

Lower Thames Crossing
6.3 Environmental Statement
Appendices
Appendix 8.23 – Terrestrial
Biodiversity
Legislation and Policy

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Lower Thames Crossing

6.3 Environmental Statement Appendices Appendix 8.23 – Terrestrial Biodiversity Legislation and Policy

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1 Terrestrial biodiversity legislation and policy framework

1.1 Legislation and policy

1.1.1 This Terrestrial Biodiversity assessment has been undertaken in accordance with relevant legislation, together with national, regional and local plans and policies.

Legislation

1.1.2 Relevant legislation that has been considered in the environmental assessment is presented in Table 1.1. The Planning Statement (Application Document 7.2) provides an assessment of the Project’s strategic alignment and conformity with the National Policy Statement for National Networks (NPSNN).

1.1.3 A number of the sources of legislation referred to throughout the ES, including this chapter, derive from the law of the European Union (EU). It is noted that the impact of European legislation may need to be revised following the UK’s exit from the EU but much EU-derived domestic legislation continues to have effect in domestic law. Relevant legislation is included in Table 1.1.

Table 1.1 Legislative requirements

Scale	Description of Legislation
European	<p>Conservation of Habitats and Species Regulations 2017 (as amended)</p> <p>Conservation of Habitats and Species Regulations 2017 (as amended), transposes the Habitats Directive (Council Directive 92/43/EEC) on the conservation of natural habitats and of wild flora and fauna (the Habitats Directive). These regulations also transpose certain elements of the Wild Birds Directive (Directive 2009/147/EC).</p> <p>This assessment has considered the potential for the Project to cause adverse effects on designated habitats and features, as a result of proximity of designated sites, and the presence of European Protected Species. This is a parallel assessment to the Habitat Regulations Assessment undertaken to support the Project (Application Document 6.5).</p>
International	<p>The Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (the Ramsar Convention or Wetlands Convention)</p> <p>Ramsar sites are wetlands of international importance designated under the Convention. They are recognised as sites of international importance and UK Government policy affords Ramsar sites the same level of protection as Special Protection Areas (SPA) and Special Areas of Conservation (SAC) comprising the national site network within the UK.</p> <p>This assessment has considered the potential for the Project to affect site integrity owing to the proximity of a Ramsar site.</p>

Scale	Description of Legislation
National	<p>The Water Environment (Water Framework Directive) [WFD] (England and Wales) Regulations 2017</p> <p>These regulations transpose Directive 2000/60/EC and establish a legal framework to protect and restore clean water across England and Wales. The Directive sets out a series of objectives which include improving the water environment to achieve Good Ecological Status or Potential (for 'heavily modified' and 'artificial' water bodies) and implementing mitigation to support the water environment at a catchment and water body scale.</p> <p>This assessment has considered the Project activities that could affect the water environment achieving Good Ecological Status and no deterioration of status.</p>
National	<p>Environment Act (2021)</p> <p>The Act makes provision for targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards; about water; about nature and biodiversity; for conservation covenants; about the regulation of chemicals; and for connected purposes.</p> <p>The Environment Act will be underpinned by secondary legislation, which is currently being consulted on in respect of mandatory Biodiversity Net Gain. The transition period for Nationally Significant Infrastructure Projects (NSIP) is likely to come to an end in autumn 2025 by which time a '<i>biodiversity gain statement</i>' or statements will have been brought forward and agreed in Parliament setting out the Biodiversity Gain Objective required to be delivered by NSIPs. This is expected to be a minimum of 10%. Whilst there is no current legal requirement for the Project to provide BNG, the design has been developed to achieve the best outcomes for biodiversity and has been proactive in assessing measurable changes in biodiversity.</p>
European	<p>Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979)</p> <p>The Bonn Convention aims to ensure conservation of migratory species and their habitats by providing strict protection for endangered migratory species (listed in Appendix I of the Convention), concluding multilateral agreements for the conservation and management of migratory species which require or would benefit from international cooperation (listed in Appendix II of the Convention), and by undertaking cooperative research activities.</p> <p>This assessment has considered the Project activities that could affect the conservation of migratory species and their habitats, during the planning stages.</p>
European	<p>Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979)</p>

