



Fosse Green Energy

Preliminary Environmental Information Report

VOLUME

3

**Appendix 9-A: Water Environment
Policy and Legislation**

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1. Introduction

1.1 Purpose of this Appendix

- 1.1.1 This Preliminary Environmental Information (PEI) Report appendix identifies and describes the legislation, policy and supporting guidance considered relevant to the assessment of the likely significant effects of the Proposed Development on the Water Environment.
- 1.1.2 Legislation and policy are considered at both national and local levels.
- 1.1.3 This appendix does not assess the Proposed Development against legislation and policy, instead the purpose of considering legislation and policy in the EIA is twofold;
 - a. To identify legislation and policy that could influence the determination of important Water Environment features (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 PEI Report assessment and/or within the EIA which will be presented in the Environmental Statement. For example, a policy may require the assessment of an impact or the use of a specific methodology.
- 1.1.4 The following sections identify and describe the legislation, policy and supporting guidance considered specifically relevant to the Water Environment assessment (the assessment) as presented in **PEI Report Volume 1, Chapter 9: Water Environment**.

2. National Legislation, Policy and Guidance

2.1 National Legislation

The Infrastructure Planning (Environmental Impact Assessment (EIA) Regulations (2017)

- 2.1.1 Regulation 5(2) of The Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (Ref 1) sets out that the EIA must describe and assess in an appropriate manner, in light of each individual case, the likely significant direct and indirect effects of the Proposed Development on the Water Environment.

Other National Legislation

- 2.1.2 The legislation relevant to the Water Environment and pertinent to the Proposed Development includes the following (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, includes new binding targets for water, which when set will need to be considered by new development that may affect the water environment;
 - b. Water Act (2014) (as amended) (Ref 3): mainly deals with regulating the impact of water supply on the water environment and the price of water;
 - c. Floods and Water Management Act 2010 (as amended) (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 (as amended) (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 (as amended) (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 (as amended) (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 (as amended) (Ref 8): sets out protection for migration routes of salmon and trout;
 - h. Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (Ref 9): 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 10): aims to prevent and remediate damage to the environment;
 - j. Environmental Permitting (England and Wales) Regulations 2016 (as amended) (Ref 11): 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. Groundwater (England and Wales) Regulations 2009 (Ref 12): aims to prevent the entry into groundwater of any hazardous substances as might be released by, among other things, new developments;
 - l. Eels (England and Wales) Regulation 2009 (as amended) (Ref 13): 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;
 - m. The Water Resources Act (Amendment) (England and Wales) Regulations 2009 (Ref 14): 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 Pollution (Oil Storage) (England) Regulations 2001 (as amended) (Ref 15): 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;
 - o. The Control of Substances Hazardous to Health (as amended) Regulations 2004 (Ref 16): 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;
 - p. The Anti-Pollution Works Regulations 1999 (Ref 17): outlines the contents of any-pollution works notices served under the Water Resources Act 1991;
 - q. The Water Framework Directive (Standards and Classification) Directions 2015 (as amended) (Ref 18): includes directions for classification of surface water and groundwater bodies for which new developments must consider as part of any Water Framework Directive Assessment;
 - r. The Building Regulations. Approved Document Part H: Drainage and Waste Disposal (2010) (Ref 32); includes details of foul water drainage both above and below ground; and
 - s. Marine and Coastal Access Act 2009: Includes requirements for new development to need a Marine Licence from the Marine Management Organisation for works below Mean High Water Spring Tide (Ref 33).
- 2.1.3 In respect of the effects of climate change on flood risk, this is assessed within the Preliminary Flood Risk Assessment (FRA) (**PEI Report Volume 3, Appendix 9-C**).

2.2 National Policy

National Policy Statements

- 2.2.1 The EIA takes account of the following National Policy Statements (NPSs), which have effect in relation to the Proposed Development and provide a framework for decision making by the Secretary of State:
- a. Overarching National Policy Statement for Energy (EN1) (Ref 19): Overarching policy statement setting out the requirements for consultation, and flood risk assessment;
 - b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (Ref 20). This contains requirements for the assessment of flood risk, potential for effects on the water environment and their significance on renewable energy infrastructure, and
 - c. National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 21). This includes provision for the inclusion of possible climate change effects on the development of electricity networks infrastructure, specifically in relation to flooding.
- 2.2.2 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 Proposed Development, and how the decision maker should consider these impacts and mitigation measures.
- 2.2.3 The relevant NPS requirements, together with an indication of where in the PEI Report the information is provided to address these requirements, are provided in **Table 1**.



