

02.

Approach to EIA

2 Approach to EIA

2.1 Introduction

- 2.1.1 This chapter describes the general approach to and scope of the EIA of the Project. It provides general information about the EIA process including the key steps taken in the approach to EIA to identify baseline conditions and identify and assess the likely significant effects of the Project. For a detailed description of topic specific assessment methods, reference should be made to the relevant chapter.

2.2 About Environmental Impact Assessment

- 2.2.1 EIA is the process of identifying, evaluating and mitigating the likely significant environmental effects of a proposed development. It promotes the early identification and evaluation of the likely significant environmental effects of the development and enables appropriate mitigation (that is measures to avoid, reduce or offset significant adverse effects) to be identified and incorporated into the design of the development, or commitments to be made to environmentally sensitive construction methods and practices. The results of the EIA also ensure that decision-makers, such as the Scottish Ministers, Local Planning Authorities (LPAs) and statutory consultees as well as other interested parties including local communities, are aware of a proposed development's likely environmental effects and whether these are likely to be significant or not so that they may be considered in the determination of an application..

2.3 Overview of EIA Report Requirements

- 2.3.1 Regulation 5(2) and Schedule 4 of the TCPA EIA Regulations and Regulation 17(1) and Schedule 4 of the Electricity EIA Regulations set out what information must be included within the EIA Report in support of the Applications. Table 2.1 addresses the requirements for the Applications.

Table 2-1 – EIA Reporting Requirements for the Applications.

EIA Requirement	Electricity Act Application(s)	Cumbernauld Substation Application	Detail
Description of the development	a) A description of the development comprising information on the site, design, size and other relevant features of the development.	a) A description of the development comprising information on the site, design, size and other relevant features of the development;	This information is provided within: Chapter 4 Project Description Chapter 4 and associated figures provide a description of its key components, nature and purpose.
Likely significant effects	b) A description of the likely significant effects of the development on the environment;	b) A description of the likely significant effects of the development on the environment;	Chapters 6 to 15 provide an overview of the environmental aspects which may be affected. These sections include the baseline environment and study area, and the assessment methods; and evaluates the likely environmental effects and identifies the likely significant effects. Chapter 16 identifies the likely cumulative effects.
Mitigation measures	c) a description of the features of the development and any measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;	(c) a description of the features of the development and any measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;	Chapter 17 provides the schedule of mitigation which summarises all of the environmental aspects from Chapter 6 to 15 and the mitigation measures identified to avoid, prevent or reduce

EIA Requirement	Electricity Act Application(s)	Cumbernauld Substation Application	Detail
			significant effects on the environment.
Reasonable alternatives	d) a description of the reasonable alternatives studied by the developer that are relevant to the 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;	(d) a description of the reasonable alternatives studied by the developer, which are relevant to the 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;	Chapter 3 Evolution of Design and Alternatives provides information on the alternatives identified throughout the routing and consultation process.
Non-Technical Summary	(f) a non-technical summary of the information referred to in sub-paragraphs (a) to (e); and	(e) a non-technical summary of the information referred to in sub-paragraphs (a) to (d);	The Non-Technical Summary contained a non-technical summary of this EIA Report.
Any other information	(g) any other information set out in Schedule 4 relevant to the specific characteristics of the development and the environmental features likely to be affected.	(f) any other information specified in schedule 4 relevant to the specific characteristics of the development and to the environmental features likely to be affected.	Chapter 6 to 15 provide any other information relevant to the specific characteristics of the Project and to the environment features likely to be affected.

2.4 EIA Scoping

- 2.4.1 The Scoping Report discussed in Chapter 1, Section 1.4 was submitted in June 2025 identified the environmental topics to be scoped in or out of the EIA report and the approach to assessment for those to be included. Table 2-2 provides a summary of the scope proposed in the Scoping Report. Following design evolution since the scoping stage there have been several changes to scope which are detail in chapter 1 of the EIA.
- 2.4.2 A Scoping Opinion was received on 7 October 2025 and contains comments from the Scottish Ministers and consultees on the scope of the assessment. Volume 3, Appendix 2.1 Gate Check Report 1 details how all scoping responses from statutory consultees have been addressed.