Scale	Description of Legislation
	<p>The Bern Convention aims to ensure conservation of wild flora and fauna species and their habitats, particularly those that are endangered or vulnerable. Such species are specified in the appendices to the Convention.</p> <p>This assessment has considered the Project activities that could affect the conservation of wild flora and fauna.</p>
European	<p>The Convention on Biological Diversity 1992</p> <p>The Convention on Biological Diversity, also known as the Biodiversity Convention, is a multilateral treaty. The Convention has three main goals, including the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from genetic resources.</p> <p>This assessment has considered the biological diversity within the Order Limits and includes measures to protect and enhance biodiversity.</p>
National	<p>Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)</p> <p>The Wildlife and Countryside Act 1981, as amended by Schedule 9 of the Countryside and Rights of Way Act 2000, provides protection to Sites of Special Scientific Interest (SSSIs) and a schedule of species with elevated protection.</p> <p>This assessment has considered the potential for the Project to affect protected species, owing to the proximity of SSSI sites.</p>
National	<p>The Natural Environment and Rural Communities (NERC) Act 2006</p> <p>The Act imposes a ‘duty to conserve biodiversity’ on public authorities, including members of the Examining Authority and the relevant Secretary of State in the case of NSIPs. Section 41 of the Act provides details of the habitats and species which are of ‘Principal Importance’ for the purposes of conserving biodiversity in England.</p> <p>This assessment has considered the potential for the Project to affect the habitats and species of principal importance which have been previously identified within the Project Order Limits.</p>
National	<p>The Countryside and Rights of Way Act 2000</p> <p>The Act aims to amend the UK law relating to nature conservation and the protection of wildlife. It provides for the improved protection and management of SSSIs and includes new and enhanced powers for conservation authorities to refuse consent for damaging activities.</p> <p>This assessment has considered the potential for the Project to affect wildlife and SSSIs.</p>
National	<p>The Salmon and Freshwater Fisheries Act 1975</p> <p>The Act consolidates the Salmon and Freshwater Fisheries Act 1923 and certain other enactments relating to salmon and freshwater fisheries. It aims to protect salmon and trout from commercial poaching, to protect migration routes, to prevent</p>

Scale	Description of Legislation
	<p>wilful vandalism and neglect of fisheries, ensure correct licensing and water authority approval.</p> <p>This assessment has considered the potential for the Project to affect migration routes which may be bisected by the Order Limits.</p>
National	<p>The Protection of Badgers Act 1992</p> <p>The Protection of Badgers Act 1992 consolidates and improves previous legislation (including the Badgers (Further Protection) Act 1991). It serves to make it an offence to kill, injure or take a badger, or to damage or interfere with a sett unless a licence is obtained from a statutory authority.</p> <p>The assessment has considered the presence of badgers and their setts within the Order Limits and includes measures to protect these features from unlawful damage or interference.</p>
National	<p>The Hedgerows Regulations 1997</p> <p>The Hedgerows Regulations 1997 are enforced under the Environment Act 1995 and were created to protect hedgerows, in particular restrict the removal of hedgerows, or parts of hedgerows which are over 20m in length. In this case, removal includes digging up and replanting elsewhere, as well as removing from the land completely or destroying in the course of other actions. This includes developments or activities that destroy the roots, causing the vegetation to die.</p> <p>The assessment has considered the presence of hedgerows within the Order Limits and includes measures to mitigate and compensate for the unavoidable loss of hedgerows.</p>

Policy

- 1.1.4 National policies are presented in Table 1.2 and Table 1.3, with the Project response to these requirements. The principal National Policy Statement relevant to the Project is the National Policy Statement for National Networks. In addition, to construct the Project, a number of utility assets require diversion, five of which are of the scale that would constitute NSIPs in their own right. The Project is required to be assessed against both the National Policy Statement for National Networks (NPSNN) as well as the Overarching National Policy Statement for Energy (EN-1), National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) and National Policy Statement for Electricity Infrastructure (EN-5). Where there is duplication of requirements presented in the various relevant National Policy Statements, these have been combined and a single Project response to the policy issue is provided in the table.
- 1.1.5 Table 1.4 presents regional and local policies that have been considered during the development of the Project and the DCO application.
- 1.1.6 Further detail on policy compliance can be found in the Planning Statement (Application Document 7.2).

