FENWICK SOLAR FARM

Fenwick Solar Farm

EN010152

Environmental Statement

Volume III Appendix 9-1: Legislation, Policy and Guidance (Water Environment)

Document Reference: EN010152/APP/6.3

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

October 2024
Revision Number: 00

BOOM POWER

BOOM-POWER.CO.UK

Revision History

Revision Number	Date	Details
00	October 2024	DCO application

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1. Introduction

1.1 Purpose of this Appendix

1.1.1 This Environmental Statement (ES) appendix identifies and describes the legislation, policy and supporting guidance considered relevant to the assessment of the likely significant effects of the Scheme on the Water Environment.

1.1.2 Legislation and policy are considered at national and local levels.

1.1.3 This appendix does not assess the Scheme against legislation and policy, instead the purpose of considering legislation and policy is twofold:

a. To identify legislation and policy that could influence the importance of receptors (and therefore the significance of effects) and any requirements for mitigation; and

b. To identify legislation and policy that could influence the methodology to be used within the ES. For example, a policy may require the assessment of an impact or the use of a specific methodology.

1.1.4 The relevant legislation and policy is assessed within the **Planning Statement [EN010152/APP/7.1]**. The following sections identify and describe the legislation, policy and supporting guidance considered specifically relevant to the Water Environment assessment.

2. National Legislation, Policy and Guidance

2.1.1 Legislation, policy and guidance relating to the Water Environment, and pertinent to the Scheme, comprises:

2.2 Legislation

2.2.1 Regulation 5(2) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref. 1) requires that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the likely significant direct and indirect effects of the Scheme on the water environment.

2.2.2 The legislation relevant to the Water Environment and pertinent to the Scheme includes the following, with a brief summary of relevance to the Scheme provided in each case. Please note that details of European Directives are not included, just the national legislation that implements them:

a. Environment Act 2021 (Ref. 2): enables better environmental protection to be included into law and includes new binding targets for water, which need to be considered by new development that may affect the water environment;

b. Water Act 2014 (Ref. 3): mainly deals with regulating the impact of water supply on the water environment and the price of water;

c. Flood and Water Management Act 2010 (Ref. 4): requires flood management authorities to manage risks in connection with flooding and prepare Strategic Flood Risk Assessments, for which new development must take into account;

d. Land Drainage Act 1991 (Ref. 5): sets out the functions of internal drainage boards and local authorities (as Lead Local Flood Authority) in relation to land drainage of Ordinary Watercourses. New development wanting to do works that may affect the flow in Ordinary Watercourse may require a consent from the relevant authority);

e. Water Resources Act 1991 (Ref. 6): regulates water resources, water quality and pollution and flood defences, for which new developments may need to take into account;

f. Environmental Protection Act 1990 (Ref. 7): brings together pollution prevention and disposal regulations, imposes duty of care on those involved with any waste stream;

g. Salmon and Freshwater Fisheries Act 1975 (Ref. 8): sets out protection for migration routes of salmon and trout;

h. Water Environment (Water Framework Directive) (WFD) (England and Wales) Regulations 2017 (Ref. 17): these regulations aim to improve and integrate the way water bodies are managed throughout the UK for which new development must be compliant or otherwise be carefully justified and include all necessary mitigation and compensation;

i. Environmental Damage (Prevention and Remediation) Regulations 2017 (Ref. 9): aims to prevent and remediate damage to the environment;

j. Environmental Permitting (England and Wales) Regulations 2016 (Ref. 10): aims to streamline the legislative system for activities in England and Wales including those for construction activities which may pose an alteration of flood risk. New developments that may need to do works to a Main River or discharge unclean water, trade or process effluent into a controlled water may need to apply for a permit;

k. Eels (England and Wales) Regulation 2009 (Ref. 11): gives powers to the regulators to implement recovery measures in all freshwater and estuarine waters in England and Wales and for which new developments that could impact eels should take into account;

l. Control of Pollution (Oil Storage) (England) Regulations 2001 (Ref. 12): sets out the requirements for the storage of oil for quantities over 200 litres, which is relevant to any development that may involve the storage of oil during construction or operation;

m. Water Resources Act (Amendment) (England and Wales) Regulations 2009 (Ref. 13): regulates water resources, water quality and pollution and flood defence and should be taken into account where necessary by any new development;

n. Control of Substances Hazardous to Health (Amendment) Regulations 2004 (Ref. 14): requirements to control and manage risks from hazardous substances, such as may be used on construction sites or as part of the operation of new developments;

o. Anti-Pollution Works Regulations 1999 (Ref. 15): outlines the contents of any-pollution works notices served under the Water Resources Act 1991;

p. The Water Framework Directive (WFD) (Standards and Classification) Directions 2015 (Ref. 16): includes directions for classification of surface water and groundwater bodies for which new developments must consider as part of any WFD Assessment; and

q. The Building Regulations. Approved Document Part H: Drainage and Waste Disposal (2010) (Ref. 18); includes details of foul water drainage both above and below ground.

2.3 Planning Policy

National Policy

National Policy Statements

2.3.1 The type of energy generating technology incorporated by the Scheme (solar photovoltaic generation) is specifically referenced within the following National Policy Statements (NPS) therefore the EIA takes these NPSs into account:

a. Overarching National Policy Statement for Energy (EN-1) (November 2023) (Ref. 19): overarching policy statement setting out the requirements for consultation, flood risk assessment, and water quality and resources. Criteria for site specific flood risk assessments is included and that mitigation for surface water runoff should include the use of Sustainable Drainage Systems (SuDS);

b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (November 2023) (Ref. 20): contains requirements for the inclusion of climate change adaptation and potential for impact of increased drought as a result of higher temperatures. Water management is a critical component for ground mount solar plants, with drainage, flood attenuation, natural wetland habitat and water quality management. Of particular note is the requirement that for access tracks permeable tracks should be used, and localised SuDS used to control runoff; and

c. National Policy Statement for Electricity Networks Infrastructure (EN-5) (November 2023) (Ref. 21): includes provision for the inclusion of possible climate change effects on the development of electricity networks infrastructure, including adaptation and resilience, specifically in relation to flooding.