Table 2-2 EIA Scope proposed in the Scoping Report

Project Component	Phase	Landscape and Visual	Cultural Heritage	Biodiversity	Water Environment	Ground Conditions	Traffic and Transport	Noise and Vibration	Socio-Economics and Recreation	Forestry	Air Quality	Climate Change	Human Health	Major Accidents
New Build overhead line (WB Route)	Construction	X	X	X	X	X	X	X	X	X	O	O	O	O
	Operation	X	X	X	X	O	O	O	O	O	O	O	O	O
Upated overhead line (ZG Route)	Construction	O	X	X	X	O	X	X	X	O	O	O	O	O
	Operation	O	O	X	X	O	O	O	O	O	O	O	O	O
Upated overhead line (XX Route)	Construction	O	X	X	X	O	X	X	X	O	O	O	O	O
	Operation	O	O	X	X	O	O	O	O	O	O	O	O	O
Upated overhead line (XR Route)	Construction	O	O	X	X	O	X	X	X	O	O	O	O	O
	Operation	O	O	X	X	O	O	O	O	O	O	O	O	O
CB Route Removal and AA Route Undergrounding	Construction	X	X	X	X	X	X	X	X	X	O	O	O	O
	Operation	X	O	X	X	O	O	O	O	O	O	O	O	O
Denny North Substation	Construction	O	X	X	X	X	X	X	O	O	O	O	O	O
	Operation	O	O	X	X	O	O	O	O	O	O	O	O	O
	Construction	X	X	X	X	X	X	X	O	O	O	O	O	O

Project Component	Phase	Landscape and Visual	Cultural Heritage	Biodiversity	Water Environment	Ground Conditions	Traffic and Transport	Noise and Vibration	Socio-Economics and Recreation	Forestry	Air Quality	Climate Change	Human Health	Major Accidents
Bonnybridge Substation	Operation	X	O	X	X	O	O	O	O	O	O	O	O	O
Cumbernauld Substation	Construction	X	X	X	X	X	X	X	X	X	O	O	O	O
	Operation	X	O	X	X	O	O	O	O	O	O	O	O	O
Easterhouse Substation*	Construction	O	X	X	X	O	X	X	X	O	O	O	O	O
	Operation	O	O	X	X	O	O	O	O	O	O	O	O	O
Wishaw Substation	Construction	O	X	X	X	X	X	X	X	O	O	O	O	O
	Operation	O	O	X	X	O	O	O	O	O	O	O	O	O

* Easterhouse substation works are internal for the existing substation and have therefore been scoped out of the EIA. Refer to chapters 1 & 4 for further detailed.

Summary of Scoping Opinions

- 2.4.3 The scoping opinions provided by the Scottish Ministers and consultees as well as advice provided by those bodies with whom they consulted are summarised below in Table 2.3. This also sets out where the points raised have been addressed within the EIA Report or, where relevant, in other reports accompanying the Applications. The Scoping Report is provided in Volume 3, Appendix 2.2 and the Scoping Opinions are provided in Volume 3 Appendix 2.3.

