SOMERSET

ENERGY PARK

Planning Inspectorate Reference: EN0110039

Environmental Impact Assessment Scoping Report - Appendices

October 2026



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1.1. Transboundary Effects Screening

1.1.1 Regulation 32 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref.1) requires the consideration of likely significant effects on the environment of European Economic Area (EEA) States as associated with the Proposed Development.

1.1.2 Guidance upon the consideration of transboundary effects is provided in the Planning Inspectorate's Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process (Ref.2).

1.1.3 The following screening matrix provides the consideration of transboundary effects for the Proposed Development, taking guidance from the Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process (Annex 1).

Table 1-1 Screening Matrix for Possible Substantial Effects on the Environment of EEA State

Criteria And Relevant Considerations	Commentary With Regard To The Proposed Development
Characteristics of the development: Size of the development; Use of natural resources; Production of waste; Pollution and nuisances; Risk of accidents; and Use of technologies.	The resources required for the construction, operation (and maintenance) and decommissioning of the Proposed Development are likely to be obtained from the global market, but it is envisaged that materials would be obtained locally where practical. No waste, nuisances or accidents are likely to extend beyond the border of the UK. No novel technologies are proposed that have the potential for transboundary effects.
Location of development (including existing use) and Geographical area: What is the existing use? What is the distance to another EEA State (Name EEA state)? What is the extent of the area of a likely impact under the jurisdiction of another EEA State?	The Scoping Site Boundary is predominantly used as agricultural land. The closest EEA State to the Proposed Development is France, located approximately 175 km south-east of the Proposed Development. No impacts are likely to extend beyond the jurisdiction of the UK, with the exception of potential greenhouse gas (GHG) emissions. The latter is expected to be relatively small during construction and decommissioning. Due to the nature of the Proposed Development, which would not generate GHG emissions directly

Criteria And Relevant Considerations	Commentary With Regard To The Proposed Development
	through the generation of electricity, operational emissions are expected to be limited to those arising from maintenance vehicles, repair works and the replacement of equipment. There would be an overall saving in GHG emission relative to the current energy mix.
Environmental importance: Are particular environmental values (e.g. protected areas – name them) likely to be affected? Capacity of the natural environment Wetlands, coastal zones, mountain and forest areas, nature reserves and parks, Natura 2000 sites, areas where environmental quality standards already exceeded, densely populated areas, landscapes of historical, cultural or archaeological significance.	There are a number of international statutory designated nature conservation sites within 10 km of the Scoping Site Boundary. The potential for significant effects relating to these designated sites will be accounted for in the EIA. Based on the current understanding of the Proposed Development and the identified ecological pathways, no significant transboundary effects on designated sites or ecological receptors in other EEA States are anticipated.
Potential impacts and carrier: By what means could impacts be spread (i.e. what pathways)?	The only potential transboundary environmental impact which is considered likely is from GHG emissions. These emissions would be spread by atmospheric processes and are anticipated to be minimal given the nature of the Proposed Development. Overall, the Proposed Development is expected to offset GHG emissions through the generation of clean electricity, that otherwise would have been generated from a fossil fuel mix comprising technologies such as gas fired power stations.
Extent: What is the likely extent of the impact (geographical area and size of the affected population)?	The only transboundary environmental impact which is considered likely is from GHG emissions, which are known to contribute to changes on climate on a global scale. The impact of GHG emissions is considered irreversible within human lifetimes, however, as above, GHG emissions associated with the Proposed Development are anticipated to be relatively small during construction (up to 36 months) and decommissioning (up to 24 months) whilst the Proposed Development is expected to lead to a beneficial contribution in terms of UK GHG
Magnitude: What would the likely magnitude of the change in relevant variables relative to the status quo, taking into account the sensitivity of the variable?	
Probability: What is the degree of probability of the impact? Is the impact likely to occur as a consequence of normal conditions or exceptional situations, such as accidents?	

Criteria And Relevant Considerations	Commentary With Regard To The Proposed Development
Duration: Is the impact likely to be temporary, short term or long-term? Is the impact likely to relate to the construction, operation or decommissioning phase of the activity?	emissions during its operation and overall. It is proposed to calculate the likely GHG emissions as part of the EIA. GHG impacts will be put into context in terms of their impact on the UK's five-year carbon budgets, which set legally binding targets for GHG emissions. The GHG emissions offset through the production of cleaner electricity during the operational phase will be accounted for within the GHG emissions calculations. The global nature of GHG impacts means that it is not possible to apportion or identify any impact in GHG emissions in terms of environmental effects on any particular country or state. On this basis, no likely significant effects on the environment of any EEA State or group of EEA States are anticipated as a result of GHG emissions from the Proposed Development. The GHG emissions are considered at a global level, and so are captured by the assessment in any event. Overall, the Proposed Development will lead to a reduction in GHG emissions compared with the current energy mix.
Frequency: What is likely to be the temporal pattern of the impact?	
Reversibility: Is the impact likely to be reversible or irreversible?	
Cumulative impacts: Are other major developments close by?	Proposed schemes within 10 km of the Scoping Site Boundary will be taken into consideration in the EIA and the potential for significant cumulative effects reported in the ES. However, given the absence of identified pathways for significant transboundary effects, no significant cumulative transboundary effects are anticipated.

References

Ref.1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Available at: https://www.legislation.gov.uk/uksi/2017/572/contents

Ref.2 Planning Inspectorate. (2024) Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process. Available at: https://www.gov.uk/guidance/nationallysignificant-infrastructure-projects-advice-on-transboundary-impacts-and-process

Appendix 1-2 Environmental Mitigation and Commitments Register

1.1. Introduction

1.1.1 This appendix to the Environmental Impact Assessment ('EIA') Scoping Report sets out the potential environmental mitigation measures and commitments identified at this stage for the Proposed Development.

1.1.2 This Commitments Register has been produced in accordance with the Nationally Significant Infrastructure Projects: Commitments Register guidance provided by the Planning Inspectorate (Ref.1) and will be updated as the Proposed Development progresses through consultation and pre-application. Columns relating to monitoring, delivery, associated supporting documentation, and compliance date and details have not been included at this stage, reflecting the early stage of the Proposed Development. The Commitments Register will be developed further through the pre-application phase and, subsequently, through examination.

1.1.3 **Table 1-1** identifies potential environmental mitigation measures and commitments currently under consideration in relation to the construction, operation (including maintenance), and decommissioning phases of the Proposed Development.

1.1.4 Measures relating to noise and vibration, air quality and dust, visual amenity, glint and glare and water may contribute to the mitigation of potential effects on human health. As such, no specific human health measures are identified at this stage.

1.1.5 Where an outline management plan is to be produced for the DCO Application, the approach to environmental management and mitigation would be developed further within the relevant management plan(s), as appropriate, ahead of construction, operation (and maintenance), and/or decommissioning. Where relevant, these plans may subsequently be secured through the DCO.

1.1.6 Potential commitments relating to the detailed design of the Proposed Development will be developed further as the design progresses and, where appropriate, set out in the Design Parameters and Commitments Document submitted as part of the DCO Application. The detailed design would be expected to accord with the Design Parameters and Commitments Document, where relevant, and may be secured through the detailed design requirement attached to the DCO.

Table 1-1 Environmental Mitigation and Commitments Register

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
C1	Air Quality	Dust emissions from construction and decommissioning phase works will be managed through measures to be set out within the Outline Construction Environmental Management Plan (Outline CEMP) and the Outline Decommissioning Environmental Management Plan (Outline DEMP). Dust emissions from maintenance and replacement works during operation will be managed through measures to be set out within the Outline Operational Environmental Management Plan (Outline OEMP). The Outline CEMP, Outline DEMP and Outline OEMP will adopt activities specific control measures from the Institute of Air Quality Management (IAQM) 'Guidance on the Assessment of Dust from Demolition and Construction' (Ref.2) that sets out industry good practice measures.	Construction, Operation (and maintenance) and Decommissioning	Outline CEMP, Outline OEMP and Outline DEMP
C2	Climate Change	Measures to reduce greenhouse gas (GHG) emissions will be set out in the Outline CEMP, Outline OEMP, and Outline DEMP, and will include best practice measures.	Construction, Operation (and maintenance) and Decommissioning	Outline CEMP, Outline OEMP and Outline DEMP
C3	Cultural Heritage	The Proposed Development design will seek to avoid impacts to heritage assets where practicable. Such measures may include the use of buffers or exclusion zones surrounding heritage assets, adjustment of the Proposed Development layout and the use of screening or filtering vegetation.	Construction	Design Principles, Outline Landscape and Ecological Management Plan (Outline LEMP)