2.3.2 The NPSs set out the Government's energy policy, the need for new infrastructure and guidance for determining an application for a Development Consent Order (DCO). The NPSs include specific criteria and issues which should be covered by applicants in their assessments of the effects of their scheme, and how the decision maker should consider these impacts.

2.3.3 The relevant NPS requirements, together with an indication of where in the ES the information provided to address these requirements, are provided in Table 1.

Table 1: Relevant NPS to the Water Environment

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
National Policy Statement for Energy EN-1		
Paragraph 4.10.5	In certain circumstances, measures implemented to ensure a scheme can adapt to climate change may give rise to additional impacts, for example as a result of protecting against flood risk, there may be consequential impacts on coastal change. In preparing measures to support climate change adaptation applicants should take reasonable steps to maximise the use of nature-based solutions alongside other conventional techniques.	The ES includes a site specific FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) and Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**) for the Scheme. This includes assessment related to climate change adaptation and resilience. The drainage design includes Sustainable Drainage Systems (SuDS) features.
Paragraph 4.10.6	Integrated approaches, such as looking across the water cycle, considering coordinated management of water storage, supply, demand, wastewater, and flood risk can provide further benefits to address multiple infrastructure needs, as well as carbon sequestration benefits.	
Paragraph 4.12.10	The Secretary of State should work on the assumption that the relevant pollution control regime and other environmental regulatory regimes, including those on land drainage, water abstraction and biodiversity, will be properly applied and enforced by the relevant regulator. The Secretary of State should act to complement but not seek to duplicate them.	The ES includes an FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) and Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**) for the Scheme, and all impacts on the water environment are assessed

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
		within **ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]**. During the operation and maintenance phase water abstraction and operational permits are not expected to be required.
Paragraph 4.12.15	Working in close cooperation with EA or NRW and/or the pollution control authority, and other relevant bodies, such as the MMO, the SNCB, Drainage Boards, and water and sewerage undertakers, the Secretary of State should be satisfied, before consenting any potentially polluting developments, that: a. the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework b. the effects of existing sources of pollution in and around the site are not such that the cumulative effects of pollution when the proposed development is added would make that development unacceptable, particularly in relation to statutory environmental quality limits.	Consultation with the Environment Agency and Danvm Internal Drainage Board was initially undertaken on 3 October 2023 and 4 August 2023 respectively. Additional meetings were held with the Danvm IDB on 19 July 2024 and 4 September 2024 to update the IDB on the proposed crossing strategy for board-maintained watercourses and agree on the PRoW and traffic management proposals at Haggs Lane in order to allow for maintenance of Fenwick Lane Drain (East) (URN AAA892) by the IDB. Further meetings with the Environment Agency on the subject of flood risk modelling were held on 17 May 2024 (discussing flood risk

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
		modelling methodology and survey limitations) and on 5 September 2024 (presenting flood risk modelling results and proposed mitigation measures).
Paragraph 5.8.5	Climate change is already having an impact and is expected to have an increasing impact on the UK throughout this century. The UK Climate Projections 2018 show an increased chance of milder, wetter winters and hotter, drier summers in the UK, with more intensive rainfall causing flooding. Sea levels will continue to rise beyond the end of the century, increasing risks to vulnerable coastal communities. Within the lifetime of energy projects, these factors will lead to increased flood risks in areas susceptible to flooding, and to an increased risk of the occurrence of floods in some areas which are not currently thought of as being at risk. A robust approach to flood risk management is a vital element of climate change adaptations; the applicant and the Secretary of State should take account of the policy on climate change adaptation in Section 4.10.	The potential for climate change to result in changes in the future to surface water drainage, and to flood risk is considered within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) and Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**).
Paragraph 5.8.7	Where new energy infrastructure is, exceptionally, necessary in flood risk areas (for example where there are no reasonably available sites in areas at lower risk), policy aims to make it safe for its lifetime without increasing flood risk elsewhere and, where possible, by reducing flood risk overall. It should also be designed and constructed to remain operational in times of flood.	The findings of a site specific flood risk assessment are included within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**). The Framework Drainage Strategy is included within **ES Volume III Appendix 9-4: Framework**

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
		Drainage Strategy [EN010152/APP/6.3].
Paragraph 5.8.9	If, following application of the Sequential Test, it is not possible, (taking into account wider sustainable development objectives), for the project to be located in areas of lower flood risk the Exception Test can be applied as defined in https://www.gov.uk/guidance/flood-risk-and-coastal-change#table2. The test provides a method of allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available.	Application of the Sequential Test and Exception Test are detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).
Paragraph 5.8.10	The Exception Test is only appropriate for use where the Sequential Test alone cannot deliver an acceptable site. It would only be appropriate to move onto the Exception Test when the Sequential Test has identified reasonably available, lower risk sites appropriate for the proposed development where, accounting for wider sustainable development objectives, application of relevant policies would provide a clear reason for refusing development in any alternative locations identified. Examples could include alternative site(s) that are subject to national designations such as landscape, heritage and nature conservation designations, for example Areas of Outstanding Natural Beauty (AONBs), SSSIs and World Heritage Sites (WHS) which would not usually be considered appropriate.	
Paragraph 5.8.11	Both elements of the Exception Test will have to be satisfied for development to be consented. To pass the Exception Test it should be demonstrated that: a. the project would provide wider sustainability benefits to the community that outweigh flood risk; and b. the project will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible will reduce flood risk overall.	Application of the Exception Test is detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.8.12	Development should be designed to ensure there is no increase in flood risk elsewhere, accounting for the predicted impacts of climate change throughout the lifetime of the development. There should be no net loss of floodplain storage and any deflection or constriction of flood flow routes should be safely managed within the site. Mitigation measures should make as much use as possible of natural flood management techniques.	Mitigation measures are set out in FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**). **ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]** includes attenuation features to ensure no increase in surface water runoff from the Order limits.
Paragraph 5.8.13	A site specific flood risk assessment should be provided for all energy projects located in Flood Zones 2 and 3 in England or Zones B and C in Wales. In Flood Zone 1 in England or Zone A in Wales, an assessment should accompany all proposals involving: a. sites of 1 hectare or more; b. land identified by the EA or NRW as having critical drainage problems; c. land identified (for example in a local authority strategic flood risk assessment) as being at increased flood risk in future; d. land that may be subject to other sources of flooding (for example surface water) e. where the EA or NRW, Lead Local Flood Authority, Internal Drainage Board or other body have indicated that there may be drainage problems.	The findings of a site specific flood risk assessment are included within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**). This uses the **ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]** in its assessment.
Paragraph 5.8.14	This assessment should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.	The findings of a site specific flood risk assessment are included within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment**
Paragraph 5.8.15	The minimum requirements for Flood Risk Assessments (FRA) are that they should:	