Table 2-3 Summary of Scoping Responses

Consultee	Summary of Response	How the response has been addressed
Falkirk Council	Falkirk Council broadly agree with the conclusions in the EIA Scoping Report in relation to likely environmental effects and have no further comments.	N/A
North Lanarkshire Council (NLC)	NLC provided guidance on the content of the EIA Report, not limited to the following: • Demonstration of alignment with NLC Local Development Plan (LDP) (2022) and relevant Supplementary Guidance, including explanation of why less harmful alternatives have not been pursued; • A proportionate Landscape and Visual Impact Assessment (LVIA) of the uprated overhead lines and substation works within North Lanarkshire; • Potential setting and physical impacts on cultural heritage assets, including mitigation, in consultation with HES and NLC; • Consideration of local designations not included within the EIA Report Scoping Report; • Updated Phase 1 and protected species surveys and Assessment of potential impacts on qualifying features of designated sites; • Clear demonstration of Biodiversity Net Gain (BNG) within NLC; • Consideration of cumulative impacts with other infrastructure projects; • Assessment of socio-economic impacts, including community amenity and access; • Consideration of health and safety risks near sensitive industrial sites;	Details of the EIA Report alignment with the NLC LDP is presented in Chapter 5 of this EIA Report. Consideration of alternatives is presented in Chapter 3 of this EIA Report. The LVIA is presented in Chapter 6 of this EIA Report. Impacts on cultural heritage assets are presented in Chapter 7 of this EIA Report. Assessment of ecological impacts is presented in Chapter 8 of this EIA Report, and associated appendices. Socio-economic impacts have been assessed in Chapter 13 of this EIA Report. Health and safety risks near industrial sites have been considered in Chapter 15 of this EIA Report. Issues relating to contaminated land are detailed in Chapter 10 of this EIA Report respectively. Issues relating to woodland are addressed in Chapter 8 and Chapter 14 of this EIA Report.

Consultee	Summary of Response	How the response has been addressed
	- Engagement with local communities and recreational stakeholders; - Detail of consultation undertaken with SEPA on historic land use and land contamination issues. - Demonstrate a clear commitment to minimising impacts on surrounding natural assets notably the surrounding woodland which in turn borders Palacerigg Country Park and Glencryan Woods – a designated site of Importance for Nature Conservation, and Forest Wood Nature Reserve.	Issues relating to cumulative impacts have been considered in Chapter 16 of this EIA Report.
NatureScot (NS)	NS provided guidance on the content of the EIA Report, not limited to the following: - Refer to NS’s standing pre-application advice for onshore wind farms as this is also applicable to other developments; - NS welcome that the EIA Report will provide further baseline peat information. NS ask the Applicant to follow their guidance on peat in development management; - A detailed Bird Protection Plan will be required; - In relation to otter, NS note the requirement for a species protection plan including pre-construction surveys; - In relation to water vole, NS support the second water vole survey, and note that areas such as Easterhouse should be considered for water voles; - In relation to badger and pine marten, NS agree that pre-construction surveys will be required as part of construction mitigation and advise that species protection plans and licences may be necessary;	Issues relating to peat are detailed in Chapter 10 of this EIA Report. Issues relating to Ornithology are detailed in Chapter 8 of this EIA Report. Issues relating to protected species are detailed in Chapter 8 of this EIA Report.

Consultee	Summary of Response	How the response has been addressed
	In relation to bats, NS agree that where trees or structures are identified as suitable for bats, further survey to determine presence / likely absence of roosting bats is needed. NS ask the Applicant to follow their guidance on protected species.	
Historic Environment Scotland (HES)	HES noted that no details have been provided on the proposed towers for upgrade, access tracks and compounds, and there is the potential for significant adverse impacts on heritage assets within their statutory remit.	Details on the proposed towers for upgrade, access tracks and compounds are presented in Chapter 4 of this EIA Report. Likely impacts on heritage assets as a result of the Project are discussed in Chapter 7 of this EIA Report.
	HES advised the Applicant to refer back to their comments provided during consultations from 2019 – 2025, including, but not limited to the following: - Exploring alternative options which do not cross the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site (WHS); - Any physical impacts to nationally important assets would require separate Scheduled Monument Consent; - Detail of cultural heritage assets which have the potential to be significantly adversely impacted; and - Separate consultation would be required for any initial cultural heritage assessment that had been undertaken associated with the routing and alignment of the WB OHL route and any potential undergrounding of separate 33kV OHL routes.	Issues relating to cultural heritage assets are detailed in Chapter 7 and 13 of this EIA Report.