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
C4	Cultural Heritage	If geophysical surveys identify archaeological remains within the Scoping Site Boundary, opportunities will be sought to avoid and retain them in situ where feasible. Where this is not possible, mitigation would be developed in agreement with the South West Heritage Trust, as appropriate, through the Outline Archaeological Mitigation Strategy (OAMS) integrated into the CEMP.	Construction	Outline CEMP
C5	Ecology and Biodiversity	The Proposed Development will apply the mitigation hierarchy, prioritising avoidance, then minimisation, restoration and compensation, where reasonably practicable, to avoid or reduce effects on Important Ecological Features (IEF) and receptors.	Construction, Operation (and maintenance) and Decommissioning	Design Principles
C6	Ecology and Biodiversity	The Proposed Development will seek to apply the mitigation hierarchy, with measures to avoid or reduce impacts on Habitats of Principal Importance (HaPI) (e.g. woodland, hedgerows, arable margins, waterbodies and watercourses) are avoided or reduced, where reasonably practicable with compensation provided where necessary and proportionate, in line with the mitigation hierarchy and Biodiversity Net Gain requirements Potential indirect effects on ancient woodland, veteran trees and other HaPIs within 2 km of the Scoping Site Boundary will also be considered, including through appropriate air quality pollution control measures where relevant.	Construction, Operation (and maintenance) and Decommissioning	Design Principles
C7	Ecology and Biodiversity	The following habitats are proposed to be retained where reasonably practicable as part of the Proposed Development: • Water bodies (including ponds);		Design Principles, Outline LEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		• Watercourses (except for access and crossing points); • Hedgerows (except for access and crossing points); and • Woodland.		
C8	Ecology and Biodiversity	The Proposed Development will aim to avoid, protect and retain notable habitats and species where reasonably practicable, with the approach refined as the design develops. This will include consideration of retention, avoidance and appropriate offsets, including: • 10 m from watercourses and water bodies, to protect riparian and aquatic habitats and species (such as riparian mammals) that are present; • 15 m from any woodland features; • 5-10 m from hedgerows without trees, noting that there may be small incursions into hedgerows to facilitate access, fencelines and the grid connection cables. Where practicable, retained individual trees and trees occurring within hedgerows will be protected as per British Standard BS: 5837 Trees in relation to design, demolition and construction – Recommendations (Ref.3) Fencing, as appropriate, will be included around working areas to protect above-ground vegetation and below-ground root systems; and • The Proposed Development will, where practicable, avoid laying cabling directly on the channel bed of watercourses and will install cables at a depth, to be determined through detailed design, that seeks to avoid warming or electromagnetic field (EMF) effects on fish.	Construction	Design Principles, Outline LEMP, Outline CEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
C9	Ecology and Biodiversity	The Proposed Development will also aim to avoid, protect and retain protected or notable species, where practicable, including: • Retaining badger setts, with a minimum undeveloped zone of 30 m from the sett (dependent on the activity); • Retaining trees with the potential to support roosting bats, with a minimum undeveloped zone concordant with the Root Protection Area (RPA) of the tree and dependent on the bat roost categorisation; and • Retaining structures with the potential to support roosting bats, with a minimum undeveloped zone of 30 m with sensitive lighting, dependent on the bat roost categorisation.		Design Principles, Outline LEMP, protected species licensing (where required)
C10	Ecology and Biodiversity	Standard best practice measures would be set out in the Outline CEMP, Outline OEMP and Outline DEMP, as appropriate, to reduce the potential for harmful impacts on IEFs and in accordance with relevant legislation. The Proposed Development will seek to avoid direct impacts to statutory and non-statutory designated sites and, through appropriate construction methods, minimise potential indirect impacts where practicable. Measures to minimise impacts on ecological habitats and species during decommissioning would be set out in the Outline DEMP, with decommissioning impacts addressed in accordance with relevant legislative and policy requirements applicable at the time of decommissioning.	Construction. Operation (and maintenance) and Decommissioning	Design Principles, Outline CEMP, Outline OEMP, Outline DEMP, Outline LEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
C11	Ecology and Biodiversity	Measures for the establishment, long term management and monitoring of habitat creation measures that would deliver Biodiversity Net Gain will also be included within the Outline LEMP.	Construction and Operation (and maintenance)	Outline LEMP Outline Biodiversity Gain Plan and BNG Boundary Plan
C12	Glint and Glare	Embedded design measures to reduce glint and glare, such as setbacks, panel orientation and tilt, and low-reflectivity finishes, will be considered as the design develops'	Operation (and maintenance)	Design Principles
C13	Ground Conditions	Work will be carried out in accordance with relevant Construction Design Management (CDM) Regulations (Ref.4). An Outline CEMP, Outline OEMP, and Outline DEMP will set out the general principles to be followed during the construction, operation (and maintenance) and decommissioning.	Construction, Operation (and maintenance) and Decommissioning	Outline CEMP, Outline OEMP and Outline DEMP
C14	Ground Conditions	The following activities are expected to be employed as standard best practice during the construction phase and will be incorporated, where applicable, into the Outline CEMP: • A Pollution Response Plan, including a Spillage Emergency Response Plan, which will be within the Outline CEMP; • Piling will be carried out in accordance with CL:AIRE, Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention (Ref.5); • Specification of concrete used in foundations and building structures will be selected based on the results	Construction	Outline CEMP Outline SWMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		of the chemical composition of the site soil and groundwater; • Waste materials will be disposed of by the contractor(s) to appropriate recycling facilities or appropriately licensed landfills in line with the Outline Site Waste Management Plan (Outline SWMP) (to be included within the Outline CEMP); • Oils and hydrocarbons will be stored in designated locations with specific measures to prevent leakage and release of their contents; • Vehicles will be well maintained to prevent accidental pollution from leaks; • The contractor(s) will employ dust suppression measures when necessary; • The length of time materials are stockpiled on-site before being removed for re-use, recycling or disposal will be kept to a minimum; • Access roads will be regularly cleaned and damped down with water where necessary to control dust and mud on the highway.		
C15	Ground Conditions	A Preliminary Risk Assessment (PRA) report is proposed to be undertaken, where required, to inform the assessment of ground conditions in the ES.	Construction, Operation (and maintenance) and Decommissioning	Outline CEMP, Outline OEMP and Outline DEMP
C16	Ground Conditions	Appropriate pollution prevention and emergency response measures, including spill response equipment and	Operation (and maintenance)	Outline OEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		procedures for maintenance personnel, will be implemented during operation and maintenance of the Proposed Development and will be set out in the Outline OEMP.		
C17	Landscape and Visual	The following design principles and considerations have been informed by initial optioneering exercises, including an initial landscape and visual analysis and site visit, and have guided the development of the proposed site layout for the EIA Scoping Report: • Limiting light spill through the orientation of temporary buildings and siting away from sensitive visual receptors where reasonably practicable; • Retention of existing vegetation where reasonably practicable – including roadside vegetation and hedgerows along field boundaries; • Strengthening existing vegetation through appropriate management and new native planting, following guidance from the published Somerset Landscape Character Assessment; • Implementation of mitigation planting and landscape proposals as early as possible in the construction programme; and • Setting back solar panels, substations, and BESS from most sensitive receptors, such as settlements and dwellings.	Construction, Operation (and maintenance) and Decommissioning	Outline CEMP, Outline OEMP, Outline DEMP and Outline LEMP
C18	Landscape and Visual	Lighting during the construction and decommissioning phase will be temporary and designed to minimise potential for light spillage beyond the Scoping Site Boundary where reasonably	Construction, Operation (and maintenance)	Outline CEMP, Outline OEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		practicable. During operation, lighting will generally be limited to substations and other critical infrastructure and will be designed to limit light spill, as set out in the Outline OEMP.	and Decommissioning	and Outline DEMP
C19	Major Accidents and Disasters	The Proposed Development design will take into account the findings of the Flood Risk Assessment, with potential mitigation measures identified and considered as the design develops, where appropriate.	Construction and Operation (and maintenance)	Design Principles
C20	Major Accidents and Disasters	Relevant utility providers will be identified and consulted as appropriate as the design develops, including water, gas, electricity and telecommunications providers.	Construction and Decommissioning	Outline CEMP and Outline DEMP
C21	Major Accidents and Disasters	Appropriate measures would be considered during construction and decommissioning to manage diseased or invasive plants and minimise the potential for their spread on and off-site. Where required, an Invasive Species Management Plan will be prepared.	Construction and Decommissioning	Outline CEMP, Outline DEMP and Outline LEMP
C22	Major Accidents and Disasters	An Outline Battery Safety Management Plan (Outline BSMP) is proposed to be developed to set out appropriate measures for managing potential risks associated with the Battery Energy Storage System.	Operation (and maintenance)	Outline BSMP
C23	Materials and Waste	The Proposed Development will aim to prioritise waste prevention, followed by preparing for reuse, recycling and recovery and lastly disposal to landfill as per the waste hierarchy.	Construction, Operation (and maintenance) and Decommissioning	Outline SWMP (to be included within the Outline CEMP)
C24	Materials and Waste	All waste arising from the Proposed Development will be managed in accordance with relevant regulations and	Construction, Operation (and maintenance)	Outline SWMP (to be included within

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		transported by appropriately licensed carriers to suitably permitted waste management facilities.	and Decommissioning	the Outline CEMP)
C25	Materials and Waste	The construction of the Proposed Development will be subject to measures and procedures set out within an Outline SWMP (to be included within the Outline CEMP).	Construction	Outline SWMP (to be included within the Outline CEMP)
C26	Materials and Waste	The operation of the Proposed Development will be subject to measures and procedures set out within an Outline OEMP which will include the approach for material and waste management on-site.	Operation (and maintenance)	Outline OEMP
C27	Materials and Waste	The decommissioning of the Proposed Development will be subject to measures and procedures set out within an Outline DEMP which will include the approach for material and waste management on-site.	Decommissioning	Outline DEMP
C28	Noise and Vibration	Measures to control noise as defined in Annex B of BS 5228-1 (Ref.6) and measures to control vibration as defined in Section 8 of BS 5228-2 (Ref.7) would be considered and adopted where reasonably practicable. These measures are expected to form part of the Best Practicable Means (BPM) and will be set out, as appropriate, within the Outline CEMP and the Outline DEMP. Examples of BPM that may be implemented during construction and decommissioning works are presented below: • Appropriate routing of construction traffic on public roads and along access tracks; • Drop heights of materials will be minimised;	Construction and Decommissioning	Outline CEMP and Outline DEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		• Plant and vehicles will be sequentially started up rather than all together; • Plant will always be used in accordance with manufacturers' instructions. Care will be taken to site equipment away from noise-sensitive areas. Where possible, loading and unloading will also be carried out away from such areas; and • Regular and effective maintenance by trained personnel will be undertaken to keep plant and equipment working to manufacturer's specifications.		
C29	Noise and Vibration	Potential embedded mitigation measures for the operational phase of the Proposed Development may include: • Siting of noise-generating plant away from sensitive receptors; and • Selection of plant with consideration to noise emission level.	Operation (and maintenance)	Outline OEMP
C30	Socio-economics	Dust emissions, transport-related noise, and noise emissions associated with the design and selection of plant, and visual intrusion would be managed through the implementation of the Outline CEMP, Outline OEMP and Outline DEMP.	Construction, Operation (and maintenance) and Decommissioning	Outline CEMP, Outline OEMP and Outline DEMP
C31	Soils and Agriculture	Mitigation measures to avoid or reduce soil damage and loss will be considered as part of the design and used to inform the layout and construction approach.	Detailed Design	Design Principles