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	a. be proportionate to the risk and appropriate to the scale, nature and location of the project; b. consider the risk of flooding arising from the project in addition to the risk of flooding to the project; c. take the impacts of climate change into account, across a range of climate scenarios, clearly stating the development lifetime over which the assessment has been made; d. be undertaken by competent people, as early as possible in the process of preparing the proposal; e. consider the vulnerability of those using the site, including arrangements for safe access and escape; f. consider and quantify the different types of flooding (whether from natural and human sources and including joint and cumulative effects) and include information on flood likelihood, speed-of-onset, depth, velocity, hazard and duration; g. identify and secure opportunities to reduce the causes and impacts of flooding overall, making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management; h. consider the effects of a range of flooding events including extreme events on people, property, the natural and historic environment and river and coastal processes; i. include the assessment of the remaining (known as 'residual') risk after risk reduction measures have been taken into account and demonstrate that these risks can be safely managed, ensuring people will not be exposed to hazardous flooding; j. consider how the ability of water to soak into the ground may change with development, along with how the proposed layout of the project may affect drainage systems. Information should include:	**[EN010152/APP/6.3]**). This uses the **ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]** in its assessment.

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	i. Describe the existing surface water drainage arrangements for the site; ii. Set out (approximately) the existing rates and volumes of surface water run-off generated by the site. Detail the proposals for restricting discharge rates; iii. Set out proposals for managing and discharging surface water from the site using SuDS and accounting for the predicted impacts of climate change. If SuDS have been rejected, present clear evidence of why their inclusion would be inappropriate; iv. Demonstrate how the hierarchy of drainage options has been followed; v. Explain and justify why the types of SuDS and method of discharge have been selected and why they are considered appropriate. ; vi. Explain how SuDS have been integrated with other aspects of the development such as open space or green infrastructure, so as to ensure an efficient use of the site; vii. Describe the multifunctional benefits the SuDS will provide; viii. Set out which opportunities to reduce the causes and impacts of flooding have been identified and included as part of the proposed SuDS; ix. Explain how run-off from the completed development will be prevented from causing an impact elsewhere; x. Explain how the SuDS been designed to facilitate maintenance and, where relevant, adoption. Set out plans for ensuring an acceptable standard of operation and maintenance throughout the lifetime of the development; k. detail those measures that will be included to ensure the development will be safe and remain operational during a flooding event throughout the development's lifetime without increasing flood risk elsewhere;	

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	l. identify and secure opportunities to reduce the causes and impacts of flooding overall during the period of construction; and m. be supported by appropriate data and information, including historical information on previous events.	
Paragraph 5.8.17	Development (including construction works) will need to account for any existing watercourses and flood and coastal erosion risk management structures or features, or any land likely to be needed for future structures or features so as to ensure: a. Access, clearances and sufficient land are retained to enable their maintenance, repair, operation, and replacement, as necessary; b. Their standard of protection is not reduced; c. Their condition or structural integrity is not reduced.	The design of the Scheme takes into account the access and clearances required by the Environment Agency and Internal Drainage Boards to ensure they can access and maintain their channels by allowing a 10 m buffer from the watercourses. The FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) assesses existing and future flood risk and sets out any proposed mitigation, as necessary.
Paragraph 5.8.18	Applicants for projects which may be affected by, or may add to, flood risk should arrange pre-application discussions before the official pre-application stage of the NSIP process with the EA or NRW, and, where relevant, other bodies such as Lead Local Flood Authorities, Internal Drainage Boards, sewerage undertakers, navigation authorities, highways authorities and reservoir owners and operators.	Consultation undertaken to date, includes the Environment Agency, Lead Local Flood Authorities and Danvm Internal Drainage Boards.
Paragraph 5.8.19	Such discussions should identify the likelihood and possible extent and nature of the flood risk, help scope the FRA, and identify the information that will be required by SoS	

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	to reach a decision on the application when it is submitted. The SoS should advise applicants to undertake these steps where they appear necessary but have not yet been addressed.	
Paragraph 5.8.20	If the EA, NRW or another flood risk management authority has reasonable concerns about the proposal on flood risk grounds, the applicant should discuss these concerns with the EA or NRW and take all reasonable steps to agree ways in which the proposal might be amended, or additional information provided, which would satisfy the authority's concerns.	
Paragraph 5.8.21	The Sequential Test ensures that a sequential, risk-based approach is followed to steer new development to areas with the lowest risk of flooding, taking all sources of flood risk and climate change into account. Where it is not possible to locate development in low-risk areas, the Sequential Test should go on to compare reasonably available sites with medium risk areas and then, only where there are no reasonably available sites in low and medium risk areas, within high-risk areas.	Application of the Sequential Test is detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).
Paragraph 5.8.23	Consideration of alternative sites should take account of the policy on alternatives set out in Section 4.3 above. All projects should apply the Sequential Test to locating development within the site.	
Paragraph 5.8.24	To satisfactorily manage flood risk, arrangements are required to manage surface water and the impact of the natural water cycle on people and property.	Mitigation measures set out in the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**). The **ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]** includes attenuation features to ensure no

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
		increase in surface water runoff from the Order limits.
Paragraph 5.8.25	In this NPS, the term SuDS refers to the whole range of sustainable approaches to surface water drainage management including, where appropriate: a. source control measures including rainwater recycling and drainage; b. infiltration devices to allow water to soak into the ground, that can include individual soakaways and communal facilities; c. filter strips and swales, which are vegetated features that hold and drain water downhill mimicking natural drainage patterns; d. filter drains and porous pavements to allow rainwater and run-off to infiltrate into permeable material below ground and provide storage if needed; e. basins, ponds and tanks to hold excess water after rain and allow controlled discharge that avoids flooding; and f. flood routes to carry and direct excess water through developments to minimise the impact of severe rainfall flooding.	The Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**) includes the use of attenuation features to ensure drainage mimics natural drainage conditions within the Order limits and takes into account future climate change.
Paragraph 5.8.26	Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.	
Paragraph 5.8.27	The surface water drainage arrangements for any project should, accounting for the predicted impacts of climate change throughout the development's lifetime, be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.	