Table 1: NPS NE-1 Requirements Relevant to the Water Environment

Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
National Policy Statement for Renewable Energy EN-1 (November 2023)		
Paragraph 4.12.9	In considering an application for development consent, the Secretary of State (SoS), should focus on whether the development itself is an acceptable use of that land, and on the impacts of that use, rather than the control of processes, emissions or discharges themselves.	PEI Report Volume 1, Chapter 9: Water Environment outlines pollution controls for the construction and operation phases of development.
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.	
Paragraph 4.12.14	The SoS should be satisfied that development consent can be granted taking full account of environmental impacts.	PEI Report Volume 1, Chapter 9: Water Environment outlines pollution controls for the construction and operation phases of development. It also includes a cumulative assessment with other developments, where appropriate.
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: - the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework; and - 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.	
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	The PEI Report for the Proposed Development includes a preliminary FRA, the findings of which are summarised in the PEI Report in EIA



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	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 adaptation; the applicant and the Secretary of State should take account of the policy on climate change adaptation in Section 4.10.	terms. Provisional flood risk information is provided in PEI Report Volume 1, Chapter 9: Water Environment and within the Preliminary FRA (PEI Report Volume 3, Appendix 9-C) .
Paragraph 5.8.6-7	The aims of planning policy on development and flood risk are to ensure that flood risk from all sources of flooding is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to steer new development to areas with the lowest risk of flooding. 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 design and constructed to remain operational in times of flood.	The PEI Report for the Proposed Development includes a preliminary FRA, the findings of which are summarised in the PEI Report in EIA terms. Provisional flood risk information is provided in the PEI Report Volume 1, Chapter 9: Water Environment and within the Preliminary FRA (PEI Report Volume 3, Appendix 9-C) .
Paragraph 5.8.13 - 14	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 sites of 1 hectare or more; land identified by the EA or NRW as having critical drainage problems; land identified (for example in a local authority strategic flood risk assessment) as being at increased flood risk in future; land that may be subject to other sources of flooding (for example surface water), or where the EA or NRW, Lead Local Flood Authority, Internal Drainage Board or other body have indicated that there may be drainage problems. 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 PEI Report for the Proposed Development includes a preliminary FRA, the findings of which are summarised in the PEI Report in EIA terms. Provisional flood risk information is provided in the PEI Report Volume 1, Chapter 9: Water Environment and within the Preliminary FRA (PEI Report Volume 3, Appendix 9-C) .
Paragraph 5.8.15	The minimum requirements for FRAs are that they should: be proportionate to the risk and appropriate to the scale, nature and location of the project;	The minimum requirements are noted and are incorporated in the Preliminary FRA (PEI Report Volume 3, Appendix 9-C) .



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	consider the risk of flooding arising from the project in addition to the risk of flooding to the project; take the impacts of climate change into account, clearly stating the development lifetime over which the assessment has been made; be undertaken by competent people, as early as possible in the process of preparing the proposal; consider both the potential adverse and beneficial effects of flood risk management infrastructure, including raised defences, flow channels, flood storage areas and other artificial features, together with the consequences of their failure and exceedance; consider the vulnerability of those using the site, including arrangements for safe access; 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; 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; 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; 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; 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: 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 sustainable drainage systems and accounting for the predicted impacts of climate change. If sustainable drainage systems 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	



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	considered appropriate. Where cost is a reason for not including SuDS, provide information to enable comparison with the lifetime costs of a conventional public sewer connection; vi) explain how sustainable drainage systems 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 sustainable drainage system 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 sustainable drainage system; ix) explain how run-off from the completed development will be prevented from causing an impact elsewhere; x) explain how the sustainable drainage system 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; 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; identify and secure opportunities to reduce the causes and impacts of flooding overall during the period of construction; and be supported by appropriate data and information, including historical information on previous events.	
Paragraph 5.8.18-19	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. 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 the Secretary of State to reach a decision on the application when it is submitted. The Secretary of State should advise applicants to undertake these steps where they appear necessary but have not yet been addressed.	Consultation undertaken to date, including with the EA, is outlined in PEI Report Volume 1, Chapter 9: Water Environment and PEI Report Volume 3, Appendix 1-C: Scoping Opinion Responses.
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	Consultation undertaken to date, including with the EA, is outlined in PEI