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
C32	Soils and Agriculture	An Outline Soil Management Plan (SMP) will be developed. The Outline SMP will include good practice soil resource management measures.	Construction, Operation (and maintenance) and Decommissioning	Outline SMP
C33	Soils and Agriculture	Where necessary, cabling within the Connection and Access Infrastructure Corridors may be installed below typical plough depth. Trenches would be backfilled and soils appropriately reinstated to enable ploughing and continued arable farming following construction, where practicable.	Construction	Outline CEMP
C34	Soils and Agriculture	The potential for continued agricultural use during operation by using the land as permanent pasture for animal grazing is being considered.	Operation (and maintenance)	Outline OEMP
C35	Soils and Agriculture	Industry standard guidance/current best working practice set out in Construction Code (Ref.8) and the Good Practice Handling Soils (Ref.9) will be followed in relation to soil workings.	Construction, Operation (and maintenance)	Outline SMP
C36	Soils and Agriculture	Existing grass cover would be maintained and new permanent grassland mix cover created to minimise the risk of soil erosion. Such cover would be maintained during the operational (and maintenance) phase, with any damaged or bare soil areas reseeded where necessary.	Operation (and maintenance)	Outline SMP
C37	Transport and Access	An Outline Construction Traffic Management Plan (CTMP) will be developed to manage the potential impacts of construction traffic on the highway network and sensitive receptors, such as heritage assets and schools. It will set out management measures for traffic routing, timing and access	Construction, and Decommissioning	Outline CTMP and Outline DEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		to the Proposed Development. Measures for the management of construction and decommissioning traffic include, but are not limited to: • Restriction of HGV movements to certain routes, days of the week and times of the day, where reasonably practicable; • Where reasonably practicable, managing working hours to minimise travel during the network peak hours; • Positioning of suitably qualified banksmen and/or other temporary traffic management at the Proposed Development access points; • Providing road signs and/or markings to increase awareness of the Proposed Development access points; and • Undertaking pre-construction and post-construction condition surveys of affected highway routes, where appropriate. Measures for the management of decommissioning traffic, similar to those set out above for construction, will be set out within the Outline DEMP during the decommissioning phase.		
C38	Transport and Access	An Outline Public Rights of Way Management Plan (PRoWMP) will be produced, setting out measures for minimising impacts on the PRoW network (including existing and Claimed PRoW). Examples of measures that may be included in the Outline PRoWMP include: maintaining access to/along PRoW, or otherwise providing temporary PRoW diversion routes where necessary to avoid any PRoW	Construction, Operation (and maintenance) and Decommissioning	Outline PRoWMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		closures or potential conflicts with the Proposed Development where possible. Any diversion routes would be discussed with the Local Highway Authority (LHA) prior to construction.		
C39	Water Environment	The Outline CEMP will set out good practice methods for reducing the risk of pollution to surface waters and the groundwater environment by setting out measures for the management of construction runoff and spillage risk. Potential measures may include the following: • It is anticipated that proportionate and targeted monitoring of watercourses at risk of pollution during the construction phase may be required. The scope of monitoring can be agreed with the Environment Agency post-DCO as part of a management plan approach, as has been the case with other DCO applications. This will need to include adequate pre-construction baseline monitoring, as well as monitoring during construction and for a short period post-construction; • At this stage it is assumed that water required for construction would be either connected to mains water supply or otherwise water would be supplied from another commercial source. Water for construction could also be augmented by rainwater harvesting (e.g. for haul road dust suppression), although there may be limitations as to how much can be captured and stored for when it might be needed. No abstractions from groundwater or watercourses are proposed;	Construction	Outline CEMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		• At this stage, it is also assumed that foul drainage from temporary compounds would be connected to the Public Sewer or otherwise captured by a sealed cesspit or tank for offsite disposal by specialised licenced contractors. No discharges of foul wastewater to surface or groundwater are proposed; • Cable crossings of the larger, more important or sensitive watercourses are expected to need to be crossed using non-intrusive techniques beneath the bed at a sufficient depth to avoid future exposure. If Horizontal Directional Drilling (HDD) is used the works would be controlled by a suitable Drilling Fluid Break-Out Management Plan. Crossings of other drainage features would be risk assessed on a case-by-case basis as the assessment progresses but may include open-cut methods. Consultation with the Environment Agency, Lead Local Flood Authorities (LLFAs) and Internal Drainage Boards (IDBs) will be undertaken, as necessary, to agree the design of any required watercourse crossing structures; • Any access crossings of larger, more important or sensitive watercourses are anticipated to be via a clear span structure. Crossings of other drainage features would be risk assessed on a case-by-case basis as the assessment progresses. Temporary access structures would apply the following hierarchy: (1) use existing; (2) use existing modified as necessary; (3) clear span crossing; (4) suitably designed culvert. Consultation with the EA, LLFAs and IDBs is required to agree the design of any required watercourse crossing structures;		

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		• Watercourses affected by open-cut cable crossings or temporary access works would be reinstated following construction, informed by pre-works riparian and hydromorphological survey, but also taking into account any subsequent improvements that might occur in the interim period; • The nature of the Proposed Development means there would be limited physical disturbance of aquifers and groundwater. The need for piling or non-intrusive techniques for permanent above ground infrastructure has yet to be determined but will be confirmed in the ES. As earlier, if HDD is used the works would be controlled by a suitable Drilling Fluid Break-Out Management Plan; • Should dewatering be required during construction works, necessary permits and approvals will be obtained prior to works commencing; • The results of the Flood Risk Assessment (FRA) will be used to refine potential locations of construction compounds and material / plant storage. These will be located outside of areas susceptible to flooding where possible, and have in place emergency flood response procedures; and • Where not disapplied by the DCO and replaced by Protective Provisions there are a number of secondary consents that may be required such as: Flood Risk Activity Permits, Water Discharge Activity Permits, Water Resource Licences, and Land Drainage Consent.		

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
C40	Water Environment	The following potential mitigation measures may apply during operation (and maintenance): • Sustainable drainage systems (SuDS) will be incorporated to attenuate runoff from the Proposed Development to a rate agreed with the Environment Agency and/or the LLFA and IDB to avoid increasing flood risk, and to reduce the quantities and concentration of diffuse urban pollutants found in runoff. Their design and use would depend on factors, such as site-specific constraints. The use of native grassland under and surrounding the panels to be included to limit the potential for channelisation; • Management of fire risk from BESS will be provided within an Outline Battery Safety Management Plan submitted alongside the DCO Application. This may include the requirement for stored water to suppress a fire (if required), and the drainage design to allow for fire water containment. Consideration of managing the pollution risk from a fire at a substation site will also be included in the ES; • The Proposed Development will include design measures to ensure that the Proposed Development does not generate any adverse flood risks to adjacent areas; • Where possible, surface water will drain from the swale based drainage system to local receiving watercourses via a new ditch, or the piped section will be shortened and the last 10 m section of the outfall route will be open	Operation (and maintenance)	Outline OEMP Outline BSMP

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		ditch, unless this affects maintenance of the channel by the IDB; • Watercourses will be buffered from permanent new infrastructure other than where crossings, drainage outfalls or other essential infrastructure are required, which has to be located near to/within watercourses. For Main Rivers, significant ordinary watercourses and watercourses found to support riparian mammals, a buffer width of 10 m will be considered as required and where practicable (as measured from the tops of watercourse embankments indicated by LiDAR). For less significant watercourses and watercourses which are not found to support riparian mammals, this buffer width may be reduced appropriately, and this is subject to further baseline assessment and consultation with statutory consultees and IDBs; • At this stage it is assumed that water required for operation and maintenance would be connected to Mains water supply (with agreement from the relevant water utility company) or another commercial source; • It is also assumed that foul drainage from permanent on-site facilities would be connected to the Public Sewer or otherwise captured by a sealed cesspit or tank for offsite disposal. No discharges of foul wastewater to surface or groundwater are proposed; and • The location and design of more vulnerable elements, including BESS, substations, Power Conversion Units (PCUs) and panels, will be sequentially located to areas of lowest risk of flooding. Where this is not possible,		

Commitment Reference	Relevant Topic	Commitment	Project Phase	Likely Commitment Securing Mechanism
		these elements will be designed accordingly with some elements potentially raised above the design flood level including an allowance for freeboard.		
C41	Water Environment	The decommissioning stage would be expected to apply similar principles and mitigation measures to those identified for construction, as appropriate. Standard pollution prevention and construction best practice measures would be considered to minimise potential impacts on the water environment, where required and reasonably practicable. Such measures would be set out, as appropriate, within the Outline DEMP.	Decommissioning	Outline DEMP

References

Ref.1 Planning Inspectorate, Nationally Significant Infrastructure Projects: Commitments Register (2024, updated 2026). Available at: https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-commitments-register

Ref.2 Institute of Air Quality Management (2024). Guidance on the assessment of dust from demolition and construction. Available at: https://iaqm.co.uk/wp content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf

Ref.3 British Standards Institute (BSI) (2012). BS 5837:2012 Trees in relation to design, demolition and construction – recommendations.

Ref.4 UK Government (2015). The Construction (Design and Management) Regulations 2015 (SI 2015 No. 51). Available at: https://www.legislation.gov.uk/uksi/2015/51/contents

Ref.5 CL:AIRE (2025), 'Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention'

Ref.6 British Standards Institute (2014) BS 5228-1:2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites – Part1: Noise. London: BSI.

Ref.7 British Standards Institute (2003) BS 5228-2:2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites - vibration. London: BSI.

Ref.8 DEFRA (2009). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Available at: https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites

Ref.9 Institute of Quarrying (2021) Good Practice Guide for Handling Soils in Mineral Workings. Available at: https://www.quarrying.org/soils-guidance

Appendix 9-1 UK National Site Network Site Descriptions

Site Name	Statutory designated site description
Somerset Levels and Moors Ramsar	The Ramsar site consists of a series of SSSI within the largest area of lowland wet grassland and associated wetland habitat remaining in Britain. It covers about 35,000 ha in the flood plains of the Rivers Axe, Brue, Parrett, Tone and their tributaries. Most of the site is only a few metres above mean sea level and drains through a large network of rhynes (rhynes/canals) and rivers. Flooding may affect large areas in winter depending on rainfall and tidal conditions. Parts of the site in the Brue Valley include areas of former raised peat bog which have now been substantially modified by agricultural improvement and peat extraction which has created areas of open water, fen and reedbed. The site attracts internationally important numbers of wildfowl in winter and is one of the most important sites in southern Britain for breeding waders. The network of rhynes supports an outstanding assemblage of aquatic invertebrates, particularly beetles.
Somerset Levels and Moors SPA	The Somerset Levels and Moors is the largest area of lowland wet grassland and associated wetland habitat remaining in Britain, covering about 35,000 hectares in the floodplains of the Rivers Axe, Brue, Parrett, Tone and their tributaries. The SPA comprises a series of sites within the extensive area bounded by Bridgwater Bay in the west and the higher ground of the Mendips, Dorset Hills, Blackdown Hills, Brendons and Quantocks. Much of the site is only a few metres above mean sea level and drains through a large network of rhynes and rivers. Flooding may affect large areas in winter, depending on levels of rainfall on the moors and surrounding higher ground, and on tidal conditions. The site is mainly used for cattle grazing, often in conjunction with hay or silage production, although withy growing (willow tree cultivation) is also an important traditional activity. Parts of the site around Westhay Moor and Shapwick Heath include areas of former raised peat bog, now substantially modified by agricultural improvement and peat extraction. The SPA supports internationally important numbers of waterfowl in winter and is one of the most important sites in southern Britain for breeding waders associated with lowland wet grassland. The SPA covers 6395.47 hectares and includes the following twelve Sites of Special Scientific Interest (SSSI), notified under the Wildlife and Countryside Act, 1981: Catcott, Edington & Chilton Moors, Curry & Hay Moors, King's Sedgemoor, Moorlinch, Shapwick Heath, Southlake Moor, Tealham & Tadham Moors, West Moor, West Sedgemoor, Westhay Heath, Westhay Moor and Wet Moor.