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.8.28	It may be necessary to provide surface water storage and infiltration to limit and reduce both the peak rate of discharge from the site and the total volume discharged from the site. There may be circumstances where it is appropriate for infiltration facilities or attenuation storage to be provided outside the project site, if necessary, through the use of a planning obligation.	
Paragraph 5.8.29	The sequential approach should be applied to the layout and design of the project. Vulnerable aspects of the development should be located on parts of the site at lower risk and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities should be taken to lower flood risk by reducing the built footprint of previously developed sites and using SuDS.	The sequential approach to the layout/design of the Scheme is detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).
Paragraph 5.8.30	Where a development may result in an increase in flood risk elsewhere through the loss of flood storage, on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development, should be provided.	Mitigation measures are detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) to ensure no increase in flood risk from the Order limits.
Paragraph 5.8.31	Where it is not possible to provide compensatory storage on site, it may be acceptable to provide it off-site if it is hydraulically and hydrologically linked. Where development may cause the deflection or constriction of flood flow routes, these will need to be safely managed within the site.	
Paragraph 5.8.32	Where development may contribute to a cumulative increase in flood risk elsewhere, the provision of multifunctional SuDS, natural flood management and green infrastructure can also make a valuable contribution to mitigating this risk whilst providing wider benefits	This has been considered within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.8.33	The receipt of and response to warnings of floods is an essential element in the management of the residual risk of flooding. Flood Warning and evacuation plans should be in place for those areas at an identified risk of flooding.	Requirements for any Flood Warning and Evacuation Plans have been considered within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).
Paragraph 5.8.34	The applicant should take advice from the local authority emergency planning team, emergency services and, where appropriate, from the local resilience forum when producing an evacuation plan for a manned energy project as part of the FRA. Any emergency planning documents, flood warning and evacuation procedures that are required should be identified in the FRA.	Requirements for any Flood Warning and Evacuation Plans have been considered within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).
Paragraph 5.8.35	Flood resistant and resilient materials and design should be adopted to minimise damage and speed recovery in the event of a flood.	This has been considered within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).
Paragraph 5.8.36	In determining an application for development consent, SoS should be satisfied that where relevant: a. the application is supported by an appropriate FRA b. the Sequential Test has been applied as part of site selection c. a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk d. the proposal is in line with any relevant national and local flood risk management strategy	The ES includes the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) and Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**) for the Scheme which cover these points.

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	e. SuDS (as required in the next paragraph on National Standards) have been used unless there is clear evidence that their use would be inappropriate f. in flood risk the project is designed and constructed to remain safe and operational during its lifetime, without increasing flood risk elsewhere (subject to the exceptions set out in Paragraph 5.8.42) g. the project is includes safe access and escape routes where required, as part of an agreed emergency plan, and that any residual risk can be safely managed over the lifetime of the development h. land that is likely to be needed for present or future flood risk management infrastructure has been appropriately safeguarded from development to the extent that development would not prevent or hinder its construction, operation or maintenance	
Paragraph 5.8.37	For energy projects which have drainage implications, approval for the project's drainage system, including during the construction period, will form part of the development consent issued by Secretary of State. The Secretary of State will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010.	The proposed drainage system is described in the Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**)
Paragraph 5.8.38	In addition, the Development Consent Order, or any associated planning obligations, will need to make provision for the appropriate operation and maintenance of any SuDS throughout the project's lifetime. Where this is secured through the adoption of any SuDS features, any necessary access rights to property will need to be granted.	The approach to operation and maintenance of the drainage components is described in the Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**)

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.8.39	Where relevant, the SoS should be satisfied that the most appropriate body is being given the responsibility for maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site. Responsible bodies could include, for example, the landowner, the relevant Lead Local Flood Authority, or water and sewerage company (though the Ofwat-approved Sewerage Sector Guidance), or another body, such as an Internal Drainage Board.	The approach to operation and maintenance of the drainage components is described in the Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**)
Paragraph 5.8.41	Energy projects should not normally be consented within Flood Zone 3b or Zone C2 in Wales, or on land expected to fall within these zones within its predicted lifetime. This also applies where land is subject to other sources of flooding (for example surface water). However, where essential energy infrastructure has to be located in such areas, for operational reasons, they should only be consented if the development will not result in a net loss of floodplain storage, and will not impede water flows.	The FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) details application of the Sequential and Exception Tests; requirements for mitigation to ensure no net loss of floodplain storage or impedance of water flows have been considered within the FRA.
Paragraph 5.8.42	Exceptionally, where an increase in flood risk elsewhere cannot be avoided or wholly mitigated, the Secretary of State may grant consent if they are satisfied that the increase in present and future flood risk can be mitigated to an acceptable and safe level and taking account of the benefits of, including the need for, nationally significant energy infrastructure as set out in Part 3 above. In any such case the Secretary of State should make clear how, in reaching their decision, they have weighed up the increased flood risk against the benefits of the project, taking account of the nature and degree of the risk, the future impacts on climate change, and advice provided by the EA or NRW and other relevant bodies.	Mitigation measures are detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) to ensure no increase in flood risk from the Order limits.