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	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.	Report Volume 1, Chapter 9: Water Environment and PEI Report Volume 3, Appendix 1-C: Scoping Opinion Responses.
Paragraph 5.8.36	In determining an application for development consent, the Secretary of State should be satisfied that where relevant: - the application is supported by an appropriate FRA; - the Sequential Test has been applied as part of site selection; - 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; - the proposal is in line with any relevant national and local flood risk management strategy; - SuDS (as required in the next paragraph on National Standards) have been used unless there is clear evidence that their use would be inappropriate; and - in flood risk the project is design 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); - the project 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; - land that is likely to be need 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.	The PEI Report for the Proposed Development includes a preliminary FRA, the findings of which are summarised in the PEI Report in EIA terms. Provisional flood risk information is provided in the PEI Report Volume 1, Chapter 9: Water Environment and within the Preliminary FRA (PEI Report Volume 3, Appendix 9-C) .
Paragraph 5.8.37 - 39	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 the 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. 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 Preliminary Surface Water Drainage Strategy for the Proposed Development is included in PEI Report Volume 3, Appendix 9-D) and is assessed within PEI Report Volume 1 Chapter 9: Water Environment . The principles upon which the drainage design will be based are



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	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. Where relevant, the Secretary of State 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 (through the Ofwat-approved Sewerage Sector Guidance), or another body, such as an Internal Drainage Board.	outlined in PEI Report Volume 1, Chapter 9: Water Environment .
Paragraph 5.8.10	The Exception Test is only appropriate for use where the Sequential Test alone cannot deliver an acceptable site. It would 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 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), Sites of Special Scientific Interest (SSSIs) and World Heritage Sites (WHS) which would not usually be considered appropriate	The PEI Report for the Proposed Development includes a preliminary FRA, the findings of which are summarised in the PEI Report in EIA terms. Provisional flood risk information is provided in the PEI Report Volume 1, Chapter 9: Water Environment and within the Preliminary FRA (PEI Report Volume 3, Appendix 9-C) . The Sequential and Exception tests have been considered within the Preliminary FRA (PEI Report Volume 3, Appendix 9-C) .
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: the project would provide wider sustainability benefits to the community that outweigh flood risk; and the project will be safe for its lifetime taking into account the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.	
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.	



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
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.	
Paragraph 5.8.25	In this NPS, the term Sustainable Drainage Systems (SuDS) refers to the whole range of sustainable approaches to surface water drainage management including, where appropriate: source control measures including rainwater recycling and drainage; infiltration devices to allow water to soak into the ground, that can include individual soakaways and communal facilities; filter strips and swales, which are vegetated features that hold and drain water downhill mimicking natural drainage patterns; filter drains and porous pavements to allow rainwater and run-off to infiltrate into permeable material below ground and provide storage if needed; basins ponds and tanks to hold excess water after rain and allow controlled discharge that avoids flooding; and flood routes to carry and direct excess water through developments to minimise the impact of severe rainfall flooding.	The Preliminary Surface Water Drainage Strategy for the Proposed Development is included in PEI Report Volume 3, Appendix 9-D) and includes the use of SuDS techniques.
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.	Details of the proposed drainage arrangements are outlined in the Preliminary Surface Water Drainage Strategy (PEI Report Volume 3, Appendix 9-D).
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.	The PEI Report for the Proposed Development includes a Preliminary FRA (PEI Report Volume 3, Appendix 9-C). Provisional flood risk information is provided in the PEI Report Volume 1 Chapter 9: Water Environment and within PEI Report Volume 3, Appendix 9-C). A Preliminary Drainage Strategy
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	



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	facilities or attenuation storage to be provided outside the project site, if necessary, through the use of a planning obligation.	has also been prepared PEI Report Volume 3, Appendix 9-D .
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 probability 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.	
Paragraph 5.8.30-31	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. 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 5.8.33-34	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. The applicant should take advice from the local authority emergency planning team, emergency services and, where appropriate, from 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.	
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 may also apply 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.	