Consultee	Summary of Response	How the response has been addressed
	HES provided guidance on the content of the EIA Report, not limited to the following: • Follow the HES / NS EIA Handbook; • HES note that the terminology used in the EIA Scoping Report is unclear, and the Applicant should use the terminology as detailed in NPF4; • HES request that any impacts on, or changes to, the World Heritage Site (WHS) should be assessed in terms of its Outstanding Universal Value (OUV), and this should be included as a separate appendix to the Cultural Heritage chapter and cross-referenced with the EIA Report; • Regarding physical impacts, all works associated with the Project must avoid direct impacts on scheduled monuments, and contractors involved in the works should be made aware of this. Should any works be required to existing infrastructure which are located within the curtilage of a scheduled monument, Scheduled Monument Consent from HES will be required; • In relation to setting impacts, HES recommend, rather than using arbitrary study areas, that assets at risk of impact should be identified using a 'bare earth' Zone of Theoretical Visibility, and assets with long distance views which form part of their cultural significance should be considered. HES advise that visualisations should be provided for any asset where a significant effect is identified; and • HES recommend the Applicant refers to their Managing Change in the Historic Environment: Setting Guidance.	Issues relating to cultural heritage assets are detailed in Chapter 7 of this EIA Report.

Consultee	Summary of Response	How the response has been addressed
Scottish Environment Protection Agency (SEPA)	SEPA provided guidance on the content of the EIA Report, not limited to the following: - The EIA Report should include a series of drawings of sensitivities, for example, peat depth, peat condition, Ground Water Dependent Terrestrial Ecosystems (GWDTE), and proximity to waterbodies, overlain with proposed permanent and temporary development; - The Applicant is advised to refer to previous consultation responses from SEPA Radioactive Substances Unit (SEPA RS Unit) regarding potential for radioactive contamination at Wishaw Substation, and to contact SEPA should the route change; - XX route should be kept scoped in due to two former landfill sites that were authorised to accept 'special precautions' waste located along the route; - SEPA would be pleased to comment on the findings and conclusions of any Phase 1 Geotechnical and Geoenvironmental Reports; - Requirements for a PMP were provided; - SEPA gave advice regarding avoiding impacts on hydrology, GWDTEs and groundwater abstractions, and asked the Applicant to follow their Guidance on Assessing the Impacts of Developments on Groundwater Abstractions; - Requirements in relation to flooding and for a Flood Risk Assessment were provided;	Issues relating to peat are presented in Chapter 10 of this EIA Report. Issues relating to GWDTEs are presented in Chapters 8 and 9 of this EIA Report. Issues relating to ground conditions and ground contamination are presented in Chapter 10 of this EIA Report. Issues relating to hydrology and flood risk are presented in Chapter 9 of this EIA Report. Issues relating to biodiversity are presented in Chapter 8 of this EIA Report. Issues relating to Forestry are presented in Chapter 14 of this EIA Report. The Schedule of Mitigation and Monitoring is provided in Chapter 17 of this EIA Report.

Consultee	Summary of Response	How the response has been addressed
	- The EIA Report must demonstrate that the proposal will conserve, restore and enhance biodiversity so they are in a demonstrably better state than without intervention; - The EIA Report must demonstrate how impacts on forestry have been avoided, where necessary; - Requirements for the schedule of mitigation which must be included in the EIA Report; - Discarding of materials as waste should be avoided and the waste hierarchy applied to waste produced during construction; - Advised that it is the Applicant's responsibility to ensure their proposal will meet all relevant regulatory requirements; and - The Applicant must clearly detail which elements of the Project are included as part of the application, and which will be subject to separate planning applications.	
Transport Scotland	Transport Scotland provided comments on the Scoping Report, not limited to the following: - Potential trunk roads proposed to be utilised for construction should be screened and assessed if the Institute of Sustainable and Environmental Professionals, formerly (Institute of Environmental Management and Assessment), thresholds are exceeded; - Methodology statements to be provided for any proposed trunk roads crossings in relation to OHLs; and	Issues relating to traffic and movement are addressed in Chapter 11 of this EIA Report.