Site Name	Statutory designated site description
Severn Estuary Ramsar	The Severn Estuary is one of the largest estuaries in Britain and it has the second largest tidal range in the world. Its classic funnel shape and southwest orientation make it susceptible to extreme weather conditions in the east Atlantic. There are large urban developments on the estuary. The high tidal range leads to strong tidal stream and high turbidity, producing communities characteristic of the extreme physical conditions of liquid mud and tide-swept sand and rock. The site is particularly important for the run of migratory fish between the sea and rivers via the estuary. Species using the estuary include Atlantic salmon *Salmo salar*, sea / brown trout *S. trutta*, sea lamprey *Petromyzon marinus*, river lamprey *Lampetra fluviatilis*, allis shad *Alosa alosa*, twaite shad *Alosa fallax* and European eel *Anguilla anguilla*. The estuary is also important for migratory birds during spring and autumn migrations.
Severn Estuary SPA	The Severn Estuary is one of the largest estuaries in Britain and has the second largest tidal range in the world. Its classic funnel shape and south-west orientation make it susceptible to extreme weather conditions in the east Atlantic. There are large urban developments on the estuary including the cities of Bristol and Cardiff. The Severn Estuary also supports a nationally important breeding population of a migratory species.
Severn Estuary SAC	The Severn Estuary lies on the southwest coast of Britain at the mouth of four major rivers (the Severn, Wye, Usk, and Avon). The immense tidal range (the second highest in the world) and classic funnel shape make the Severn Estuary unique in Britain and very rare worldwide. This tidal range creates strong tidal streams and high turbidity, producing communities characteristic of the extreme physical conditions of liquid mud and tide-swept sand and rocks. The Estuary includes a wide diversity of habitats including Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by sea water at low tide, Atlantic salt meadows, and Reefs, which are identified as Annex I habitat types. The intertidal zone of mudflats, sand banks, rocky platforms and saltmarsh is one of the largest and most important in Britain. The estuary has a diverse geological setting and a wide range of geo-morphological features, especially sediment deposits. It is important for the interpretation of coastline dynamics and landforms, and past changes, in sea level, sediment supply, climate and river flow. The estuary's overall interest depends on its large size, and on the processes and interrelationships between the intertidal and marine habitats and its fauna. The fluctuating salinity and highly mobile sediments with consequent high turbidity limits the benthic invertebrates of the mud and sandflats to relatively few species. Those which are tolerant of such conditions occur in very high densities on the more stable mudflats. Beds of eelgrass *Zostera spp.* also occur on some mudflats. A greater variety of invertebrates occurs on the intertidal rock platforms, a more stable habitat with rock pools and a relatively high cover of seaweeds. The estuary fringes have large areas of saltmarsh. These are often grazed by sheep and/or cattle, a

Site Name	Statutory designated site description
	significant factor determining the plant communities. A range of saltmarsh types is present, with both gradual and stepped transitions between bare mudflat and upper marsh. The estuarine fauna includes: invertebrate populations of importance (especially as a food resource for a wide range of bird and fish species), internationally important populations of waterfowl; and large populations of migratory fish, including sea lamprey, river lamprey (both of which spawn in freshwater but complete part of their life cycle in the sea), twaite shad and the nationally rare and endangered allis shad.
Mendip Limestone Grasslands SAC	This site comprises coastal and inland sections of the Carboniferous Limestone outcrops of the Mendips. It contains a wide range of habitats including ancient and secondary semi-natural broadleaved woodland, unimproved calcareous grassland and a complex mosaic of calcareous grassland and acidic dry dwarf-shrub heath. The coastal headland and inland hills support the largest area of sheep's-fescue – carline-thistle *Festuca ovina – Carlina vulgaris* grassland in England, including two sub-types (the dwarf sedge *Carex humilis* and honewort *Trinia glauca* sub-communities) known from no other site in the UK. Areas of short-turf sheep's-fescue – meadow oatgrass *Helictotrichon pratense* grassland also occur inland. The site is exceptional in that it supports several rare and scarce vascular plants typical of the oceanic southern temperate and Mediterranean elements of the British flora. These include white rockrose *Helianthemum apenninum*, Somerset hairgrass *Koeleria vallesiana* and honewort. Transitions to limestone heath situated on flatter terrain also occur. Heath species such as heather *Calluna vulgaris*, bell heather *Erica cinerea* and western gorse *Ulex gallii* are well represented and bracken *Pteridium aquilinum* is often locally dominant. Rose Wood and King's Wood (in Crook Peak to Shute Shelve Hill SSSI) are ancient woodlands. Canopy species include ash *Fraxinus excelsior*, pedunculate oak *Quercus robur*, small-leaved lime *Tilia cordata* and common whitebeam *Sorbus aria agg.* The understorey is dominated by hazel *Corylus avellana* with some field maple *Acer campestre* and spindle *Euonymus europaeus*. Ground flora species include dog's mercury *Mercurialis perennis*, columbine *Aquilegia vulgaris* and meadow saffron *Colchicum autumnale*. The nationally rare purple gromwell *Lithospermum purpurocaeruleum* occurs at Rose Wood.
Mendip Woodlands SAC	Mendip Woodlands contains extensive examples of mixed woodlands on limestone. They have developed on dolomitic conglomerate, lower limestone shales and Carboniferous limestone strata on the southern escarpment of the Mendip Hills. Although they are dominated by ash, a rich variety of other trees and shrubs are present, including elm, small-leaved lime, field maple and whitebeam. At Ebbor Gorge, elm rather than lime is mixed with ash in a steep-sided gorge; at both Rodney Stoke and Cheddar Wood, lime and ash are found on rocky slopes with patches of deeper soil between the outcrops. Ferns characteristic of this woodland type, such as hart's-

Site Name	Statutory designated site description
	tongue *Phyllitis scolopendrium* and shield-ferns *Polystichum spp*., are common. The site is in the centre of the range of hazel dormouse *Muscardinus avellanarius* and Cheddar Wood holds a large population of this species.
North Somerset & Mendip Bats SAC	The Cheddar complex and Wookey Hole areas support a wide range of habitats which provide feeding grounds for bats. These include semi-natural dry grasslands of which the principal community present is sheep's-fescue – meadow oatgrass *Festuca ovina – Helictotrichon pratense* grassland which occurs on rock ledges and on steep slopes with shallow limestone soil, especially in the dry valleys and gorges and on the south-facing scarp of the Mendips. King's Wood and Urchin Wood have developed over limestone which outcrops in parts of the site and forms a steep scarp to the south-east. There is mostly oak and ash woodland, though some areas are dominated by small-leaved lime with both maiden and coppice trees. Other canopy trees include yew *Taxus baccata*, cherry *Prunus avium* and wild service tree *Sorbus torminalis*. There is a rich ground flora including many ferns and mosses. The limestone caves and mines of the Mendips and the north Somerset hills provide a range of important breeding and hibernation sites for lesser horseshoe bat *Rhinolophus hipposideros* and greater horseshoe bat.
Exmoor and Quantock Oakwoods SAC	This site supports extensive tracts of old sessile oak *Quercus petraea* with transitions to heathland. The oakwoods are rich in bryophytes, ferns (including *Dryopteris aemula*) and epiphytic lichens, the latter often associated with old trees, since parts are former wood-pasture rather than the oak coppice that is more common with this type. In the Barle Valley the woods also occur in mosaic with glades and small fields, and the combination results in good populations of fritillary butterflies. Valley woodland dominated by alder *Alnus glutinosa* as well as ash which occurs in small areas alongside some of the streams. A maternity colony of barbastelle bats *Barbastella barbastellus* utilises a range of tree roots in the oak woodland. The woods also hold Bechstein's bats *Myotis bechstenii*, whilst rivers and streams flowing through the site support otters *Lutra lutra.*
Hestercombe House SAC	Hestercombe House is a former country house and estate consisting of mixed woodland, pasture, lakes and landscaped gardens. A colony of lesser horseshoe bats utilise two roof voids within the former stable block and domestic outbuildings as maternity (breeding) roosts during the summer months, with a small number of bats also using the roofs as hibernation sites during the winter.
Mells Valley SAC	Mells Valley in southern England contains the maternity site associated with an exceptional breeding population of greater horseshoe bats. A proportion of the population also hibernates at the site. The bats use a network of caves, quarries and old buildings. An area of species-rich unimproved calcareous grassland occurs in the field to the east of Stoke Lane Quarry (in St Dunstan's Well Catchment SSSI). Sheep's-fescue, meadow oatgrass *Avenula pratensis*, crested dog's-tail *Cynosurus cristatus* and common bent *Agrostis capillaris* are the most

Site Name	Statutory designated site description
	common grasses, and glaucous sedge *Carex flacca* and spring sedge *C. caryophyllea* are abundant. Herbs of interest include Lady's mantle *Alchemilla filicaulis*, devil's-bit scabious *Succisa pratensis,* salad burnet *Sanguisorba minor*, cowslip *Primula veris*, fairy flax *Linum catharticum*, common rockrose *Helianthemum nummularium* and wild thyme *Thymus praecox*. Early purple orchid *Orchis mascula* and common spotted orchid *Dactylorhiza fuchsii* are widespread.
Chew Valley Lake SPA	The site consists of an expanse of open water (the largest artificial freshwater lake in Southwest England) with peripheral areas of reedbed, carr (wet woodland) and neutral grassland. The sparse submerged vegetation is composed largely of fennel pondweed *Stuckenia pectinata*, lesser pondweed *Potamogeton pusillus*, opposite-leaved pondweed *Groenlandia densa* and water crowfoots *Ranunculus spp.* The site is an internationally important staging post for migratory birds, especially waders, terns, warblers, swallows, and Martins. The grasslands and reedbeds are a critical autumn feeding ground for reed warblers *Acrocephalus scirpaceus* and sedge warblers *A. schoenobaenus*, and the lake is one of the most important inland waters in Britain for wintering wildfowl. Chew Valley Lake supports good populations of shoveler and gadwall, and nationally important numbers of teal and tufted duck *Aythya fuligula*. Other species over-wintering include goldeneye *Bucephala clangula*, wigeon *Anas penelope*, snipe *Gallinago gallinago*, lapwing and redshank. Up to 50 broods of great crested grebe *Podiceps cristatus* and 28 of little grebe *Tachybaptus ruficollis* are raised annually; autumn numbers of great crested grebe are the highest in Britain. Duck species breeding regularly include gadwall, mallard *Anas platyrhynchos*, shoveler, pochard *Aythya ferina*, tufted duck, ruddy duck *Oxyura jamaicensis* and shelduck. The lake also supports up to 42,000 roosting black-headed gull *Larus ridibundus*, common gull *Larus canus* and lesser black-backed gull *Larus fuscus*. A total of 247 species of bird have been recorded. Traditionally managed pasture and hay meadows on Keuper Marls and Head Deposits are included in the site. Plants associated with neutral soils include pepper-saxifrage *Silaum silaus*, burnet-saxifrage *Pimpinella saxifraga* and devil's-bit scabious, with fairy flax, salad burnet and dwarf thistle *Cirsium acaule* in more calcareous areas. There is a colony of several thousand green-winged orchid *Orchis morio*, and abundant cowslip, spiny restharrow *Ononis spinosa* and dyer's greenweed *Genista tinctoria*. Hedgerows support the nationally rare bithynian vetch *Vicia bithynica*.