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.16.3	Where the project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment, and how this might change due to the impact of climate change on rainfall patterns and consequently water availability across the water environment, as part of the ES or equivalent (see Section 4.3 and 4.10).	**ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]** presents an assessment regarding the baseline status of the water environment and impacts that might occur as a result of the Scheme, taking into account mitigation that is embedded in the Scheme design.
Paragraph 5.16.4	The applicant should make early contact with the relevant regulators, including the local authority, the Environment Agency and Marine Management Organisation, where appropriate, for relevant licensing and environmental permitting requirements.	Consultation undertaken to date with regards to the water environment impact assessment is summarised in **ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]**.
Paragraph 5.16.5	Where possible, applicants are encouraged to manage surface water during construction by treating surface water runoff from exposed topsoil prior to discharging and to limit the discharge of suspended solids e.g. from car parks or other areas of hard standing, during operation.	**Framework CEMP [EN010152/APP/7.7]** includes an outline of measures required in order to minimise risk of pollution from suspended solids within runoff from hard standing, or areas of compacted soils. The drainage principles are set out within the **Framework Drainage Strategy** (**ES Volume III Appendix 9-4 [EN010152/APP/6.3]**).

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.16.6	Applicants are encouraged to consider protective measures to control the risk of pollution to groundwater beyond those outlined in River Basin Management Plans and Groundwater Protection Zones – this could include, for example, the use of protective barriers.	The Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**) includes the use of attenuation features to ensure the suitable treatment trains for site runoff.
Paragraph 5.16.7	The ES should in particular describe: a. the existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges b. existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Abstraction Licensing Strategies) and also demonstrate how proposals minimise the use of water resources and water consumption in the first instance c. existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project and any impact of physical modifications to these characteristics d. any impacts of the proposed project on water bodies or protected areas (including shellfish protected areas) under the Water Environment (Water Framework Directive) (England and Wales Regulations 2017 and source protection zones (SPZs) around potable groundwater abstractions e. how climate change could impact any of the above in the future	**ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]** presents a baseline status of the water environment and impacts that might occur as a result of the Scheme. The existing physical characteristics are included within the baseline section. An assessment of cumulative effects is presented in **ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]**.

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	f. any cumulative effects	
Paragraph 5.16.8	The Secretary of State should consider whether mitigation measures are needed over and above any which may form part of the project application. A construction management plan may help codify mitigation at that stage.	**ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]** summarises mitigation proposed for the water environment impacts. The **Framework CEMP [EN010152/APP/7.7]** has been developed to secure any mitigation required.
Paragraph 5.16.14	The Secretary of State should be satisfied that a proposal has regard to the River Basin Management Plans and meets the requirements of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (including Regulation 19). The specific objectives for particular river basins are set out in River Basin Management Plans. The Secretary of State must refuse development consent where a project is likely to cause deterioration of a water body or its failure to achieve good status or good potential, unless the requirements set out in Regulation 19 are met. A project may be approved in the absence of a qualifying Overriding Public Interest test only if there is sufficient certainty that it will not cause deterioration or compromise the achievement of good status or good potential.	A WFD assessment has been produced as **ES Volume III Appendix 9-2: Water Framework Directive [EN010152/APP/6.3]** to demonstrate that the Scheme will meet the requirements of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, and that the Scheme will not be likely to cause the deterioration of a water body.
Paragraph 5.16.15	The Secretary of State should also consider the interactions of the proposed project with other plans such as Water Resources Management Plans and Shoreline/Estuary Management Plans.	**ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]** has considered the interaction with

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
		Water Resource Management Plans. It is considered that, given the location of the Scheme there would be no interaction with the Humber Estuary Shoreline Management Plan and any Shoreline/Estuary Management Plans. Given the nature of the development, and the small number of employees required, once operational, the Scheme will not require large volumes of water.
Paragraph 5.16.16	The Secretary of State should consider proposals to mitigate adverse effects on the water environment and any enhancement measures put forward by the applicant and whether appropriate requirements should be attached to any development consent and/or planning obligations are necessary.	**ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]** summarises the proposed mitigation and enhancement measures for water environment.
National Policy Statement for Renewable Energy EN-3		
Paragraph 2.4.11	Solar photovoltaic (PV) sites may also be proposed in low lying exposed sites. For these proposals, applicants should consider, in particular, how plant will be resilient to: a. increased risk of flooding; and b. impact of higher temperatures.	Mitigation measures are detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) to ensure the scheme will be resilient to increased risk of flooding.

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 2.10.60	As set out above applicants will consider several factors when considering the design and layout of sites, including, proximity to available grid capacity to accommodate the scale of generation, orientation, topography, previous land – use and ability to mitigate environmental impacts and flood risk	Factors considered when developing design and layout of the scheme are detailed within the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).
Paragraph 2.10.84	Where a Flood Risk Assessment has been carried out this must be submitted alongside the applicant's ES. This will need to consider the impact of drainage. As Solar PV Panels will drain to the existing ground, the impact will not, in general, be significant.	The ES includes the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) and Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**).
Paragraph 2.10.85	Where access tracks need to be provided, permeable tracks should be used, and localised SuDS, such as swales and infiltration trenches, should be used to control any runoff where recommended.	The Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**) includes the use of swales, and permeable tracks for access round the Order limits.
Paragraph 2.10.86	Given the temporary nature of solar PV farms, sites should be configured or selected to avoid the need to impact on existing drainage systems and watercourses.	The design of the Scheme has utilised existing watercourse crossings where practicable for access track crossings. The
Paragraph 2.10.87	Culverting existing watercourses/drainage ditches should be avoided.	

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
Paragraph 2.10.88	Where culverting for access is unavoidable, applicants should demonstrate that no reasonable alternatives exist and where necessary it will only be in place temporarily for the construction period.	creation of new tracks will be minimised and for any watercourse crossings, clear span crossings will be prioritised and no new culverts will be installed.
Paragraph 2.10.92	Applicants should consider whether they need to provide geotechnical and hydrological information (such as identifying the presence of peat at each site) including the risk of landslide connected to any development work	There are no areas of peat or at risk of landslide within the Order limits.
Paragraph 2.10.154	Water management is a critical component of site design for ground mount solar plants. Where previous management of the site has involved intensive agricultural practice, solar sites can deliver significant ecosystem services value in the form of drainage, flood attenuation, natural wetland habitat, and water quality management.	The Framework Drainage Strategy for the Scheme is included within **ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**. The principles upon which the drainage design is based are outlined in **ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]**. A Biodiversity Net Gain assessment report has been carried out at ES stage. Enhancement and BNG measures will be secured via the **Framework Landscape and Ecological Management Plan (LEMP) [EN010152/APP/7.14]**.