Table 1.2 National policy framework and the Project response

Reference	Requirement	Project response
National Policy Statement for National Networks (NPS NN) (Department for Transport, 2014)		
<p>Paragraph 4.15 (additionally found within Paragraph 4.2.1 of the Overarching National Policy Statement for Energy (EN-1))</p>	<p><i>'All proposals for projects that are subject to the European Union's Environmental Impact Assessment Directive and are likely to have significant effects on the environment, must be accompanied by an environmental statement (ES), describing the aspects of the environment likely to be significantly affected by the project. The Directive specifically requires an environmental impact assessment to identify, describe and assess effects on human beings, fauna and flora, soil, water, air, climate, the landscape, material assets and cultural heritage, and the interaction between them. Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 sets out the information that should be included in the environmental statement including a description of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project, and also the measures envisaged for avoiding or mitigating significant adverse effects.'</i></p>	<p>The application is accompanied by an ES which describes the likely significant effects of the Project on flora and fauna determined through the assessment process in accordance with the NPSNN requirements (see Section 8.6 of Chapter 8 (Application Document 6.1)). Measures for avoiding or mitigating significant adverse effects are outlined in Section 8.5 of Chapter 8.</p>

Reference	Requirement	Project response
Paragraph 4.23	<i>‘Applicants are required to provide sufficient information with their applications for development consent to enable the Secretary of State to carry out an Appropriate Assessment if required. This information should include details of any measures that are proposed to minimise or avoid any likely significant effects on a European site. The information provided may also assist the Secretary of State in concluding that an appropriate assessment is not required because significant effects on European sites are sufficiently unlikely that they can be excluded.’</i>	A Habitats Regulations Assessment has been undertaken and submitted in support of the DCO application (Application Document 6.5).
Paragraph 5.22 (additionally found within Paragraph 5.3.3 of the Overarching National Policy Statement for Energy (EN-1))	<i>‘Where the project is subject to EIA the applicant should ensure that the environmental statement clearly sets out any likely significant effects on internationally, nationally and locally designated sites of ecological or geological conservation importance (including those outside England) on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity and that the statement considers the full range of potential impacts on ecosystems.’</i>	<p>The ES sets out the baseline regarding designated sites, protected and notable species and habitats of principal importance (see Section 8.4 of Chapter 8).</p> <p>The ES also describes the likely significant effects of the Project on these features and outlines mitigation measures (see Sections 8.5, 8.6 and 8.7 of Chapter 8).</p>
Paragraph 5.23 (additionally found within Paragraph 5.3.4 of the Overarching National Policy Statement for Energy (EN-1))	<i>‘The applicant should show how the Project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.’</i>	The ES identifies the opportunities taken to protect and enhance biodiversity and geological conservation interests (see Section 8.5 of Chapter 8).

Reference	Requirement	Project response
Paragraph 5.25 (additionally found within Paragraph 5.3.7 of the Overarching National Policy Statement for Energy (EN-1))	<i>‘...development should avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives.’</i>	While the development has sought to avoid significant harm to biodiversity, it cannot be avoided in every case. In such cases the consideration of alternatives appraisal (Chapter 3: Assessment of Reasonable Alternatives) has informed the Project’s design. For example, the location of the South Portal was identified to mitigate adverse effects on biodiversity. Other measures are proposed to mitigate likely adverse effects on biodiversity as far as practicable (see Section 8.5 of Chapter 8).
	<i>‘The applicant may also wish to make use of biodiversity offsetting in devising compensation proposals to counteract any impacts on biodiversity which cannot be avoided or mitigated. Where significant harm cannot be avoided or mitigated, as a last resort, appropriate compensation measures should be sought.’</i>	The Project has considered the most appropriate ways to mitigate adverse effects which include working with third parties on conservation projects to reduce residual effects. Where significant harm to biodiversity cannot be avoided or reduced to acceptable levels through

Reference	Requirement	Project response
		mitigation, compensation measures are proposed (see Section 8.5 of Chapter 8). This includes, for example, the creation of new areas of open mosaic habitat to compensate for the unavoidable loss of habitat within non-statutory designated sites such as Blackshots Nature Area Local Wildlife Site, as well as other semi-natural areas.
Paragraph 5.27 (additionally found within Paragraph 5.3.9 of the Overarching National Policy Statement for Energy (EN-1))	<p><i>‘The most important sites for biodiversity are those identified through international conventions and European Directives. The Habitats Regulations provide statutory protection for European sites [...] The National Planning Policy Framework states that the following wildlife sites should have the same protection as European sites:</i></p> <ul style="list-style-type: none"> <i>• potential Special Protection Areas [pSPAs] and possible Special Areas of Conservation [pSACs]</i> <i>• listed or proposed Ramsar sites, and</i> <p><i>sites identified, or required, as compensatory measures for adverse effects on European sites, [pSPAs, pSACs] and listed or proposed Ramsar sites.’</i></p>	Those sites that are identified through international conventions and European Directives (European sites) as being the most important for biodiversity and as such are valued as being of international importance (see Section 8.4 of Chapter 8). Within the ES, pSPAs, pSACs, listed or proposed Ramsar sites, and sites identified or required as compensatory measures for adverse effects on European sites, pSPAs, pSACs and listed or proposed Ramsar sites,