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
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)	An assessment of impacts on the water environment (including water quality, hydrogeology, hydromorphology, water resources and flood risk) is presented in PEI Report Volume 1, Chapter 9: Water Environment.
Paragraph 5.16.7	The ES should in particular describe: 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; 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; 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; any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive (WFD) and source protection zones (SPZs) around potable groundwater abstractions; how climate change could impact any of the above in the future; and any cumulative effects.	An assessment of impacts on the water environment (including water quality, hydrogeology, hydromorphology, water resources and flood risk) is presented in PEI Report Volume 1, Chapter 9: Water Environment. This includes a cumulative effects assessment. A WFD Screening Assessment has been undertaken and is presented in PEI Report Volume 3, Appendix 9-B).
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.	A Framework Construction and Environmental Management Plan is included in PEI Report Volume 1, Appendix 3-A).
Paragraph 5.16.14-15	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	An assessment of impacts on the water environment (including consideration of River Basin Management Plans) is



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	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. 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.	presented in PEI Report Volume 1, Chapter 9: Water Environment . This includes a cumulative effects assessment. A WFD Screening Assessment has been undertaken and is presented in PEI Report Volume 3, Appendix 9-B .
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	Mitigation required to ensure the protection of the water environment are outlined in PEI Report Volume 1, Chapter 9: 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: - increased risk of flooding; and - impact of higher temperatures.	The PEI Report for the Proposed Development includes a Preliminary FRA (PEI Report Volume 3, Appendix 9-C). Provisional flood risk information is provided in the PEI Report Volume 1 Chapter 9: Water Environment and within PEI Report Volume 3, Appendix 9-C . A Preliminary Drainage Strategy has also been prepared PEI Report Volume 3, Appendix 9-D .
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 PEI Report Volume 3, Appendix 9-C: Preliminary FRA .
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	The PEI Report for the Proposed Development includes a Preliminary FRA (PEI Report Volume 3, Appendix



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	solar PV panels will drain to the existing ground, the impact will not, in general, be significant.	9-C). Provisional flood risk information is provided in the PEI Report Volume 1 Chapter 9: Water Environment and within PEI Report Volume 3, Appendix 9-C). A Preliminary Drainage Strategy has also been prepared PEI Report Volume 3, Appendix 9-D.
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 Preliminary Surface Water Drainage Strategy for the Proposed Development is included in PEI Report Volume 3, Appendix 9-D) and includes the use of SuDS techniques.
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 Preliminary Surface Water Drainage Strategy for the Proposed Development is included in PEI Report Volume 3, Appendix 9-D) and includes the use of SuDS techniques.
Paragraph 2.10.87	Culverting existing watercourses/drainage ditches should be avoided.	Refer to Chapter 9: Water Environment (PEI Report Volume 1) for details of structures at the PEI Report stage. While there is a preference for open span crossings, structure designs are yet to be finalised and so the use of culverts has currently been included as a worst case. This will be reviewed at PEI Stage.
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.	Refer to Chapter 9: Water Environment (PEI Report Volume 1) for details of structures at the PEI Report stage. While there is a preference for open span crossings, structure designs are yet to be finalised



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
		and so the use of culverts has currently been included as a worst case. This will be reviewed at PEI Stage.
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.	Chapter 9: Water Environment (PEI Report Volume 1) highlights where further geotechnical or hydrological information may be required. For example, ground assessment at locations where Horizontal Directional Drilling (or similar) is required.
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.	Refer to Chapter 9: Water Environment (PEI Report Volume 1) for details of water management and assessment of impact on water resources.
National Policy Statement for Electricity Networks EN-5		
Paragraph 2.3.1-2	Section 4.9 of EN-1 sets out the generic considerations that applications and the SoS should take into account in order to ensure that electricity networks infrastructure is resilient to the effects of climate change. 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: flooding, particularly for substations that are vital to the network; and especially in light of changes to groundwater levels resulting from climate change; effects of wind and storms on overhead lines; higher average temperatures leading to increased transmission losses; earth movement or subsidence caused by flooding or drought (for underground cables); and coastal erosion – for the landfall of offshore transmission cables and their associated substations in the inshore and coastal locations respectively.	The PEI Report for the Proposed Development includes a Preliminary FRA (PEI Report Volume 3, Appendix 9-C) . Provisional flood risk information is provided in the PEI Report Volume 1 Chapter 9: Water Environment and within PEI Report Volume 3, Appendix 9-C) . A Preliminary Drainage Strategy has also been prepared PEI Report Volume 3, Appendix 9-D .