Appendix 9-2 Statutory Designated Site Descriptions

Site Name	Statutory designated site description
Tealham and Tadham Moors SSSI	A wide range of grassland types have developed due to the variation in soils and in management practice. The fescue/rye-grass swards are dominated by Meadow Fescue *Festuca pratensis* and Perennial Ryegrass *Lolium perenne* together with marsh Ragwort *Senecio aquaticus*, Ragged-Robin *Lychnis floss-cuculi* and Meadowsweet *Filipendula ulmaria*. Other more diverse swards contain common knapweed *Centaurea nigra*, crested dog's-tail and meadow rue *Thalictrum flavum.* The wetter grasslands have marsh-marigold *Caltha palustris*, lesser spearwort *Ranunculus flammula* and rushes *Juncus spp.* There are some species-rich examples of the mire-type communities with meadow thistle *Cirsium dissectum*, carnation sedge *Carex panicea* and sweet vernal-grass *Anthoxanthum odoratum.* Other habitats present include hedges and hedgerow trees of alder, hawthorn and willow S*alix spp.* together with a few areas of scrub. An area of mixed woodland is the site of a heronry - the only one located on the moors. These habitats provide suitable feeding and nesting sites for a wide range of birds. In winter, large numbers of waterfowl feed on the wet grasslands; including good numbers of golden plover, lapwing, snipe and dunlin. Under flood conditions, populations of wildfowl move on to the moor: Bewick's Swan, wigeon and teal. Much of the moor remains moist into the spring and early summer when the low tussocky pastures provide suitable conditions for breeding snipe, lapwing, curlew and redshank. Good numbers of yellow wagtail *Motacilla flava* and whinchat *Saxicola rubetra* breed on the fringes of the moor. Tealham and Tadham Moors are also an important feeding ground for Whimbrel *Numenius phaeopus* on their spring migration in April/May. A wide range of other vertebrate species have been recorded here, most notably the otter.
Catcott Edington and Chilton Moors SSSI	Catcott, Edington and Chilton Moors form part of the extensive grazing marsh and ditch systems of the Somerset Levels and Moors. The land lies below 8 m ODN in the basin of the River Brue. A diverse invertebrate fauna is associated with the botanically rich water channels present within the SSSI. The water beetle fauna is of exceptional interest, with the nationally rare species *Haliplus mucronatus* and great silver water beetle *Hydrophilus piceus* present. The rare flecked general soldier fly *Stratiomys furcata* is found, and there are good numbers of dragonflies and damselflies, notably hairy dragonfly *Brachytron pratense* and ruddy darter *Sympetrum sanguineum*. Other habitats present include hedges and hedgerow trees of alder, hawthorn *Crataegus monogyna* and willow. Diverse habitats provide suitable feeding and nesting sites for a wide range of birds. In winter, waterfowl such as golden plover, lapwing, snipe and dunlin feed on the wet grasslands, whilst under flood conditions, wildfowl such as teal, wigeon and mallard move on to the Moors. The pastures remain moist into spring and early summer when the tussocky fields support breeding snipe, lapwing, curlew and a few pairs of redshank, yellow wagtail and whinchat

Site Name	Statutory designated site description
	breed on the moors and in spring, the pastures are an important feeding ground for whimbrel on migration. Other vertebrate species present, include the otter, grass snake *Natrix natrix* and common frog *Rana temporaria.*
Bridgwater Bay SSSI	Bridgwater Bay comprises a succession of habitats ranging through extensive intertidal mudflats, saltmarsh, shingle beach and grazing marsh intersected by a complex network of freshwater and brackish rhynes. It supports internationally and nationally important numbers of over-wintering and passage migrant waders and waterfowl. The rhynes and ponds contain a diverse invertebrate fauna including six nationally rare species and eighteen nationally scarce species. The site is an integral part of the Severn Estuary system and is ecologically linked to the Somerset Levels which provide alternative winter-feeding grounds for waders and wildfowl. The site supports internationally important numbers of whimbrel and black-tailed *godwit Limosa limosa* on passage. Of the overwintering species it attracts nationally important numbers of dunlin and wigeon. Shelduck use the Bay as a moulting ground and are also present in nationally important numbers. The Bay forms an integral part of the Severn Estuary system and is used by a substantial proportion of the overall waterfowl population which is of international importance. The assemblage of wildfowl and waders contains individual populations present in internationally important numbers including dunlin, shelduck, wigeon, curlew *Numenius arquata*, redshank and teal. Populations of national importance are those of ringed plover *Charadrius hiaticula* and grey plover *Pluvialis squatarola*. Significant numbers of knot *Calidris canutus,* turnstone *Arenaria interpres, c*ommon snipe and mallard also occur.
Crook Peak to Shute Shelve Hill SSSI	This site comprises a wide range of habitats which includes ancient and secondary semi-natural broadleaved woodland, unimproved calcareous grassland and a complex mosaic of calcareous grassland and acidic dry dwarf-shrub heath. Four of the calcareous grassland communities, two of the woodland types and the calcareous grassland/acidic dry dwarf-shrub heath mosaic all have a restricted distribution in Britain. Four nationally rare and seven notable plant species are also present. Greater horseshoe bats have been recorded in recent years.
Shiplate Slait SSSI	Shiplate Slait lies towards the western end of the Mendips between 30 and 160 metres mainly on south and west facing slopes, but with north and east aspects. The site has unimproved calcicolous grassland, some of which is mixed with dwarf-shrub, mosaics of calcicolous grassland and scrub and woodland. Four nationally rare types of vegetation form most of the grassland. Scrub forms a gradual transition between the grasslands and woodlands present and includes hawthorn, privet *Ligustrum vulgare*, wayfaring-tree *Viburnum lantana, t*raveller's-joy *Clematis vitalba* and black bryony *Tamus communis*. Vegetation around the scrub is not as heavily grazed as the open grassland and supports a taller community of plants such as common calamint *Calamintha ascendens,* Marjoram *Origanum vulgare*, basil thyme *Acinos arvensis*, hairy St John's-wort *Hypericum hirsutum* and false brome *Brachypodium sylvaticum*. The woodland canopy is ash-dominated with a discontinuous shrub layer of hawthorn, bramble *Rubus sp*., field maple and hazel.

Site Name	Statutory designated site description
	The ground layer is dominated by dog's mercury and has stinking iris *Iris foetidissima*, spurge laurel *Daphne laureola* and bluebell *Hyacinthoides non-scripta.* Other habitats present are small stands of bracken on the mudstone and patches of common nettle *Urtica dioica in* a dry valley bottom
Westhay Heath SSSI	Westhay Heath is an area of tall fen vegetation containing scrub, marshy grassland, rhynes and small ponds in the heart of the peat moors on the Somerset Levels. This mosaic of habitats has developed on areas previously used for peat extraction. The site is of importance for the presence of a nationally rare fen community, including a diverse assemblage of breeding and wintering birds and the presence of a nationally rare breeding bird species. This fen habitat supports breeding populations of at least 16 bird species. These include little grebe, Cetti's warbler *Cettia cetti*, whinchat, water rail *Rallus aquaticus*, mute swan *Cygnus olor*, reed warbler, sedge warbler *Acrocephalus schoenobaenus* and teal. This is the only Somerset site where the nationally rare marsh harrier *Circus aeruginosus* breeds. In addition, barn owl *Tyto alba*, kingfisher *Alcedo atthis,* buzzard *Buteo buteo* and grey heron *Ardea cinerea*, regularly frequent the area. Bittern *Botaurus stellaris*, bearded tit *Panurus biarmicus* and Cetti's warbler regularly over winter, while hobby *Falco subbuteo* is a frequent summer visitor. Otters are regularly recorded on Westhay Heath. Harvest mice *Micromys minutus* breed on the site, while grass snake and common frog are frequent
Berrow Dunes SSSI	This site provides a wide range of coastal habitats which includes salt marsh, fore, grey and yellow dunes, stable dune grassland, dune slacks, scrub and a freshwater lagoon. A rich invertebrate fauna is associated with these habitats. Fourteen species of dragonfly have been recorded including the notable hairy dragonfly and ruddy darter. Beetles are particularly well represented with 14 notable species and the nationally rare great silver water beetle. Two nationally rare species of soldier fly are also present: the flecked general and the banded general *S. potamida*. Breeding birds with a local distribution in Somerset include sedge warbler and reed warbler, bittern, snipe, woodcock *Scolopax rusticola*, merlin *Falco columbarius*, peregrine falcon *Falco peregrinus* and hen harrier are regular winter visitors
Shapwick Heath SSSI	The heath is a former raised bog lying in the basin of the River Brue. The site supports a diverse community of terrestrial and aquatic invertebrates. National rarities are the great silver water beetle and the lesser silver water beetle *Hydrochara caraboides* which is now confined nationally to the Brue Basin Peat Moors.
Westhay Moor SSSI	The moor is a former raised bog, now for the most part modified to grassland by agricultural practice. A wide range of sward types has developed due to variation in soils and in management practice. Westhay Moor supports a nationally outstanding community of terrestrial and aquatic invertebrates. Thirteen Red Data Book species have been recorded in recent years including the endangered lesser silver water beetle, which

Site Name	Statutory designated site description
	preys on the rich molluscan fauna in the peaty rhynes. It is now confined nationally to the peat moors in the Brue Basin. The large ornate brigadier soldier fly, *Odontomyia ornata* and the rare marsh fly, *Pteromicra leucopeza* are also found on Westhay Moor. At least 28 nationally notable invertebrate species also occur on the moor. The meadows, rhynes, abandoned peat workings and hedgerows present provide suitable breeding habitats for a diverse and nationally important breeding bird community. At least 39 species breed on the moor including lapwing, snipe, redshank and yellow wagtail on the meadows and nightingale *Luscinia megarhynchos* and little owl *Athene noctus* in the scrub woodland. Flooded peat workings attract wintering and breeding waterfowl including little grebe and water rail. Other vertebrate species present include the otter, grass snake and common frog.
Cheddar Reservoir SSSI	This deep-water reservoir supports large numbers of wildfowl, eleven species of which occur regularly. It is particularly important for over-wintering diving ducks, coots and grebes and has significant numbers of dabbling ducks especially in autumn and when water levels are low. Cheddar Reservoir has one of the largest flocks of wintering pochard in England and Wales and is regionally important for gadwall, goldeneye and great crested grebe. Some of the dabbling ducks, which include mallard, teal and shoveler, roost on the lake but feed elsewhere on the Somerset Levels. The lake provides food for up to 2500 wintering coots *Fulica atra,* the largest flock in Somerset. Migrant waders and terns use the reservoir as a feeding and roosting station
Axbridge Hill and Fry's Hill SSSI	This is a nationally important botanical site, for both vascular and non-vascular plants, situated on the southern escarpment of the Mendip Hills. It also contains a roosting site for two nationally rare species of bat and a wide range of butterfly species. There is a roosting site for greater horseshoe bat and lesser horseshoe bat, both of which are nationally rare. Dormice are present in the woodland. Twenty-five species of butterfly have been recorded and these include: brown argus *Aricia agestis,* green hairstreak *Callophrys rubi*, dark green fritillary *Argynnis aglaja* and marbled white *Melanargia Galathea.*
Somerset Wetlands NNR	The area covers six pre-existing national nature reserves and associated conservation-managed land: Bridgwater Bay, Ham Wall, Huntspill River, Shapwick Heath, Somerset Levels and Westhay Moor. The Somerset Wetlands National Nature Reserve (NNR) is an archipelago of interconnected nature reserves in the Somerset Levels and Moors, which is the largest remaining area of lowland wetland in England. It is also the UK's second largest area of lowland peat soils. Its range of wetland habitats hold nationally and internationally important populations of wildfowl and wading birds.

Site Name	Statutory designated site description
Mendip NNR	The Mendip national nature reserve incorporates two pre-existing NNRS; Ebbor Gorge and Rodney Stoke. With a series of archipelago sites stretching from Tor Woods, across the southern slopes and plateau of the Mendip Hills, ending in Brean Down, stretching out into the Severn Estuary. The Mendip NNR is most important for its large stretches of calcareous grasslands, ancient, wooded ravines and notable geology. Threatened champion species include adders *Vipera berus*, dormice, horseshoe bats and skylarks *Alauda arvensis*; and woodland and grassland flora, including endemic whitebeam species, and Somerset's county flower, the Cheddar pink.