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
National Policy Statement for Electricity Networks Infrastructure EN-5		
Paragraph 2.3.2	As climate change is likely to increase risks to the resilience of some of this infrastructure, from flooding for example, or in situations where it is located near the coast or an estuary or is underground, applicants should in particular set out to what extent the proposed development is expected to be vulnerable, and, as appropriate, how it would be resilient to: a. flooding, particularly for substations that are vital to the network; and especially in light of changes to groundwater levels resulting from climate change; b. effects of wind and storms on overhead lines; c. higher average temperatures leading to increased transmission losses; d. earth movement or subsidence caused by flooding or drought (for underground cables); and e. coastal erosion – for the landfall of offshore transmission cables and their associated substations in the inshore and coastal locations respectively.	A site specific FRA has been carried out and is included as **ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3].** The Framework Drainage Strategy document is appended as **ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**. Climate Change Resilience review and In-combination Climate Change Impact (ICCI) assessment are also included in the **ES Volume I Chapter 6: Climate Change [EN010152/APP/6.1]**.
Paragraph 2.3.3	Section 4.10 of EN-1 advises that the resilience of the project to climate change should be assessed in the Environmental Statement (ES) accompanying an application. For example, future increased risk of flooding would be covered in any flood risk assessment (see Section 5.8 in EN-1). Consideration should also be given to coastal change (see Section 5.6 in EN-1).	A site specific FRA has been carried out and is included **ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**. The Framework Drainage Strategy document is appended as **ES Volume III Appendix 9-4:**

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
		Framework Drainage Strategy [EN010152/APP/6.3].

National Planning Policy Framework

2.3.4 National Planning Policy Framework (NPPF) (December 2023) (Ref. 23), Section 14 explains the national planning policy with regard to meeting the challenge of climate change and flooding.

2.3.5 The relevant NPPF (Ref. 22) paragraphs, together with an indication of where in the ES the information is provided to address these requirements, are provided in Table 2.

2.3.6 Paragraph 5 outlines that while the NPPF does not contain specific policies for NSIPs, the NPPF is still relevant when considering the determination of DCOs. Therefore, the ES for the Scheme has taken the NPPF into account. Paragraph 8 defines three overarching objectives within the NPPF, which are interdependent and need to be pursued in mutually supportive ways:

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

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

c. **an environmental objective**: to contribute to protecting and enhancing the natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

Table 2: Relevant NPPF to the Water Environment

Relevant NPPF paragraph reference	Requirement of the NPPF	Location of information provided to address this
Paragraph 165	Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.	The FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**) and Framework Drainage Strategy (**ES Volume III Appendix 9-4: Framework Drainage Strategy [EN010152/APP/6.3]**) have been prepared for the Scheme, and all impacts on the water environment have been assessed within **ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]**.
Paragraph 169	If it is not possible for development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3.	
Paragraph 170	The application of the exception test should be informed by a strategic or site specific flood risk assessment, depending on whether it is being applied during plan production or at the application stage. To pass the exception test it should be demonstrated that: a. the development would provide wider sustainability benefits to the community that outweigh the flood risk; and b. the development will be safe for its lifetime taking account of the vulnerability of its users, without	

Relevant NPPF paragraph reference	Requirement of the NPPF	Location of information provided to address this
	increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.	
Paragraph 171	Both elements of the exception test should be satisfied for development to be allocated or permitted.	
Paragraph 173	When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that: a. within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location; b. the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment; c. it incorporates SuDS, unless there is clear evidence that this would be inappropriate; d. any residual risk can be safely managed; and e. safe access and escape routes are included where appropriate, as part of an agreed emergency plan.	

Relevant NPPF paragraph reference	Requirement of the NPPF	Location of information provided to address this
Paragraph 175	Major developments should incorporate SuDS unless there is clear evidence that this would be inappropriate. The systems used should: a. take account of advice from the lead local flood authority; b. have appropriate proposed minimum operational standards; c. have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and d. where possible, provide multifunctional benefits.	
Paragraph 180	Planning policies and decisions should contribute to and enhance the natural and local environment by: […] e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; […]	

National Guidance

National Planning Practice Guidance

2.3.7 National Planning Practice Guidance (NPPG) (Ref. 23) is a web-based resource that was published on the 6 March 2014 and, with reference to the Flood Risk and Coastal Change guidance (Ref. 24), advises on how to take account of and address the risks associated with flooding and costal change in the planning process.

2.3.8 It outlines a number of steps to be followed which are designed to ensure that if there are better sites in terms of flood risk (Sequential and Exception Tests), or if a proposed development cannot be made safe, it should not be permitted. These steps include: assess flood risk; avoid flood risk; and control, mitigate and manage residual flood risk. The guidance states that developers and applicants need to consider flood risk to and from the development site and it is likely to be in their own best interests to do this as early as possible. In addition, the guidance provides detail on the application of the Sequential Test and the Exception Test, which are considered in the FRA (**ES Volume III Appendix 9-3: Flood Risk Assessment [EN010152/APP/6.3]**).

Environmental Improvement Plan 2023

2.3.9 In 2023, the UK Government published the Environmental Improvement Plan (Ref. 25), the first revision of the 25 Year Improvement Plan (see below). The plan covers the provision of clean air and water; protection and enhancement of habitats, wildlife and biosecurity; reducing the risk from environmental hazards and mitigating and adapting to climate change; using resources more sustainable and efficiently, minimizing waste and managing exposure to chemicals; enhancing beauty, heritage and engagement with the natural environment.

2.3.10 Ten goals were set out by the original plan and the 2023 iteration document reviewed the progress made against each goal, specific targets and commitments and the plan to continue to deliver these goals. One of these specific goals is improving water environmental quality. Defra's goals for the forthcoming period include to tackle nutrient pollution, including by upgrading 160 wastewater treatment works by 2027 and providing increased advice and incentives to support a shift to sustainable agricultural techniques, restore 400 miles of river through the first round of Landscape Recovery projects, establish 3,000 hectares of new woodlands along England's rivers, and roll out water efficiency labelling across appliances and ensure water companies deliver a 50% reduction in leakages by 2050.