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
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).	
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	
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 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: 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; 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; it incorporates SuDS,	



Relevant NPS Paragraph	Requirement of the NPS	Where this is addressed in the PEI Report
	unless there is clear evidence that this would be inappropriate; any residual risk can be safely managed; and safe access and escape routes are included where appropriate, as part of an agreed emergency plan.	
Paragraph 175	Major developments should incorporate SuDS unless there is clear evidence that this would be inappropriate. The systems used should: take account of advice from the lead local flood authority; have appropriate proposed minimum operational standards; have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and where possible, provide multifunctional benefits.	The Preliminary Surface Water Drainage Strategy for the Proposed Development is included in PEI Report Volume 3, Appendix 9-D) and includes the use of SuDS techniques.
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.	Refer to Chapter 9: Water Environment (PEI Report Volume 1) for an assessment of potential impacts to water quality from the Proposed Development.

National Planning Policy Framework

- 2.2.4 The National Planning Policy Framework (NPPF) (Ref 22) sets out the Governments planning policies for England and how these are expected to be applied. Paragraph 5 outlines that while the Framework does not contain specific policies for Nationally Significant Infrastructure Projects (NSIPs), the NPPF is still relevant when considering the determination of DCOs. As a result, the EIA is taking the NPPF into account.
- 2.2.5 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 a well-designed and safe built environment, 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, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.
- 2.2.6 Relevant NPPF requirements relating to Water Environment, along with an indication of where this information is located within the PEI Report to address these requirements, are provided in **Table 2**.
- 2.2.7 The policies set out in the NPPF to a large extent mirror those that are explained in NPS EN-1.



Table 2: Relevant NPPF Policy for Water Environment

Relevant NPPF paragraph reference	Requirement of the NPPF	Where this is addressed in the PEI Report
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 PEI Report for the Proposed Development includes a Preliminary FRA (PEI Report Volume 3, Appendix 9-C) . Provisional flood risk information is provided in the PEI Report Volume 1 Chapter 9: Water Environment and within PEI Report Volume 3, Appendix 9-C) . A Preliminary Drainage Strategy has also been prepared PEI Report Volume 3, Appendix 9-D .
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 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: 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;	



Relevant NPPF paragraph reference	Requirement of the NPPF	Where this is addressed in the PEI Report
	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; it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate; any residual risk can be safely managed; and safe access and escape routes are included where appropriate, as part of an agreed emergency plan.	
Paragraph 175	Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate. The systems used should: take account of advice from the lead local flood authority; have appropriate proposed minimum operational standards; have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and where possible, provide multifunctional benefits.	The Preliminary Surface Water Drainage Strategy for the Proposed Development is included in PEI Report Volume 3, Appendix 9-D) and includes the use of SuDS techniques.
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.	Refer to Chapter 9: Water Environment (PEI Report Volume 1) for an assessment of potential impacts to water quality from the Proposed Development.

2.3 National Guidance

National Planning Practice Guidance

- 2.3.1 National Planning Practice Guidance (NPPG) (Ref 23) was updated in 2023 and provides more in-depth guidance to the NPPF. The NPPG for Flood Risk advises on how to take account of and address the risks associated with flooding and costal change in the planning process.
- 2.3.2 It outlines a number of main steps to be followed which are designed to ensure that if there are better sites in terms of flood risk, or if a proposed development cannot be made safe, it should not be permitted. These steps include: assess flood risk; avoid flood risk; and manage and mitigate flood risk. The guidance states that developers and applicants needs 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 has been considered in the Preliminary FRA (**PEI Report Volume 3, Appendix 9-C**).

Environmental Improvement Plan 2023

- 2.3.3 In 2023, the UK Government published the Environmental Improvement Plan (Ref 24), the first revision of the 25 Year Improvement Plan (see below, Ref 25). 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.
- 2.3.4 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

- 2.3.5 In 2018 Defra published 'A Green Future: Our 25 Year Plan to Improve the Environment' (Ref 25) setting out the UK Government's goals for improving the environment within a generation and leaving it in a better state than we found it. 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.

- 2.3.6 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 Water Framework Directive, 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)

- 2.3.7 In the above plan (Ref 46), 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.
- 2.3.8 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 46). Further actions are listed within the plan to address multiple sources of pollution impacting water bodies.
- 2.3.9 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 Government's Water Strategy for England (2011)

- 2.3.10 The Government's Future Water strategy (Ref 26), 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.
- 2.3.11 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.

PINS Advice Note 18: Water Framework Directive

- 2.3.12 PINS has produced Advice Note 18: The Water Framework Directive (Ref 43). This contains advice on the preparation and submission of any separate WFD assessment reports by Applications. This note includes advice of bodies to be consulted, and screening, scoping and impact assessment, together information on Article 4.7 derogations.