Reference	Requirement	Project response
		<p>have all been considered as receiving the same level of protection. However, none of these are present within the study area.</p>
<p>Paragraph 5.29 (additionally found within Paragraph 5.3.11 of the Overarching National Policy Statement for Energy (EN-1))</p>	<p><i>‘Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect on the site’s notified special interest features is likely, an exception should be made only where the benefits of the development at this site clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs.’</i></p>	<p>The design of the Project has been iterative in an effort to mitigate then compensation, as far as reasonably practicable, likely adverse effects on SSSIs. where compensation has been proposed in the form of new habitat creation, this has been designed not only to provide new areas of high quality semi-natural habitat that aligns with that affected by the Project, but also to locate this habitat creation to strengthen the resilience of the network of designated sites and habitats.</p> <p>Where residual significant effects occur, the Need for the Project (Application Document 7.1), Section 3 sets out the needs case for the Project. The Planning Statement</p>

Reference	Requirement	Project response
		<p>(Application Document 7.2) sets out the planning balance between the economic, social and environmental benefits the Project would generate against any adverse effects resulting from its construction and operation. The benefits of the development are considered clearly to outweigh the impacts of the project on qualifying features of the SSSIs.</p>
<p>Paragraph 5.32 (additionally found within Paragraph 5.3.14 of the Overarching National Policy Statement for Energy (EN-1)</p>	<p><i>‘Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.’</i></p>	<p>The design of the Project has been iterative in an effort to avoid loss or deterioration, as far as reasonably practicable, of ancient woodland.</p> <p>Where residual significant effects occur, the Need for the Project (Application Document 7.1), Section 3 sets out the needs case for the Project. The Planning Statement (Application Document 7.2) sets out the planning balance between the economic, social and environmental benefits the Project would generate</p>

Reference	Requirement	Project response
		<p>against any adverse effects resulting from its construction and operation. This concludes that the national need for and benefits of the Project would outweigh the unavoidable loss of irreplaceable habitats, including ancient woodland, aged (or ancient) trees and veteran trees. A detailed assessment of the likely effects of the Project on aged and veteran trees is provided in Appendix 7.12: Arboricultural Impact Assessment (Application Document 6.3), which includes the reasons for the loss of such trees.</p>
<p>Paragraph 5.36 (additionally found within Paragraph 5.3.18 of the Overarching National Policy Statement for Energy (EN-1))</p>	<p><i>‘Applicants should include appropriate mitigation measures as an integral part of their proposed development, including identifying where and how these will be secured. In particular, the applicant should demonstrate that:</i></p> <ul style="list-style-type: none"> • <i>during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works;</i> • <i>during construction and operation, best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised (including because of transport access arrangements);</i> • <i>habitats will, where practicable, be restored after construction works have finished;</i> 	<p>The landscape, biodiversity and other topic groups have worked collaboratively to ensure construction activities are confined to the minimum area and reduce disturbance and/or damage to species and habitats as far as is practicable. Habitat creation and restoration,</p>

Reference	Requirement	Project response
	<ul style="list-style-type: none"> <i>developments will be designed and landscaped to provide green corridors and minimise habitat fragmentation where reasonable; opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals, for example through techniques such as the 'greening' of existing network crossing points, the use of green bridges and the habitat improvement of the network verge.'</i> 	<p>green infrastructure and other mitigation and compensation measures have been developed in an integrated manner to deliver multiple environmental benefits (see Section 8.5 of Chapter 8). Opportunities to improve and enhance the existing habitats has been taken where appropriate. Good practice measures will be followed during construction and operation of the Project to ensure the risk of disturbance or damage to species or habitats is minimised. This is outlined further in Section 8.5 of Chapter 8.</p>
<p>Overarching National Policy Statement for Energy (NPS EN-1) (Department of Energy and Climate Change, 2011a)</p>		
<p>Paragraph 4.3.1</p>	<p><i>'Prior to granting a development consent order, the IPC must, under the Habitats and Species Regulations, (which implement the relevant parts of the Habitats Directive and the Birds Directive in England and Wales) consider whether the project may have a significant effect on a European site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects. Further information on the requirements of the Habitats and Species Regulations can be found in a Government Circular. Applicants should also refer to Section 5.3 of this NPS on biodiversity and geological conservation. The applicant should seek the advice of Natural England and/or the Countryside Council for Wales, and provide the IPC with such information</i></p>	<p>A Habitats Regulations Assessment has been undertaken and submitted in support of the DCO application (Application Document 6.5).</p>