A Green Future: Our 25 Year Plan to Improve the Environment

2.3.11 In 2018 Defra published 'A Green Future: Our 25 Year Plan to Improve the Environment' (Ref. 26) setting out the UK Government's goals for improving the environment within a generation and leaving it in a better state than it was found. The plan covered the provision of clean air and water; protection and enhancement of habitats, wildlife and biosecurity; reducing the risk from environmental hazards and mitigating and adapting to climate change; using resources more sustainably and efficiently, minimising waste and managing

exposure to chemicals; and enhancing beauty, heritage and engagement with the natural environment.

2.3.12 With regards to the water environment, the Plan includes specific goals to reduce the environmental impact of water abstraction, meet the objectives of River Basin Management Plans under the WFD, reduce leakage from water mains, improve the quality of bathing waters, restore protected freshwater sites to a favourable condition, and do more to protect communities and businesses from the impact of flooding, coastal erosion and drought. The foundation of the Plan incorporates a natural capital approach with the aspiring goal that there should always be a net gain in biodiversity from new development.

The UK Government's Plan for Water: Our Integrated Plan for Delivering Clean and Plentiful Water (2023)

2.3.13 In the above plan (Ref. 28), more investments, tighter regulation and effective enforcement are being made to transform and integrate the water system, address sources of pollution and boost water supply. A few of the key actions include giving the Environment Agency the power to issue bigger penalties for when water companies pollute, and authorising Ofwat under the new powers in the Environment Act 2021 (Ref. 2) to link the dividends of water company to their environmental performance.

2.3.14 Besides setting new legally binding targets to significantly reduce pollution from farming, wastewater, and abandoned metal mines, the UK Government has also initiated a significant investment in water infrastructure improvements. Monitoring of storm overflows has also been substantially increased from only 10% in 2015 to over 90% today (Ref. 42). Further actions are listed within the plan to address multiple sources of pollution impacting water bodies.

2.3.15 With almost £500 million of additional investment in new large-scale water infrastructure, water companies are required to develop plans to meet water demands in a changing climate. Key actions to reduce drought impacts on water reliant business and farmers have also been identified.

Future Water, The Governments Water Strategy for England (2011)

2.3.16 The Government's Future Water strategy (Ref. 27), published in June 2011, sets out the Government's long-term vision for water and the framework for water management in England. It aims to permit the supply of secured water supplies whilst ensuring an improved and protected water environment. Future Water brings together the issues of water demand, water supply, water quality in the natural environment, surface water drainage and river/coastal flooding into a single coherent long-term strategy, in the context of the need to reduce greenhouse gas emissions.

2.3.17 The strategy also considers the issue of charging for water. The water environment and water quality have great economic, biodiversity, amenity and recreational value, playing an important role in many aspects of modern day society, and thus the functions provided must be sustainably managed to ensure they remain available to future generations without compromising environmental quality.

Regional Policy

2.3.18 At a regional level, water management is coordinated through ten River Basin Management Plans (RBMPs). Each RBMP is prepared by the Environment Agency for six-year cycles and sets out how organisations, stakeholders and communities will work together to improve the water environment.

2.3.19 The water bodies within the Study Area fall under the Humber RBMP (Ref. 33). The most recent RBMPs for the Humber river basin districts were updated in October 2022 and will remain in place until 2027, after which the monitoring and protection regime is uncertain until new Government targets and guidance are released. Until then the RBMPs set legally binding, locally specific, environmental objectives, and contain the current WFD status of the water bodies in the area. More information on these is included in the baseline section of **ES Volume I Chapter 9: Water Environment [EN010152/APP/6.1]**.

Local Policy

2.3.20 The Scheme lies wholly within the administrative boundaries of City of Doncaster Council.

Doncaster Local Plan 2015-2035

2.3.21 The following policies from the Doncaster Local Plan 2015-2035 (Ref. 34), adopted in September 2021 are of relevance to the water environment assessment:

a. Policy 1: Settlement Hierarchy (Strategic Policy), Section 7 Flood Risk states the need to consider the current and future challenges arising from having large areas at risk of flooding, and the need to apply national policy and guidance, including the flood risk Sequential Test and (where necessary) Exception Tests;

b. Policy 33: Landscape (Strategic Policy), Part D highlights that development will be permitted provided that it conserves, enhances and, where possible, restores the special qualities of rivers, waterways, wetlands and their surroundings;

c. Policy 54: Pollution, Part D states that during planning applications particular consideration will be given to any adverse effects on the quantity, quality and ecology features of water bodies and groundwater resources, including contamination to Source Protection Zones (SPZs);

d. Policy 55: Contamination and Unstable Land, Part A states that development on land that is unstable, currently contaminated or suspected of being contaminated due to its previous history or geology, or that will potentially become contaminated as a result of the development, require a Preliminary Risk Assessment (PRA) to demonstrate the development does not cause significant harm, or risk of significant harm, to human health, or land, natural environment, pollution of soil or any watercourse or groundwater;

e. Policy 56: Drainage states that development sites must incorporate satisfactory measures for dealing with their drainage impacts to ensure wastewater and surface water run-off are managed appropriately and to

ensure no increase in existing rates for greenfield runoff, and to make use of SuDS;

f. Policy 57: Flood Risk Management Parts A-D relate to flood risk and sets out the planning policies that applications for planning permission will be tested against; and

g. Policy 60: Protecting and Enhancing Doncaster's Soil and Water Resources, Parts E and F state that proposals will be supported which will make positive progress towards achieving 'good' status or potential under the WFD in surface and groundwater bodies, and also promote water efficiency measures which take account of current water availability and future demand. Proposals will not be supported which would have an adverse impact on the ecological status or recreational value of rivers and other water bodies such as flood storage areas; and/or lead to the deterioration in the quality of surface and groundwaters; and/or lead to a reduction in groundwater levels (or reduced flows in watercourses).