Appendix 9-3 Arboricultural Assessment Methodology

1.1.1 The assessment of potential impacts as a result of the Proposed Development (construction, operation (and maintenance) and decommissioning) on Arboriculture will be undertaken using the principles of the guidance and criteria set out in BS5837:2012 Trees in relation to design, demolition and construction – Recommendations (Ref -1).

1.1.2 The methodology is set out below.

1.1.3 Potential impacts of the Proposed Development on Arboriculture will be assessed by:

a. Considering the existing (baseline) status of the Arboricultural features within the Scoping Site Boundary and relevant surrounds with respect to trees;
b. Identifying potential impacts of the Proposed Development on Arboriculture during the construction, operational and maintenance, and decommissioning phases; and
c. Proposing suitable mitigation measures to be incorporated into the Proposed Development design, construction, operation and maintenance, and decommissioning to offset any adverse impacts (i.e. embedded mitigation).

1.2. Site Walkover

1.2.1 A walkover will be undertaken within the Site to identify and record trees which are likely ancient or veteran, and thus have greater constraints associated with them than that of non-ancient/veteran trees. Such trees are of at least mature dimensions for the species and exhibit substantial dead or decayed wood habitat. Where identified they will be recorded via a tree survey to British Standards BS5837:2012 Trees in relation to design, demolition and construction – Recommendations which will identify the quality and value of the trees and the spatial constraints associated with them. Buffer zones will be applied in accordance with Standing Advice.

1.2.2 Tree dimensions, health and structural condition, quality category and likely remaining useful contribution (in years) will be considered. This will provide essential information to the design team to allow the retention of the highest value trees where feasible. This will also include a consideration of the likely future growth and shading impact of trees.

1.3. Desk Study and Targeted Tree Survey

1.3.1 A targeted approach to tree surveys is considered appropriate, and this has been successfully applied on a range of solar schemes across the UK (including East Yorkshire Solar Farm and Sunnica Energy Farm).

1.3.2 A desk study will be undertaken with reference to the National Tree Map dataset (provided by Bluesky International Ltd). This provides data on tree

heights and canopy spread derived from LiDAR and aerial imagery. A buffer zone will be added to each tree based on its recorded height which will be used to estimate a typical maximum stem diameter. The buffer will be derived from AECOM's extensive dataset of tens of thousands of trees surveyed across the UK. This will be used to provide early tree constraint information and to inform the design.

1.3.3 The desk study will then identify those trees at substantive risk from impacts from the construction activities within the Site, and these will then be subject to a targeted detailed tree survey to BS5837:2012 (i.e., 'at risk areas').

1.3.4 Topographical survey information will be utilised to inform the position of tree features subject to targeted detailed tree surveys (where available).

1.3.5 Trees which are not subject to a detailed survey will be addressed solely via desk study data.

1.4. Baseline Tree Constraints

1.4.1 A Tree Constraints Plan will be produced to set out the spatial constraints associated with arboricultural features on and immediately adjacent to the Site. This will include identification of any feature with a significant statutory or non-statutory designation and any relevant buffer zone.

1.4.2 The likely future impact of trees will also need to be fully considered in the design process to ensure well placed tree retention and to minimise unnecessary conflicts associated with trees. Trees will continue to grow and increase in stature and must be provided reasonable space for their likely future dimensions to avoid pressure for tree removal or ongoing onerous tree pruning works which would have a negative impact on the health or amenity value of the trees. Current and future shading arcs will be shown on the Tree Constraints Plan based on tree heights. Future tree heights will be based on published mature heights where the species is identified and where the species is not identified (e.g. trees considered via desk study only) will adopt a maximum height of 30 m.

1.5. Assessment of Arboricultural Impacts

1.5.1 An Arboricultural Impact Assessment to BS5837:2012 will be developed to consider the likely direct and indirect impacts of the Proposed Development on trees. This will constitute a desktop analysis of the proposals for the Site overlaid onto the Tree Constraints Plan and will identify those trees to be removed in relation to the Proposed Development, as well as consider how trees to be retained are to be protected throughout the construction phase. Suitable mitigation measures will also be recommended as appropriate.

1.5.2 A Tree Protection Plan will set out the spatial positioning of protective measures to protect retained trees and will identify trees for removal.

1.5.3 Full consideration of the spatial constraints associated with trees and well implemented and maintained tree protection measures throughout the construction phase, will ensure that important trees can be successfully retained and incorporated into the Proposed Development.

1.5.4 An Arboricultural Impact Assessment will be included as a technical appendix to the ES.

1.5.5 A commitment to produce an Arboricultural Method Statement ('AMS') will be included in the Outline CEMP; an AMS will be appended to a detailed CEMP.

1.6. Limitations and Assumptions

1.6.1 The location and layout of certain elements of infrastructure, construction methodologies and mitigation have not yet been determined. This is of particular importance when considering impacts associated with Arboriculture.

1.6.2 Should access be restricted due to land access agreements, dense vegetation or other restrictions, trees will be surveyed from the nearest feasible vantage point and conditions and dimensions will be estimated.

1.6.3 Important hedgerows (as per the Hedgerow Regulations) will be determined by the Ecology & Biodiversity and Heritage assessments.

1.6.4 The level of topographical survey detail will impact the accuracy of tree positions (and any associated buffer zones and/or RPAs) and will also have an impact on how much detail can be feasibly recorded especially for trees within woodlands and tree groups.

1.6.5 Where trees form a coherent group feature, they will be recorded as group and be assigned maximum dimensions.

1.6.6 The British Standard BS5837:2012 is currently under revision and the revised version (which has been delayed) is due to be published in July 2027. Because the tree survey will have been completed to the current 2012 standard it is proposed to adopt this methodology for the arboricultural assessment to be submitted as part of the ES.

1.6.7 The desk study, use of buffers and targeted approach to tree surveys is considered a reasonable and proportionate response to the scale of the Site and has been used successfully on a range of Nationally Significant Infrastructure Projects ('NSIPs') including solar (such as East Yorkshire Solar Farm). This approach is likely to overestimate rather than underestimate tree constraints. The application of site walkovers to identify ancient or veteran trees and targeted tree surveys of at-risk locations helps to further reduce any risk that tree constraints may not be fully represented.

1.6.8 The loss of companion shelter and any additional tree management to address this will need to be considered following site clearance works and may result in the requirement for additional tree loss or management (beyond that identified within any initial assessment of arboricultural impacts).

1.7. Summary of Elements Scoped In and Out

1.7.1 A standalone ES chapter for Arboriculture is proposed to be scoped out; however, an Arboricultural Impact Assessment will be completed to the relevant standards, to include identification for the mitigation of impacts to trees and will be included as a technical appendix to the ES.

References

Ref.1 British Standards Institution (BSI), 2012. BS5837:2012 Trees in relation to design, demolition and construction – Recommendations

Appendix 10-1: Nutrient Neutrality Screening Assessment

1.1. Introduction

1.1.1 On 17th August 2020, Natural England published advice to a number of Local Planning Authorities (LPAs), including Somerset Council (Ref.1) to indicate that as a Competent Authority under the Habitats Regulations, the LPA (or Secretary of State (in the case of a Development Consent Order (DCO)), must carefully consider the nutrient impacts of any new plans and projects on habitats sites and whether those impacts may have an adverse effect on the integrity of a habitats site that requires mitigation, including through nutrient neutrality. In the case of Somerset Council, the affected habitat site is the Somerset Levels and Moors Ramsar Site, for which excessive phosphorus is contributing to unfavourable status. Based on Natural England guidance (Ref.1), nitrogen does not need to be considered for this catchment.

1.1.2 Part of the Proposed Development is located within the Brue catchment (Ref.2) and the Somerset Levels and Moors Ramsar Site is located approximately 150 m south east of the Scoping Site Boundary, as shown on **Figure 10-10: Sensitive Sites.** Therefore, this Nutrient Neutrality Screening Assessment considers the potential nutrient impacts of the Proposed Development, whether the issue of nutrient neutrality is invoked, and assesses whether the Proposed Development is nutrient neutral. This will also inform the Habitat Regulations Assessment for the Proposed Development. The Brue nutrient neutrality catchment in relation to the Somerset Levels and Moors Ramsar Site and the Proposed Development is shown on **Figure 10-2: Surface Water Features and their Attributes**.

1.1.3 Nutrient neutrality is an approach developed by Natural England to ensure that potential developments do not increase nutrient loading in environmentally sensitive catchments (Ref.3). Nutrient neutrality assessments ensure that elevated nutrient concentrations can be avoided to prevent water quality and aquatic communities from being adversely affected by the impacts of excess nutrient loading. The excess of nutrients, notably phosphorus in this case, results in the rapid growth of certain plants and excessive oxygen consumption in a process called eutrophication, reducing the ecological quality of water environments.

1.1.4 In Somerset, evidence of habitats and species being negatively affected due to nutrient enrichment has resulted in the implementation of nutrient neutrality regulations (Ref.3). Development proposals within these catchments must demonstrate that they will not result in a net increase in nutrient inputs which could adversely affect designated sites. Nutrient neutrality assessments consider changes in land use and nutrient inputs and outputs to determine whether nutrient loading increases or decreases.

1.1.5 The Proposed Development is partially located within the Brue nutrient neutrality catchment and therefore requires consideration of its potential to increase phosphorus loading within the catchment (Ref.3). This technical note undertakes a screening exercise to determine whether the Proposed Development could result in an increase of nutrient inputs to the designated site. For solar developments nutrient neutrality considerations are typically associated with changes in land use and runoff pathways rather than wastewater generation, which is more relevant for residential developments.

1.2. Proposed Development

1.2.1 The Energy Park comprises of land parcels grouped into five Development Areas: Northern, Eastern, Southern, Western and Central. Approximately 121 hectares (ha) of the Eastern Development Area is located within the Brue nutrient neutrality catchment, therefore it is only this area of the Proposed Development which requires consideration as part of this Screening Assessment. The Eastern Development Area within the Brue nutrient neutrality catchment is shown on **Figure 10-11: Nutrient neutrality screening assessment: CORINE existing land use** and **Figure 10-12: Nutrient neutrality screening assessment: CROME existing crop map**

1.2.2 Currently, the Eastern Development Area comprises agricultural land. Land use was determined through a review of both the CORINE 2020 (Ref.5) and CROME 2024 (Ref.6) land-use data sets. CORINE classified the site as a single land-use type, namely pasture, as shown on **Figure 10-11: Nutrient neutrality screening assessment: CORINE existing land use**. In contrast, the more recent CROME 2024 dataset identified the Scoping Site Boundary as predominantly grassland and temporary grassland, with smaller areas of cereal crops and hedgerows, as shown on **Figure 10-12: Nutrient neutrality screening assessment: CROME existing crop map**. As CROME provides the most recent land-use information, it has been used to inform the land-use designation for the purposes of this assessment. Based on the CROME dataset and considering the land use types available within the Somerset Phosphate Budget Calculator (Ref.7) (hereby referred to as 'the Calculator') the Scoping Site Boundary is predominantly Lowland Grazing with a small percentage of Cereals. Further baseline information is provided in Section 10.5 of the Scoping Report.

1.3. Somerset Levels and Moors Ramsar sites

1.3.1 The Somerset Levels and Moors is designated as both a Ramsar Site and a Special Protection Area (SPA) featuring a series of Sites of Special Scientific Interest (SSSIs) (Ref.4). The site supports a range of ecologically important wetland habitats and species.