Consultee	Summary of Response	How the response has been addressed
	Transport Scotland will require to be satisfied that the size of loads proposed can negotiate the selected route and that their transportation will not have any detrimental effect on structures within the trunk road route path.	
Scottish Forestry	Scottish Forestry strongly encourages the development of a Forest Plan for all woodlands, especially those undergoing long-term operations like felling and restricting, and directed the Applicant towards the Forestry and Land Management (Scotland) Act 2018.	Issues relating to forestry are addressed in Chapter 14 of this EIA Report.
Marine Directorate	The Marine Directorate provided generic scoping guidelines in relation to what should be considered regarding how fish populations can be impacted by overhead line development. The Marine Directorate require that a checklist is completed on the topics of fish, peat and felling operations.	Fish populations have been scoped out and are addressed in Chapter 8 of this EIA Report

2.5 General Approach to EIA

Overview

2.5.1 In general terms, the key stages in the EIA are:

- **Scoping studies:** Scoping is the first step in the EIA process. Regulation 17 of the TCPA EIA Regulations and Regulation 18 of the Electricity EIA Regulations, allows developers to request a scoping opinion as to the content of an EIA Report i.e. the scope of and approach to EIA including the baseline studies undertaken, sources of data, approaches to assessment and specific impacts to consider.
- **Baseline studies and consultation:** These comprise a combination of desk-based studies and field surveys to establish an understanding of the existing environmental conditions ('the baseline') within the study area and therefore ensure an accurate assessment of the likely significant effects of the Project. Some baseline surveys have been undertaken previously and this is reported in the relevant chapters of this report.
- **Impact prediction and identification of mitigation:** The likely environmental impacts of the Project (both beneficial and adverse) have been predicted and evaluated using a range of specialist methods which are described in subsequent chapters. Through iterative assessment, likely effects have been predicted and opportunities to mitigate them identified, with the aim of preventing or reducing likely significant effects as much as possible. Mitigation measures identified in this EIA Report are embedded within the Project design and have informed its detailed design and / or how it shall be constructed.
- **Identification of likely significant effects:** As stated above, the purpose of the EIA is to determine the likely significant effects of the Project. A detailed description of the general approach to assessing impacts is contained in this chapter, with detailed approaches tailored to individual technical assessments following topic-specific guidance contained in subsequent chapters. This EIA Report identifies the likely significance effects of the Project, identifies any additional (secondary) mitigation and then the significance of the residual effects of the Project i.e. those which remain, taking into account mitigation.

Characterisation of the Baseline Environment

2.5.2 In order to assess the likely significant effects resulting from the Project it is necessary to first establish the environmental conditions that currently exist along and within the vicinity of the Project (referred to as 'the baseline') as well as the likely evolution of the baseline without the Project. An understanding of the baseline environment for each environmental topic has been established through a range of activities including field surveys undertaken to make observations and / or record data, desk-based studies including reviews of relevant documentation and literature as well as stakeholder consultation. Subsequent chapters of this EIA Report set out the baseline studies which have been undertaken and the sources of information which have been consulted in undertaking the EIA.

Types of Effects

Direct Effects and Indirect Effects

2.5.3 Direct effects are those where there is a physical connection between the Project and the receptor (for example, direct impacts on a sensitive ecological receptor resulting from habitat removal), whereas indirect effects require some additional pathway for the effect to arise (for

example, impacts on surface water quality on other watercourses within the catchment from spillage risk).

Reversible and Irreversible Effects

- 2.5.4 Reversible effects are those where the effected receptor is able to return to its original baseline condition following the cessation of the Project or removal of the impact (for example, temporary disturbance to noise sensitive receptors during construction activities, where conditions return to normal once works are completed). In contrast, irreversible effects are those where the change to the receptor is permanent (for example, permanent habitat loss a result of land take for built development).

Temporary Effects

- 2.5.5 Temporary effects mainly occur during the construction phase only and are typically short term. This would include effects resulting from the construction of the Project such as construction traffic, noise and vibration from construction plant and machinery, dust generation and site runoff, as well as effects resulting from temporary loss of agricultural land or other temporary effects resulting from requirements for temporary access tracks or construction compounds.

Longer Term, Operational & Permanent Effects

- 2.5.6 Longer term, operational and permanent effects are those which would occur as a result of the Project, such as its land take or as a result of its operation. This would include effects which may begin during construction and endure for the lifetime of the Project, or effects which occur for a period of time following completion of construction or during operation only.