2.4 Guidance

Environment Agency Position Statements

2.4.1 The Environment Agency provides guidance on the approach to protection of groundwater in a number of position statements (Ref. 36). This includes Position Statement A (Risk Based Approach); Position Statement B (Protection of Water Intended for Human Consumption), Position Statement G (Discharge of Liquid Effluents into the Ground); and Position Statement N (Groundwater Resources and Abstraction).

Sustainable Drainage Systems Guidance

2.4.2 The following paragraphs set out the guidance documents which have been considered in relation to SuDS.

2.4.3 Defra published guidance on the use, design and construction of SuDS in Non-Statutory Technical Standards for SuDS (Ref. 28), in 2015. In January 2023 a Policy Paper was published 'Sustainable drainage systems review' (Ref. 43). The report sets out the findings of a review into the implementation of schedule 3 to The Flood and Water Management Act 2010 (Ref. 4). It was stated in the review that Defra would carry out a consultation in order to collect views on the impact assessment, national standards and statutory instruments in 2023.The report has not been updated at the time of writing.

2.4.4 Industry good practice guidance on the planning, design and good maintenance of SuDS is also provided by Construction Industry Research and Information Association (CIRIA) C753 The SuDS Manual (Ref. 29) and Design Manual for Roads and Bridges (DMRB) CD532 Vegetated Drainage Systems for Highways Runoff (Ref. 30). CIRIA Report C753 The SuDS Manual 2nd Edition (2016) (Ref. 29) includes the Simple Index Method for mitigation calculations.

2.4.5 Consideration is also given to the Building Regulations 2010 Approved Document H Drainage and Waste Disposal (Ref. 18), which sets out the hierarchy for how surface water should be disposed of, and Water UK: Sewerage Sector Guidance (Ref. 31).

Planning Inspectorate's Guidance: Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive (2024)

2.4.6 The Planning Inspectorate has replaced Advice Note 18: The Water Framework Directive with the Guidance 'Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive' (Ref. 32). This contains advice on the preparation and submission of any separate WFD assessment reports by DCO applications. This guidance includes advice of bodies to be consulted, and screening, scoping and impact assessment, together information on Article 4.7 derogations. The WFD Assessment included as **ES Volume III Appendix 9-2: Water Framework Directive [EN010152/APP/6.3]** has considered the updated guidance.

Environmental Good Practice On Site Guide (Fifth Edition)

2.4.7 CIRIA C811 Environmental good practice on site guide (fifth edition) (Ref. 37) supersedes CIRIA C741 (fourth edition) and provides up to date practical guidance on delivering sustainable construction at the site level.

Connected by Water Action Plan

2.4.8 The Study Area is located within the boundary of City of Doncaster metropolitan borough. City of Doncaster Council and various stakeholders published the Connected by Water Action Plan in January 2023 (Ref. 38), which proposes actions covering flood risk such as the Doncaster Borough Wide Surface Water Alleviation Scheme.

Yorkshire and Humber Business Plan 2020/2021

2.4.9 City of Doncaster Council is a member of the Yorkshire Leaders Board, and the Study Area is located within land included in the Yorkshire and Humber Business Plan 2020/21. The Yorkshire Leaders Board has identified flooding as a priority area in the Yorkshire and Humber Business Plan 2020/21 and published the Yorkshire and Humber Flood Resilience Forum 2022, which aims to support the integration of flood resilience into wider strategy and policy (Ref. 39).

The Don Catchment Flood Management Plan (2010)

2.4.10 The Don Catchment Flood Management Plan (2010) (Ref. 40) that covers the Study Area considers all types of inland flooding and sets policies for managing flood risk within the catchment. The Study Area is located within sub-area 6 where the policy is: "*Areas of moderate to high flood risk where we can generally take further action to reduce flood risk".*

Strategic Flood Risk Assessment (SFRA)

2.4.11 A SFRA is a study carried out by one or more local planning authorities to assess the risk to an area from flooding from all sources, now and in the future taking account of the impacts of climate change, and to assess the impact that land use changes and development in the area will have on flood risk.

2.4.12 The following Doncaster Metropolitan Borough Council Level 1 SFRA (November 2015) (Ref. 41) is available for the Study Area, which is located in the administrative area of City of Doncaster Council and will be reviewed in full in the ES.

2.4.13 The Doncaster Metropolitan Borough Council SFRA (Ref. 41) states that the majority of fluvial flood risk in the Council area comes from the River Don and its tributaries to the north of Doncaster. The southeast section of the Grid Connection Corridor Search Area is at risk of flooding from the River Don.

2.4.14 The Flood Zone mapping in the SFRA differentiates between Flood Zone 3a and Flood Zone 3b, which is functional floodplain. Definitions of the Flood Zones are provided in Section 9.7. Flood Zone 3b is based on the 5% annual probability of flooding or the 4% annual probability of flooding. The sections of the Order limits in Flood Zone 3b are located within the northern section of the PV Solar Site (functional floodplain of the River Went), and the southeastern section of the Grid Connection Corridor (functional floodplain of River Don).

3. References

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Ref. 2 HMSO (2021). Environment Act 2021. Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted. [Accessed 21 December 2023].

Ref. 3 HMSO (2014) Water Act. Available at: https://www.legislation.gov.uk/ukpga/2014/21/contents/enacted. [Accessed 21 December 2023].

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Ref. 8 HMSO (1975) Salmon and Freshwater Fisheries Act 1975. Available at: https://www.legislation.gov.uk/ukpga/1975/51/contents. [Accessed 21 December 2023].

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Ref. 10 HMSO (2016) Environmental Permitting (England and Wales) Regulations. Available at: https://www.legislation.gov.uk/uksi/2016/1154/contents/made. [Accessed 21 December 2023].

Ref. 11 HMSO (2009) Eels (England and Wales) Regulations. Available at: https://www.legislation.gov.uk/uksi/2009/3344/made. [Accessed 21 December 2023].

Ref. 12 HMSO (2001) Control of Pollution (Oil Storage) (England) Regulations. Available at: https://www.legislation.gov.uk/uksi/2001/2954/contents/made. [Accessed 21 December 2023].

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https://www.legislation.gov.uk/uksi/2009/3104/contents/made. [Accessed 21 December 2023].

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