1.3.2 The Somerset Levels and Moors are designated as an SPA under the Habitat Regulations 2017 and listed as a Ramsar Site under the Ramsar Convention. The Ramsar Site broadly covers the same area as the Somerset Levels and Moors SPA. While the SPA is designated for its international waterbird communities, the Ramsar Site is designated for its

internationally important wetland features including the floristic and invertebrate diversity and species of its ditches, which is shared as a designated feature of the underpinning Sites of Special Scientific Interest (SSSIs) (Ref.4).

1.3.3 The site qualifies as a SPA under Article 4.1 of the Birds Directive by supporting populations of the following qualifying features, as identified in the Somerset Levels & Moors SPA conservation objectives (2019) (Ref.8):

a. *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding);
b. *Anas crecca*; Eurasian teal (Non-breeding);
c. *Pluvialis apricaria*; European golden plover (Non-breeding);
d. *Vanellus vanellus*; Northern lapwing (Non-breeding); and
e. Waterbird assemblage

1.3.4 The Somerset Levels and Moors Ramsar Site qualifies under the following Ramsar criteria, as identified within the Ramsar information sheet (Ref.9):

a. Ramsar criterion 2: Supports 17 species of British Red Data Book invertebrates;
b. Ramsar criterion 5: assemblages of international importance: Species with peak counts in winter: 97155 waterfowl (5 year peak mean 1998/99-2002/2003)
c. Ramsar Criterion 6: Species/populations occurring at levels of international importance. Qualifying species with peak counts in winter include:
    i. Tundra swan (*Cygnus columbianus bewickii*), NW Europe population, 112 individuals, representing an average of 1.3% of the GB population (five-year peak mean 1998/99 to 2002/03);
    ii. Eurasian teal (*Anas crecca*), NW Europe population, 21,231 individuals, representing an average of 5.3% of the population (five-year peak mean 1998/99 to 2002/03); and
    iii. Northern lapwing (*Vanellus vanellus*), Europe breeding population, 36,580 individuals, representing an average of 1.0% of the population (five-year peak mean 1998/99 to 2002/03).

1.3.5 The Somerset Levels and Moors Ramsar Site has been identified as having elevated phosphorus concentrations acting as a key pressure contributing to eutrophication and ecological changes (Ref.4). As a result, the interest features of the Somerset Levels and Moors Ramsar Site are considered unfavourable, or at risk, from the effects of eutrophication caused by excessive phosphates, therefore there is the requirement for potential developments located within the Brue nutrient neutrality catchment to demonstrate that they will not contribute to excess phosphorus to the catchment.

1.3.6 Nutrient neutrality requirements apply to the Somerset Levels and Moors Ramsar Site due to concerns regarding phosphorus enrichment and its effects on the site's qualifying wetland features. Natural England found that additional nutrients from new developments are unlikely to have a significant effect on internationally important bird communities. The requirement does

not relate to the qualifying bird features of the SPA; only nutrient neutrality in relation to the Ramsar Site has been considered within this assessment.

1.4. Methodology

1.4.1 The nutrient neutrality assessment has been undertaken using the Calculator (Ref.7). The Calculator quantifies phosphorus loads associated with the Proposed Development and compares baseline and post development conditions to determine whether the Proposed Development would result in a net increase in phosphorus entering the Brue nutrient neutrality catchment. The Calculator requires land use inputs to be selected from a predefined list of categories (Ref.10). Where the existing or proposed land use does not directly correspond with one of these categories, professional judgement has been applied to identify the most appropriate land use classification.

1.4.2 The assessment considers potential nutrient inputs associated with existing and proposed surface water drainage arrangements, and any other relevant nutrient pathways. For commercial developments, process water streams that may contain nutrients should also be considered; however, no such sources are associated with this Proposed Development. Where the Proposed Development does not generate additional foul wastewater within the catchment, the wastewater component of the Calculator may be screened out of further assessment.

1.5. Assumptions and limitations

1.5.1 This Screening Assessment and the nutrient neutrality calculations are based on the current design information available at the EIA Scoping stage and at the time of writing (September 2026).

1.5.2 The existing (pre-development) land use has been determined using CORINE 2020 (Ref.5) and CROME 2024 (Ref.6) land-use mapping, supplemented by aerial imagery and professional judgement where required, and has been categorised as a mix of 'Lowland Grazing[1]' and 'Cereals[2]'.

1.5.3 The precise location of the proposed Collector Substations is not yet known, but it has been assumed that there will be one within the Eastern Development Area and within the Brue nutrient neutrality catchment as a worst-case scenario. The Collector Substation is anticipated to require a land area of 1.5 ha, at the time of writing. This area is categorised as 'Commercial/Industrial[3]' as part of the nutrient neutrality calculations.

[1] Lowland Grazing: Holdings on which cattle, sheep and other grazing livestock account for more than two thirds of their total standard output, excluding holdings classified as dairy. A holding is classified as lowland if less than 50% of its total area falls within a Less Favored Area (LFA).

[2] Cereals: Areas on which cereals, combinable crops and set aside are farmed

[3] Commercial/Industrial: Land used for commercial establishments […], manufacturing plants, public utilities, mining, distribution of goods or services, administration of business activities, research and development facilities, warehousing, shipping, transporting, remanufacturing, stockpiling of raw materials, storage, repair and maintenance of commercial machinery or equipment, and waste management.

1.5.4 The remainder of the Eastern Development Area (that is not the Collector Substation or the access tracks) has been categorised as 'Lowland Grazing'. This is taking the precautionary approach where there is the assumption that the land may be grazed under the solar panels when the Proposed Development is operational. This is yet to be confirmed but is more precautionary than adopting a grassland land use.

1.5.5 There will be access tracks as part of the Proposed Development, but the precise extent of these is not yet confirmed. For the purposes of this assessment, it has been assumed that the access tracks between the Solar Arrays will comprise compacted stone tracks and will be subject to low-frequency operational traffic (e.g. similar or less than typical farm usage). As such, it would not be appropriate to classify these as 'Commercial/Industrial' within the nutrient neutrality assessment.

1.5.6 This assessment has not considered any hardstanding access tracks which may form part of the Collector Substation as the extent of these has not been defined at the time of writing. If the Collector Substation should fall within the nutrient neutrality catchment, then this assessment will need to be revisited at the next stage of assessment and these access tracks considered.

1.5.7 The Calculator (Ref.7) has been used for this Screening Assessment, and the appropriate land uses chosen as detailed above. It should be noted that the proposed land uses and their respective areas are indicative at this stage but nonetheless have been chosen on a precautionary basis. Any changes to these, or potentially other changes, may require a review of this assessment.

1.5.8 The assessment does not consider potential nutrient inputs associated with wastewater (foul drainage) (i.e. Stage 1 of the Calculator). It is assumed that foul drainage from temporary construction compounds and operational substation welfare facilities will be connected to the public sewer or otherwise captured by a sealed cesspit or tank for offsite disposal. The Proposed Development does not necessitate new overnight stays for workers living outside of the nutrient neutrality catchment, and so does not increase foul wastewater in the catchment over and above what would already be occurring. Stage 1 of the calculations is therefore considered redundant, in accordance with the methodology outlined in Section 1.4.

1.6. Nutrient neutrality screening assessment

Assessment approach

1.6.1 Nutrient budget calculations have been undertaken using the Calculator to assess how land use change following the Proposed Development may result in changes to phosphorus loading into the catchment (Ref.7). The calculations compare existing land use nutrient loading with the proposed land use following the Proposed Development to assess whether nutrient neutrality can be achieved.

Stage 1 Nutrient load from additional population (wastewater)

1.6.2 Stage 1 of the Calculator determines wastewater / foul nutrient loading. The assessment method from Natural England is intended to estimate the nutrient budget from all types of development that would result in a net increase in population served by a wastewater system. This is indicated by development that would include overnight accommodation. The methodology suggests that other types of business or commercial development, not involving overnight accommodation, will generally not need to be included in the wastewater assessment.

1.6.3 It is assumed that anyone living in the catchment also works and uses facilities in the catchment, and therefore wastewater generated by that person can be calculated using the population increase from new homes and other accommodation. This removes the potential for double counting of human wastewater arising from different planning uses. On this basis the requirement for a Stage 1 assessment of foul wastewater is screened out.

Stage 2 Existing land use

1.6.4 Stage 2 of the Calculator determines existing nutrient loading from a proposed development site based on surface water runoff from a certain land use, and considers soil drainage type, annual average rainfall and whether the Scoping Site Boundary is within a Nitrate Vulnerable Zone. Supporting mapping for these parameters is provided in Annex 10-1-1.

1.6.5 The soil drainage type has been checked using the Soilscapes tool (Ref.11) and ‘Impermeable - drained for arable’ has been selected due to the soil classification being Loamy and sandy soils with naturally high groundwater and a peaty surface (Soilscape 23).

1.6.6 The annual average rainfall band was identified using the Rainfall tab inbuilt within the Calculator and the annual average rainfall band of 750-800 mm/yr has been used.

1.6.7 The Proposed Development is not within a Nitrate Vulnerable Zone as checked on Defra’s MAGIC Map Application (Ref.6).

1.6.8 The existing (pre-development) land use within the Scoping Site Boundary was determined using CORINE 2020 (Ref.5) and CROME 2024 (Ref.6) land-use mapping (**Figure 10-11: Nutrient neutrality screening assessment: CORINE existing land use** and **Figure 10-12: Nutrient neutrality screening assessment: CROME existing crop map** respectively). The Scoping Site Boundary comprises predominantly ‘Lowland Grazing’, with smaller areas of ‘Cereals’ against the Calculator. These existing agricultural practices contribute to phosphorus inputs to the catchment. The nutrient budget calculations consider these land use practices as the baseline nutrient loading for the calculations going forward.

1.6.9 The total existing land use area of the Eastern Development Area within the Brue nutrient neutrality catchment is 121 ha. When considering the existing

land use categories (117 ha to lowland grazing, and 4 ha to cereals), this results in a total phosphorus load of 26.93 kg/yr, as shown in Annex 10-1-1.

Stage 3 Proposed land use

1.6.10 Stage 3 of the Calculator determines proposed nutrient loading from the new land use(s) on a Proposed Development site. In this case, the vast majority of the Scoping Site Boundary will consist of solar panel arrays. Grass will be allowed to grow beneath the panels with no application of any fertiliser arising from the 'Cereal' portion of the land, thereby representing a general reduction in nutrient loading in comparison to the existing agricultural land use.

1.6.11 The panels themselves will not contribute to any nutrient loading. Rainfall will runoff to the ground below, with no source of nutrients, akin to a meadow or semi natural grassland. It has not yet been determined whether low level grazing will be utilised to prevent grass from growing excessively, as is the case on other similar schemes. Therefore, on a precautionary basis, the land beneath the panels is considered to be low level grazing. This is more precautionary than adopting a grassland land use.