3. Regional Policy

- 3.1.1 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.
- 3.1.2 The waterbodies within the study area fall under both the Humber RBMP (Ref 44) and the Anglian RBMP (Ref 45). The most recent RBMPs for the Humber and Anglian river basin districts were updated in October 2022 and will remain in place until 2027. These set legally binding locally specific environmental objectives, and contain the current WFD status of the waterbodies in the area. More information on these is included in the baseline section of **PEI Report Volume 1, Chapter 9: Water Environment**.

4. Local Policy and Guidance

4.1 Local Planning Policy

- 4.1.1 Local planning policy documents concerning Water Environment that are relevant to the Proposed Development, have been outlined below and policy relevant to these documents further considered within **Table 3**.

Central Lincolnshire Local Plan (2023)

- 4.1.2 The Central Lincolnshire Local Plan (Ref 31) was adopted in April 2023 and is a revision of the previous Central Lincolnshire Plan that was adopted in 2017. The Local Plan was revised to ensure it remains current and consistent with latest national guidelines and local circumstances. The Local Plan contains planning policies and allocations for the growth and regeneration of Central Lincolnshire over the next 20 years.

Neighbourhood Plans

- 4.1.3 There are no Neighbourhood Plans with relevant policy and guidance on Water Environment.

4.2 Guidance

- 4.2.1 Guidance documents which are relevant to the Proposed Development include:
- a. Non-statutory technical standards for Sustainable Drainage Systems (Ref 47): includes information on volume and peak flow control in relation to mitigation of flood risk; and
 - b. Water UK Sewerage Sector Guidance (2019) (Ref 40): guidance in relation to the adoption of sewerage assets by sewerage companies in England.
 - c. Construction Industry Research and Information Association (CIRIA) Report C753 The SuDS Manual 2nd Edition (2016) (Ref 41): guidance covers the planning, design, construction, and maintenance of Sustainable Urban Drainage Systems, includes the Simple Index Method for mitigation calculations.
 - d. National Highways (2020) Design Manual for Roads and Bridges (DMRB) CD532 Vegetated Drainage Systems for Highways Runoff (Ref 42): guidance for the design of vegetated drainage systems, with information on their mitigation potential; and
 - e. Planning Inspectorate Advice Note 18: The Water Framework Directive (Ref 43). This outlines the WFD process and the information required to undertake screening, scoping and WFD impact assessment stage assessments.



Table 3: Relevant Local Policy and Guidance with Respect to Water Environment

Relevant Document	Relevant policies	Where this is addressed in the PEI Report
Central Lincolnshire Local Plan (Adopted April 2023)	Policy S21: Flood Risk and Water Resources All development proposals will be considered against the NPPF, including application of the sequential and, if necessary, the exception test. Through appropriate consultation and option appraisal, development proposals should demonstrate: - that they are informed by and take account of the best available information from all sources of flood risk and by site specific flood risk assessments where appropriate; - that the development does not place itself or existing land or buildings at increased risk of flooding; - that the development will be safe during its lifetime taking into account the impacts of climate change and will be resilient to flood risk from all forms of flooding such that in the event of a flood the development could be quickly brought back into use without significant refurbishment; - that the development does not affect the integrity of existing flood defences and any necessary flood mitigation measures have been agreed with the relevant bodies, where adoption, ongoing maintenance and management have been considered and any necessary agreements are in place; - how proposals have taken a positive approach to reducing overall flood risk and have considered the potential to contribute towards solutions for the wider area; and - that they have incorporated Sustainable Drainage Systems (SuDS)/ Integrated Water Management into the proposals unless they can be shown to be inappropriate. Development proposals that are likely to impact on surface or ground water should consider the requirements of the Water Framework Directive. Development proposals should demonstrate: - that water is available to support the development proposed;	An assessment of impacts on the water environment (including water quality, hydrogeology, hydromorphology, water resources and flood risk) is presented in PEI Report Volume 1, Chapter 9: Water Environment. This includes a cumulative effects assessment. A WFD Screening Assessment has been undertaken and is presented in PEI Report Volume 3, Appendix 9-B). The PEI Report for the Proposed Development includes a Preliminary FRA (PEI Report Volume 3, Appendix 9-C). The Preliminary Surface Water Drainage Strategy for the Proposed Development is included in PEI Report Volume 3, Appendix 9-D) and includes the use of SuDS techniques.