Reference	Requirement	Project response
	<p><i>as it may reasonably require to determine whether an Appropriate Assessment is required. In the event that an Appropriate Assessment is required, the applicant must provide the IPC with such information as may reasonably be required to enable it to conduct the Appropriate Assessment. This should include information on any mitigation measures that are proposed to minimise or avoid likely effects.'</i></p>	
<p>National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4) (Department of Energy and Climate Change, 2011b)</p>		
<p>Paragraph 2.21.1</p>	<p><i>'Sections 4.3 and 5.9 of EN-1 sets out the general principles that should be applied in the assessment of biodiversity and landscape and visual impacts. Additional considerations apply during the construction of a pipeline (which, without mitigation, can affect both landscape and ecology). These comprise the effect upon specific landscape elements within and adjacent to the pipeline route, such as grasslands, field boundaries (hedgerows, hedgebanks, drystone walls, fences), trees, woodlands, and watercourses. There will also be temporary visual impacts caused by the need to access the working corridor and to remove flora and soil. The working width of the pipeline will vary depending on the surrounding terrain. Temporary impacts could include large excavations where deep pits are needed for boring beneath rivers, roads and sensitive features'</i></p>	<p>The application is accompanied by an ES which describes the likely significant effects of the Project on flora and fauna determined through the assessment process in accordance with the NPSNN requirements (see Section 8.6 of Chapter 8). Measures for avoiding or mitigating significant adverse effects are outlined in Section 8.5 of Chapter 8.</p>
<p>Paragraph 2.21.5</p>	<p><i>'Mitigation measures to protect the landscape and ecology could include reducing the working width required for the installation of the pipeline in order to reduce the impact on the landscape where it will not be possible to fully reinstate the route.'</i></p>	<p>The landscape, biodiversity and other topic groups have worked collaboratively to ensure construction activities are confined to the minimum area and reduce disturbance and/or damage to species and</p>

Reference	Requirement	Project response
		habitats as far as is practicable.
Paragraph 2.21.6	<i>'In circumstances where the habitat to be crossed contains ancient woodland, trees subject to a Tree Preservation Order, or hedgerows subject to the Hedgerows Regulations 1997, the applicant should consider whether it would be feasible to use horizontal direct drilling under the ancient woodland or thrust bore under the protected tree or hedgerow and the IPC should consider requiring this, where not included in the proposal'</i>	The landscape, biodiversity and other topic groups have worked collaboratively to ensure construction activities are confined to the minimum area and reduce disturbance and/or damage to species and habitats as far as is practicable.
National Policy Statement for Electricity Networks Infrastructure (NPS EN-5) (Department of Energy and Climate Change, 2011c)		
Paragraph 2.7.1	<i>'Generic biodiversity effects are covered in Section 5.3 of EN-1. However, large birds such as swans and geese may collide with overhead lines associated with power infrastructure, particularly in poor visibility. Large birds in particular may also be electrocuted when landing or taking off by completing an electric circuit between live and ground wires. Even perching birds can be killed as soon as their wings touch energised parts.'</i>	The application is accompanied by an ES which describes the likely significant effects of the Project on flora and fauna determined through the assessment process in accordance with the NPSNN requirements (see Section 8.6 of Chapter 8). Measures for avoiding or mitigating significant adverse effects are outlined in Section 8.5 of Chapter 8.
Paragraph 2.7.4	<i>'Careful siting of a line away from, or parallel to, but not across, known flight paths can reduce the numbers of birds colliding with overhead lines considerably.'</i>	The application is accompanied by an ES which describes the likely significant effects of the