Transboundary Effects

- 2.5.7 The EIA Regulations also require consideration of transboundary effects, these are effects which occur in one country as a result of a proposed development or activity in another country. In relation to the Project, its scale and location mean that it is not considered likely to result in transboundary effects, therefore they have not been considered further.

Residual Effects

- 2.5.8 Residual effects are those effects that remain having taken account of mitigation measures. As noted above, the approach taken to the EIA of the Project means that much of the mitigation is an inherent part of the design (design measures) and how it will be constructed (management measures). As a result, the significance of some residual environmental effects may be the same as the significance of the likely environmental effects before additional (secondary) mitigation. It should be noted that this is not because they have not been mitigated, but rather that by incorporating mitigation into the design and construction of the Project from the outset, effects have been mitigated as far as possible.
- 2.5.9 Residual effects can be characterised in a number of ways, this may include duration (e.g. temporary, permanent, short-term or long-term), their reversibility (reversible or irreversible) and whether they arise directly from the Project or in combination with other impacts and developments (cumulative effects). In subsequent chapters, this means that there may be more substantive reporting of the likely effects before additional (secondary) mitigation as opposed to the residual effects.

Cumulative Effects

- 2.5.10 For the purpose of the EIA, cumulative effects have been defined under two categories; intra-project effects and inter-project effects:
- Intra-Project Effects: The combined effects arising as a result of the Project upon a single receptor or resource. An example would be where a local resident is affected by dust, noise and a loss of visual amenity during the construction of the substation, with the result being a greater nuisance than each individual effect alone.
 - Inter-Project Effects: The combined effects of the Project with other reasonably foreseeable relevant development which may not, on an individual basis result in significant effects but, together (i.e. cumulatively), have a significant effect.
- 2.5.11 The assessment of intra-project and inter-project cumulative effects has been informed by the Planning Inspectorate: Advice on Cumulative Effects Assessment (formally known as ‘PINS Advise Note 17’)¹.
- 2.5.12 Regarding intra-project effects, sensitive receptors identified in the technical chapters which had the potential to be exposed to two or more type of residual effects, with a significance of minor or above, have been assessed. The assessment considered if the combination of effects is likely to lead to overall effects of greater significance.
- 2.5.13 With regard to inter-project effects, the Zone of Influence (Zol) (the areas within which other developments could give risk to cumulative effects due to a combination of impacts from the Project and other developments) was determined for each technical topic. The largest Zol was 3km, therefore a review of planning applications made to Falkirk Council, North Lanarkshire Council, Glasgow City Council, South Lanarkshire Council, Stirling Council and the Energy Consents Unit was undertaken within this area. Those within the 3km Zol, and were identified to be Major and National Applications², have been added to the Long List.
- 2.5.14 Threshold criteria was applied to the Long List to create a Short List, this focused the assessment on other developments which are of a scale and nature to give rise to potential cumulative effects in combination with the Project.
- 2.5.15 The final list of other developments to be considered in the cumulative effects assessment Long List was frozen on 31st January 2026, four months prior to submission to allow sufficient time to compile the EIA Report.

Identification and Assessment of Likely Significant Effects

Overview

- 2.5.16 The likely significant effects (beneficial and adverse) of the Project will be predicted and evaluated using a range of predictive methods including quantitative, semi-qualitative and qualitative techniques.

¹ Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment, (2025), Planning Inspectorate <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment>

² As identified under The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009. Scottish Statutory Instruments. (2009) The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009 (S.S.I. 2009 No. 51). Edinburgh: The Scottish Ministers. Available at: https://www.legislation.gov.uk/ssi/2009/51/pdfs/ssi_20090051_en.pdf

- 2.5.17 There is no statutory definition of what constitutes a ‘significant’ effect within the EIA Regulations. The process of assessing significance typically involves consideration of two aspects of a likely effect, namely the sensitivity and / or value of the environmental aspect or receptor being affected, and the magnitude of the impact on it.