Relevant Document	Relevant policies	Where this is addressed in the PEI Report
	that adequate mains foul water treatment and disposal already exists or can be provided in time to serve the development. Non mains foul sewage disposal solutions should only be considered where it can be shown to the satisfaction of the local planning authority that connection to a public sewer is not feasible; that they meet the Building Regulation water efficiency standard of 110 litres per occupier per day or the highest water efficiency standard that applies at the time of the planning application (see also Policy S12); that water reuse and recycling and rainwater harvesting measures have been incorporated wherever possible in order to reduce demand on mains water supply as part of an integrated approach to water management (see also Policy S11); that they have followed the surface water hierarchy for alloposals: - surface water runoff is collected for use; - discharge into the ground via infiltration; - discharge to a watercourse or other surface water body; - discharge to a surface water sewer, highway drain or other drainage system, discharging to a watercourse or other surface water body; - discharge to a combined sewer; that no surface water connections are made to the foul system; that surface water connections to the combined or surface water system are only made in exceptional circumstances where it can be demonstrated that there are no feasible alternatives (this applies to new developments and redevelopments) and where there is no detriment to existing users; that no combined sewer overflows are created in areas served by combined sewers, and that foul and surface water flows are separated; that development contributes positively to the water environment and its ecology where possible and does not adversely affect surface and ground water quality in line with the requirements of the Water Framework Directive; that development with the potential to pose a risk to groundwater resources is not located in sensitive locations to meet the requirements of the Water Framework Directive;	



Relevant Document	Relevant policies	Where this is addressed in the PEI Report
	how Sustainable Drainage Systems (SuDS)/ Integrated Water Management to deliver improvements to water quality, the water environment and to improve amenity and biodiversity net gain wherever possible have been incorporated into the proposal unless they can be shown to be impractical; that relevant site investigations, risk assessments and necessary mitigation measures for source protection zones around boreholes, wells, springs and water courses have been agreed with the relevant bodies (e.g. the Environment Agency and relevant water companies); that suitable access is safeguarded for the maintenance of watercourses, water resources, flood defences and drainage infrastructure; and that adequate provision is made to safeguard the future maintenance of water bodies to which surface water and foul water treated on the site of the development is discharged, preferably by an appropriate authority (e.g. Environment Agency, Internal Drainage Board, Water Company, the Canal and River Trust or local Council). In order to allow access for the maintenance of watercourses, development proposals that include or abut a watercourse should ensure no building, structure or immovable landscaping feature is included that will impede access within 8m of a watercourse, or within 16m of a tidal watercourse. Conditions may be included where relevant to ensure this access is maintained in perpetuity and may seek to ensure responsibility for maintenance of the watercourse including land ownership details up to and of the watercourse is clear and included in maintenance arrangements for future occupants.	
	Policy S53: Design and Amenity All development proposals will: Incorporate appropriate landscape and boundary treatments to ensure that the development can be satisfactorily assimilated into the surrounding area, maximising opportunities to deliver diverse ecosystems and biodiverse habitats, strengthening wildlife corridors and green infrastructure networks, and helping to achieve wider goals for biodiversity net gain, climate change mitigation and adaptation and water management.	An assessment of impacts on the water environment (including water quality, hydrogeology, hydromorphology, water resources and flood risk) is presented in PEI Report Volume 1, Chapter 9: Water Environment. This includes a cumulative effects assessment.



Relevant Document	Relevant policies	Where this is addressed in the PEI Report
	Policy S60: Protecting Biodiversity and Geodiversity All development should: protect and enhance the aquatic environment within or adjoining the site, including water quality and habitat.	A WFD Screening Assessment has been undertaken and is presented in PEI Report Volume 3, Appendix 9-B).

5. References

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- Ref 14. HM Government (2009), The Water Resources Act (Amendment) (England and Wales) Regulations 2009. Available at: <https://www.legislation.gov.uk/ukxi/2009/3104/contents>
- Ref 15. H.M. Government (2001) Control of Pollution (Oil Storage) (England) Regulations. Available at: The Control of Pollution (Oil Storage) (England) Regulations 2001 ([legislation.gov.uk](https://www.legislation.gov.uk))
- Ref 16. H.M. Government (2004) The Control of Substances Hazardous to Health (Amendment) Regulations 2004. Available at: The Control of Substances Hazardous to Health (Amendment) Regulations 2004 ([legislation.gov.uk](https://www.legislation.gov.uk))
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