Reference	Requirement	Project response
		Project on flora and fauna determined through the assessment process in accordance with the NPSNN requirements (see Section 8.6 of Chapter 8).
Paragraph 2.7.5	<i>‘Making lines more visible by methods such as the fitting of bird flappers and diverters to the earth wire, which swivel in the wind, glow in the dark and use fluorescent colours designed specifically for bird vision can also reduce the number of deaths. The design and colour of the diverters will be specific to the conditions – the line and pylon/transmission tower specifications and the species at risk.’</i>	An assessment of high potential areas for bird strikes has been undertaken. Mitigation measures will be implemented where there is a high risk of bird strikes in accordance with the NPS EN-5 requirements (see Section 8.6 of Chapter 8).
Paragraph 2.7.6	<i>‘Electrocution risks can be reduced through the design of crossarms, insulators and the construction of other parts of high voltage power lines so that birds find no opportunity to perch near energised power lines on which they might electrocute themselves.’</i>	The application is accompanied by an ES which describes the likely significant effects of the Project on flora and fauna determined through the assessment process in accordance with the NPSNN requirements (see Section 8.6 of Chapter 8). Measures for avoiding or mitigating significant adverse effects are outlined in Section 8.5 of Chapter 8.

Reference	Requirement	Project response
National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2021)		
Paragraph 174 and 180	<p><i>‘Planning policies and decisions should contribute to and enhance the natural and local environment by:</i></p> <p><i>a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);</i></p> <p><i>b) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.’</i></p> <p><i>When determining planning applications, local planning authorities should apply the following principles:</i></p> <p><i>a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;</i></p> <p><i>b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;</i></p> <p><i>c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and</i></p>	<p>The Project has been designed to reduce adverse effect on sites of biodiversity value whilst still meeting its overall objectives. Where adverse effects are predicted to occur, these have been mitigated and compensated appropriately.</p> <p>The Project would have adverse effect on a number of designated sites, as a result of direct habitat loss as well as deterioration in habitat quality through impacts such as increased nitrogen deposition. These designated sites include SSSI and local wildlife sites, as well as irreplaceable habitats in the form of ancient woodland.</p> <p>The overarching approach to the design of ecological mitigation and compensation is to provide more high quality habitats which link</p>

Reference	Requirement	Project response
	<p><i>d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'</i></p>	<p>retained habitats and designated sites, building resilience into this landscape-scale network against future pressures such as climate change (see Section 8.5 of Chapter 8).</p> <p>Examples of this are the creation of new areas of woodland to compensate for the unavoidable loss of woodland habitats, and the creation of wildlife-rich woodland, grassland and open mosaic habitats which would offset habitat loss and degradation, and create new links between existing semi-natural habitats and designated sites. Hedgerow planting and the provision of green bridges further strengthens the coherence of the ecological network.</p> <p>Measures to plant a more diverse understorey of trees and shrubs and to change coppice rotation in Shorne Woods Country Park were agreed with Kent County Council and</p>

Reference	Requirement	Project response
		<p>began in 2022 as part of a ten year programme to enhance the diversity of the woodland, increasing its value for dormice.</p> <p>It is recognised that, whilst the Project has adverse effects on statutory designated sites and irreplaceable habitat such as ancient woodland, the design has looked to provide biodiversity gains wherever possible. The Project also includes further measures to enhance the environment and provide conservation legacy benefits by working in partnership with Essex Wildlife Trust to support them in meeting their objective of providing long-term conservation benefits (see Section 8.5 of Chapter 8).</p>
<p>Paragraphs 181 and 182</p>	<p><i>'The following should be given the same protection as habitats sites:</i></p> <p><i>a) potential Special Protection Areas and possible Special Areas of Conservation;</i></p> <p><i>b) listed or proposed Ramsar sites; and</i></p>	<p>A Habitats Regulations Assessment has been undertaken and submitted in support of the DCO application (Application Document 6.5).</p>

Reference	Requirement	Project response
	<p><i>c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.</i></p> <p><i>The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.'</i></p>	

