on a parcel of land which lies adjacent to the Site and which also forms part of the wider site allocation.

2.9.4 There are also two applications (*App 2020/0027 and 2020/0028 - Applicant: Strata Sterling Barnsley West*) which have already been submitted and consented for works within the Site associated with the delivery of the new Link Road between M1, Junction 37 and the A635, Barugh Green Road. Given how the works included with these applications are integral to the overall proposals at the Site it is understood that they should be considered within the main assessment as part of the overall proposals, rather than within the separate cumulative effects section.

2.9.5 The wider applications for further upgrades to the highways network may also be relevant for consideration in the cumulative effects section of some chapters of the ES, as may other proposed developments in the wider area. This includes the application for 'Highways works comprising the linking of Capitol Close and Higham Lane via a new roundabout, road realignment and widening works throughout, enlargement of existing roundabout located at Capitol Close and Whinby Road and provision of associated footpaths, combined cycle/footpath and verges' (*App 2020/0040 - Applicant: Barnsley MBC*). Also of relevance may be the application at Penny Pie Park, Dodworth Road/Pogmoor Road, Barnsley for 'Signalised gyratory roundabout with improvements to the existing Dodworth Road / Broadway / Pogmoor Road junction and re-configuration of park' (*App 2018/0965 -Applicant: Barnsley MBC*).

**2.10 GENERAL ASSUMPTIONS AND LIMITATIONS**

2.10.1 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 Application 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.

**STRUCTURE OF TECHNICAL CHAPTERS**

2.10.2 Throughout the EIA process, the likely significant environmental effects of the Proposed Development will be assessed. Within each of the technical chapters 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 (where applicable)** 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.