Assessing the sensitivity, value or importance of receptors

- 2.5.18 The sensitivity of a receptor or feature is characterised by its vulnerability to change and its ability to recover. The value of a receptor or feature reflects its overall importance and the value placed on it by society; this may be reflected by its level of statutory or policy protection or else a value may be attributed through consultation and the application of professional judgement. Criteria for defining the sensitivity and / or value of a receptor are set out in Table 2-.

Table 2-4 Sensitivity Criteria

Sensitivity	Description
Very high	Very high importance and rarity, value at an international level and limited potential for recovery or substitution
High	High importance and rarity, value at a national level and limited potential for recovery or substitution.
Medium	Medium importance and rarity, value at a regional level and limited potential for recovery or substitution.
Low	Low or medium importance and rarity, value at local level and limited potential for recovery or substitution.
Negligible	Not considered to be important, valued at a local level, easy to replace.

Assessing the magnitude of impacts

- 2.5.19 General criteria for defining the magnitude of an impact are set out in Table 2-. Key factors that influence this include:
- Scale of change – the scale of change refers to the degree of change to or from the baseline environment caused by the impact being assessed;
 - Spatial extent – the extent of an impact is the full area over which the impact occurs or is experienced; and
 - Duration and frequency – the duration is the period within which the impact is expected to last prior to recovery or replacement of the feature. Frequency refers to how often the impact will occur.

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Table 2-5 Magnitude Criteria

Magnitude	Description
High	Adverse: Loss of resource and / or quality and integrity of resource; severe damage to key characteristics, features, or elements. Beneficial: Large scale or major improvement of resource, including extensive restoration or major improvement of attribute quality.
Medium	Adverse: Measurable loss of resource, but not adversely affecting the integrity; partial loss of / damage to key characteristics, features or elements. Beneficial: Measurable benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.
Low	Adverse: Minor measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements. Beneficial: Minor benefit to, or in addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk or negative impact occurring.
Negligible	Adverse: Very minor loss of detrimental alteration to one or more characteristics, features or elements. Beneficial: Very minor benefit to or positive addition of one or more characteristics, features or elements.

Evaluating the significance of effects

2.5.20 Having established the magnitude of change and the sensitivity of the receptor, the significance of the effect can be assessed. The identification of significance typically requires the application of professional judgement, however, a significance matrix, as shown in Table 2-6, may also be used as a guide to help identify the likely significance of effects. Each of the specialist disciplines undertaking EIA may have a variation of the table below that aligns with magnitude and sensitivity criteria that best suits their topic area, which may also be defined by relevant industry guidelines. These criteria and determination of significance are outlined in the specialist sections of this Scoping Report.

Table 2-6 Assessment of Significance

Magnitude of Impact	Sensitivity of Receptor					
		Very High	High	Medium	Low	Negligible
	High	Major	Major	Moderate	Moderate	Minor
	Medium	Major	Moderate	Moderate	Minor	Negligible
	Low	Moderate	Moderate	Minor	Negligible	Negligible
	Negligible	Minor	Minor	Negligible	Negligible	Negligible

- 2.5.21 The EIA Regulations require the likely significant effects to be identified. The classification of significance is explained in Table 2-, however, in simple terms effects predicted to be ‘major’ or ‘moderate’ are considered to be ‘significant’ whilst effects predicted to be ‘minor’ or ‘negligible’ are considered to be ‘not significant’.

Table 2-7 Significance Classifications

Classification	Description	Significant
Major	A large and detrimental change to a valuable / sensitive receptor; likely or apparent exceeding of threshold or a major departure from national targets. A large and beneficial change, resulting in improvements to baseline conditions whereby previously poor conditions are replaced by compliance with thresholds or a major contribution is made to national targets. These are effects which may represent key factors in the decision-making process. Potentially associated with sites and features of national importance or likely to be important considerations at a regional or district scale. Major effects may relate to impacts on resources or features which are rare and cannot be relocated, or if lost, cannot be replaced.	Yes
Moderate	A medium scale change which, although not beyond an threshold, is still considered to be generally unacceptable, unless balanced out by other significant positive benefits of the development. Likely to relate to	Yes (typically) ³