Table 1.3 Other National policies relevant to Terrestrial Biodiversity

Reference	Requirement	Project response
<p>25 Year Environment Plan (Defra, 2019)</p>	<p>Launched in January 2018, the 25 Year Environment Plan outlines the UK Government’s goals for improving the environment by creating richer habitats for wildlife, improving air and water quality and minimising waste. With regard to terrestrial biodiversity, the plan aims to:</p> <ul style="list-style-type: none"> • Restore 75% of terrestrial and freshwater protected sites to favourable condition. • Create or restore 500,000 hectares of wildlife-rich habitat outside the protected site network, focusing on priority habitats. • Recover threatened, iconic or economically important species of animals, plants and fungi, and where possible to prevent human induced extinction or loss of known threatened species in England. • Increase woodland in England in line with the aspiration of 12% cover by 2060. 	<p>The ES sets out the baseline regarding protected wildlife sites, protected and notable species and habitats of principal importance (see Section 8.4 of Chapter 8). It describes the likely significant effects of the Project on these features and outlines mitigation and compensation measures to address these effects (see Section 8.4, 8.5 and 8.6 of Chapter 8). This includes proposals to minimise adverse effects on protected sites and create wildlife-rich habitats, including extensive areas of woodland and open mosaic habitat. Although some adverse effects on sites, habitats and species would be unavoidable, the Project would provide overall improvements to the environment by, for example, strengthening, via planted habitat corridors, links between existing sites and habitats that would be retained as a result of the Project. This would facilitate the dispersal of wildlife into new areas and reduce habitat</p>

Reference	Requirement	Project response
		<p>fragmentation. The Project also includes further measures to enhance the environment and provide conservation legacy benefits by working in partnership with Essex Wildlife Trust to support them in meeting their objective of providing long-term conservation benefits (see Section 8.5 of Chapter 8).</p> <p>The status of the 25 year plan under the Environment Act is proposed to make this the first Environmental Improvement Plan, and as such targets and strategies will be produced directly and through secondary legislation. When this legislation is enacted, the Project will review them in accordance with the ecological baseline found impacted by both construction and operation of the Project.</p>
<p>Biodiversity 2020 (Defra, 2011)</p>	<p>Published in 2011, Biodiversity 2020 is a national strategy for England’s wildlife and ecosystem services. It outlines the government’s ambition to halt overall loss of England’s biodiversity by 2020, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.</p>	<p>The Project has considered the most appropriate ways to avoid and mitigate adverse effects on terrestrial biodiversity. Where significant harm to biodiversity cannot be avoided or reduced to acceptable levels through mitigation, compensation measures are proposed (see Section 8.5 of Chapter 8). This includes, for example, the creation of new areas of woodland to compensate for the unavoidable loss of woodland habitats and the creation of coherent ecological networks through hedgerow planting and the construction of green bridges to avoid habitat fragmentation either side of the Project.</p>

Table 1.4 Regional and local policies for Terrestrial Biodiversity

Reference	Requirement
Kent Environment Strategy (Kent County Council, 2016)	Priority 5: Conserve and enhance the quality and supply of the county of Kent’s natural and historic resources and assets.
Annual Plan 2022 – 2023 (Essex County Council, 2022)	Aim 2: High Quality Environment
The London Plan 2021 – The Spatial Development Strategy for Greater London (Greater London Authority, 2021)	Policy G1 Green Infrastructure Policy G3 Metropolitan Open Land Policy G4 Open space Policy G5 Urban greening Policy G6 Biodiversity and access to nature Policy G7 Trees and woodlands Policy SI 1 Improving air quality
Gravesham Local Plan Core Strategy (Adopted 2014)	CS12: Green Infrastructure
Thurrock Council – Core Strategy and Policies for Management of Development (Adopted 2015)	CSTP18: Green Infrastructure CSTP19: Biodiversity PMD7: Biodiversity, Geological Conservation and Development
London Borough of Havering Council – Core Strategy and Development Control Policies Development Plan Document (Adopted 2021)	Policy 29 Green Infrastructure Policy 30 Biodiversity and geodiversity Policy 31 Rivers and river corridors Policy 33 Air Quality Policy 34 Managing pollution
Brentwood Council – Replacement Local Plan (Adopted 2022)	NE01: Protecting and Enhancing the Natural Environment NE02: Green and Blue Infrastructure NE08: Air Quality

Reference	Requirement
Maidstone Borough Local Plan (Maidstone Borough Council, 2017)	Policy DM 1 Principles of Good Design Policy DM 3 Natural Environment Policy DM 6 Air Quality
Tonbridge and Malling Borough Council Local Development Framework, Core Strategy (Tonbridge and Malling Borough Council, 2007)	Policy CP1 Sustainable development Policy CP7 Areas of Outstanding Natural Beauty, including landscape, wildlife and geological interest Policy CP8 Sites of Special Scientific Interest Policy CF24 Achieving a High Quality Environment

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