³ Moderate effects are typically significant but may be subject to the application of professional judgement for each EIA topic

Classification	Description	Significant
	departure from relevant planning policy, rather than legal compliance. A positive moderate effect is a medium scale change that is significant in that the baseline conditions are improved to the extent that guideline targets are contributed to. These effects, if adverse, are likely to be important at a local or district scale and on their own could have a material influence on decision-making.	
Minor	A small change that, whilst adverse, does not exceed thresholds, legal or guideline standards. Unlikely to be a departure from planning policy. A small positive change, but not one that is likely to be a key factor in the overall balance of issues. These effects may be raised as local issues but are typically unlikely to be critical in the decision-making process.	No
Negligible	A very small scape change that is so small and/or unimportant that it is not a key factor in the overall balance of issues. Effects which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error, these effects are unlikely to influence decision making irrespective of other effects.	No

- 2.5.22 A significant adverse effect is not necessarily one that would render the Project, nor is a significant beneficial effect necessarily one that would make it acceptable. The purpose of identifying the significant effects (adverse and beneficial) is to ensure that all parties, in particular decision-makers, are aware of the environmental impacts (in particular those which are likely to be significant) of the Project and consider these alongside other material considerations in determining the applications for consent.

Approach to Mitigation

- 2.5.23 A standard hierarchical approach to identifying mitigation requirements will be used:
- Avoid or Prevent: In the first instance, mitigation should seek to avoid or prevent the adverse effect at source.
 - Reduce: If the effect is unavoidable, mitigation measures should be implemented which seek to reduce the significance of the effect.

- Offset: If the effect can neither be avoided nor reduced, mitigation should seek to offset the effect through the implementation of compensatory mitigation.

2.5.24 Mitigation measures fall into two categories: Embedded (Primary) Mitigations, that is 'Mitigation by Design' which forms part of the Project; and 'Project Specific Mitigation' which is in addition to design commitments and which are identified as a result of the assessment of the Project:

- Embedded (Primary) Mitigation: The Project is being developed through an iterative process which involves seeking to avoid or reduce likely environmental effects through the appropriate routeing and siting of the key infrastructure and encompasses further embedded measures (e.g. design refinements and construction controls) This involves seeking to avoid or reduce likely environmental effects through design interventions led by the EIA topic leads.
- Additional (Secondary) Mitigation: Project specific mitigation refers to measures which will be identified and proposed as a result of the assessment. These will be presented within each of the topic chapters. These will be identified to further avoid or reduce identified likely significant adverse environmental effects where they cannot be mitigated through the design of the Project.
- Standard Practice (Tertiary) Mitigation: these are standard industry best practice measures which would generally be implemented regardless of the EIA Report.

Assessment of Residual Effects

2.5.25 The Assessment of Residual Effects will be reported in each topic chapter and summarised in Chapter 18. Residual effects are those that are predicted to remain after mitigation measures have been implemented. The significance of residual effects is assessed using the criteria described in preceding sections. As noted above the approach taken to the EIA of the Project means that much of the mitigation is an inherent part of its design and how it will be constructed. As a result, the significance of some residual environmental effects may be the same as the significance of the likely environmental effects. It should be noted that this is not because they have not been mitigated but rather that by incorporating mitigation into the design and construction of the Project from the outset, effects have been mitigated as far as possible. This may mean that there is more substantive reporting of the likely effects as opposed to the residual effects.

Compensatory and enhancement measures

2.5.26 Compensation and enhancement measures sit alongside avoidance and mitigation as part of the overall approach to managing environmental effects. They are typically applied once it is clear that adverse effects cannot be fully avoided or reduced. Compensatory and enhancement measures are defined as follows:

- Compensation measures are implemented to offset residual adverse effects. They aim to provide like-for-like replacement for what has been lost, for example, if habitat loss cannot be avoided, compensation might involve creating or restoring habitat of equivalent ecological value elsewhere.
- Enhancement measures are included to deliver a net environmental benefit, these go beyond mitigation and compensation to improve environmental conditions.

2.5.27 Compensatory and enhancement measures are reported in topic chapters where applicable.