1.6.12 The proposed land use types for the Proposed Development have been based on a precautionary approach:

a. The proposed Collector Substation (1.5 ha) has been categorised at 'Commercial/Industrial' for the purposes of the nutrient neutrality assessment.
b. The remainder of the Eastern Development Area (excluding the Collector Substation and access tracks) has been categorised as 'Lowland Grazing'. It is assumed that the land may be grazed beneath the Solar Arrays during operation of the Proposed Development to manage grass growth. Access routes and tracks are assumed to comprise compacted stone tracks with very low levels of operational traffic and therefore do not warrant an urban land use.

1.6.13 The total proposed land use area of the Eastern Development Area within the Brue nutrient neutrality catchment is 121 ha, comprising 1.5 ha of 'Commercial/Industrial' and 119.5 ha of 'Lowland Grazing'; this results in total phosphorus load of 26.8 kg/yr, shown in Annex 10-1-1.

Stage 4 Nutrient budget results

1.6.14 Stage 4 calculates the net change in total phosphorus load to the catchment from the Proposed Development. This is derived by calculating the difference between the load calculated for the Proposed Development (Stage 3) and that for the existing land uses (Stage 2). A 20% precautionary buffer is applied by the Calculator to a positive nutrient budget; as the budget is negative, no buffer is added.

1.6.15 Stage 1 is not applicable as there is no increase in foul drainage / wastewater as part of overnight accommodation as a result of the Proposed Development.

1.6.16 The nutrient budget (the net change in total phosphorus load) is -0.13 KgP/year, as illustrated in Annex 10-1-1.

1.6.17 The Proposed Development will be phosphorus neutral as there is a negative net change in total phosphorus (-0.13 kg/year). Therefore, no further mitigation for phosphorus is required.

1.6.18 To provide additional confidence in the assessment outcome, the nutrient budget was also considered under a scenario whereby grazing does not occur across the site and the majority of the site is represented by the calculator land use category 'Greenspace[4] / Semi-Natural Grassland[5]'. Under this scenario, the nutrient budget would be -22.84 kgP/yr, indicating that the Proposed Development would remain comfortably nutrient neutral.

1.7. Conclusions

1.7.1 This Nutrient Neutrality Screening Assessment compared the existing (pre-development) and proposed (post-development) scenarios to determine whether there would be any potential for additional phosphorus loading to the Brue nutrient neutrality catchment as a result of the Proposed Development.

1.7.2 At this stage, the limitations and assumptions associated with the Proposed Development led to a precautionary approach for the calculations.

1.7.3 Only 121 ha of the Proposed Development (Eastern Development Area) is located within the Brue nutrient neutrality catchment, therefore only this area of the Proposed Development required consideration as part of this Screening Assessment.

1.7.4 Overall, the nutrient budget calculations indicate that the section of the Proposed Development within the Brue nutrient neutrality catchment would not result in an increase in phosphorus loading to the Brue nutrient neutrality catchment. Instead, the calculations suggest the Proposed Development would generate a net reduction in relation to the existing baseline. Therefore, it is considered that the Proposed Development is likely to be phosphorus neutral and, on that basis, no likely significant effects on the Somerset Levels and Moors Ramsar Site are anticipated in relation to phosphorus. This will be confirmed in the Habitats Regulations Assessment. Furthermore, an appropriate surface water drainage strategy incorporating sustainable drainage systems will be developed for the scheme, further enabling removal of phosphorus from surface water runoff and thus providing further confidence in this conclusion.

1.7.5 Across the Proposed Development, the reduction in phosphorus loading can mainly be attributed to the reduction and/or removal of lowland grazing /

[4] Greenspace: Natural and semi-natural outdoor spaces provided for recreational use where fertilisers will not be applied and dog waste is managed (e.g. semi-natural parks). This does not include green infrastructure within the built urban environment as this is included in the urban categories.
[5] Meadow / Semi-Natural Grassland: A meadow is a field habitat vegetated by grass and other non-woody plants that has an open character and is not grazed by livestock.

agricultural activities and the associated reduction in fertiliser use. In this assessment, it was assumed the land beneath the solar panels would be grazed (albeit at a lower density) as a worst-case approach, however, there is the potential for the establishment of permanent grassland beneath and around the solar arrays, which would further reduce phosphorus loading. Under a scenario where the majority of the site comprised Greenspace and Meadow / Semi-Natural Grassland, the Proposed Development would remain comfortably nutrient neutral.

References

Ref.1 Natural England (2020). *Matters Regarding Development in Relation to the Somerset Levels and Moors Ramsar Site. Letter to Local Planning Authorities,* 17 August 2020. Natural England. Available: Natural England advice to LPAs on nutrients in the Somerset Levels and Moors catchment - 17.08.20.pdf

Ref.2 Royal HaskoningDHV (2022). *Somerset Levels and Moors Surface Water Catchment: Brue Catchment (Phosphate Budget Calculator Map).* Royal HaskoningDHV for Somerset Local Planning Authorities. Available: https://www.somerset.gov.uk/planning-buildings-and-land/phosphates-on-the-somerset-levels-and-moors-ramsar-site/

Ref.3 Natural England (2022). *Nutrient Neutrality Principles and Guidance*. Natural England. Available: https://publications.naturalengland.org.uk/publication/5031421117988864

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Ref.5 European Environment Agency (EEA) (2020). *CORINE Land Cover 2018 (Version 2020_20*). European Environment Agency. Available: https://land.copernicus.eu/en/products/corine-land-cover

Ref.6 Department for Environment, Food and Rural Affairs (Defra) (2024). *Crop Map of England (CROME) 2024*. Defra. Available: Defra Data Services Platform

Ref.7 Somerset Council (2024). *Somerset Phosphate Budget Calculator Version 3.* (Developed by Royal HaskoningDHV on behalf of Somerset Council). Available: https://www.somerset.gov.uk/planning-buildings-and-land/phosphate-budget-calculator/

Ref.8 Natural England (2018, updated). *Somerset Levels and Moors SPA Conservation Objectives*. Natural England. Available: European Site Conservation Objectives for Somerset Levels & Moors SPA - UK9010031

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Ref.10 Somerset Ecology Services / Somerset Local Planning Authorities (2024). *Guidance Notes for the Somerset Phosphate Budget Calculator.* Somerset

Ecology Services. Available: Phosphates guidance, templates and useful information

Ref.11 Cranfield University (n.d.). *Soilscapes Soil Types Viewer*. Available at: https://www.landis.org.uk/soilscapes/

Ref.12 Department for Environment, Food and Rural Affairs (Defra) (n.d.). *MAGIC Map Application (Multi-Agency Geographic Information for the Countryside*). Available at: https://magic.defra.gov.uk/MagicMap.html

Annex 10-1-1 Supporting Evidence

Plate 1 *Stage 2 existing land use phosphorus budget calculation outputs.*

Plate 2 *Stage 3 proposed land use phosphorus budget calculation outputs.*

Plate 3 *Stage 4 phosphorus budget calculation and nutrient neutrality results.*

Plate 4 *Nitrate Vulnerable Zone (NVZ) Designation from the UK Soil Observatory (UKSO)*

Plate 5 *Cranfield University Soilscapes Classification*

Plate 6 *Somerset Phosphate Budget Calculator V3 Soil Drainage Classifications*

Plate 7 *Average Annual Rainfall Classification from the Somerset Phosphate Budget Calculator V3*

Plate 1 *Stage 2 existing land use phosphorus budget calculation outputs.*

Stage 2 **Calculate existing (pre-development) nutrient load from current land use of the development**

Note: Where development sites include existing areas that are to be retained, these areas can be excluded from the calculations in both Stages 2 and 3.

1. Identify current land uses of the development site — Value — Unit

The user should select the value from the following drop-down list that applies to the development. Use the links below or navigate to the 'Introduction' tab to find instructions on how this information can be acquired.

Select the Catchment	Brue and Axe	
Select the soil drainage type	Impermeable - drained for arable	
Select annual average rainfall band	750-800	mm/yr
Within Nitrate Vulnerable Zone (NVZ)	No	

Note: Use the links in the 'Introduction' Tab to find the soil type, catchment and NVZ map. The rainfall can be found in the 'Rainfall' tab.

2. Input the area of the existing land use type(s) — 0

			TP loading	
			Brue and Axe	
Residential urban		Hectares	0.00	Kg/yr
LDRU		Hectares	0.00	Kg/yr
Commercial / Industrial		Hectares	0.00	Kg/yr
Urban open space		Hectares	0.00	Kg/yr
Dairy		Hectares	0.00	Kg/yr
Lowland grazing	117.000	Hectares	24.57	Kg/yr
Mixed agriculture		Hectares	0.00	Kg/yr
Poultry		Hectares	0.00	Kg/yr
Pigs		Hectares	0.00	Kg/yr
Horticulture		Hectares	0.00	Kg/yr
Cereals	4.000	Hectares	2.36	Kg/yr
General arable		Hectares	0.00	Kg/yr
Allotments and city farms		Hectares	0.00	Kg/yr
LFA		Hectares	0.00	Kg/yr
Woodland (e.g. broad-leaved, orchard)		Hectares	0.00	Kg/yr
Greenspace / semi-natural grassland		Hectares	0.00	Kg/yr
Shrub / heathland / bracken / bog		Hectares	0.00	Kg/yr
Water		Hectares	0.00	Kg/yr
Sum total	**121.000**	**Hectares**	**26.93**	**Kg/yr**

SuDS removal

Please input the total TP removal amount (%) calculated for the existing SuDS on site (if present). The calculated value should be justifiable with supporting evidence.

Where LDRU is selected, a standard SuDS removal of 85% is automatically applied and the CIRIA SuDS guidance for calculating run-off should not be used in combination.

SuDS removal amount		%
SuDS removal amount (LDRU Override)	0	%

3. Calculate loading from current land usage

	Value	Unit
TP load from existing land usage	**26.93**	**Kg/yr**

Plate 2 *Stage 3 proposed land use phosphorus budget calculation outputs.*

Stage 3 **Calculate nutrient load for the proposed development**

Note: This section should include all land uses within the proposed development. Where the proposed scheme is to create new wetlands, woodlands, nature reserves, etc. within the development site area, then this should be included within this section. Any offsite mitigation should not be included below, and should instead be inputted in to the mitigation tabs (if required).

1.	Identify proposed land uses of the development site	Value	Unit
	Residential urban		Hectares
	LDRU		Hectares
	Commercial / Industrial	1.500	Hectares
	Urban open space		Hectares
	Dairy		Hectares
	Lowland grazing	119.500	Hectares
	Mixed agriculture		Hectares
	Poultry		Hectares
	Pigs		Hectares
	Horticulture		Hectares
	Cereals		Hectares
	General arable		Hectares
	Allotments and city farms		Hectares
	LFA		Hectares
	Woodland (e.g. broad-leaved, orchard)		Hectares
	Greenspace / semi-natural grassland		Hectares
	Shrub / heathland / bracken / bog		Hectares
	Water		Hectares

2.	Designed Wetlands		
	Wetland area		Hectares
	TP Banking coefficient		kg/ha/year

Note: Where wetlands are proposed, please input the banking coefficient (i.e. the phosphorus removal amount in kg/ha/yr) calculated for the designed wetland. The calculated value should be justifiable with supporting evidence. Wetland refers to specific designed wetland and not SuDS. For further information on the designing constructed wetlands and deriving the phosphorus removal rate, please refer to the Constructed wetland hub.

3. SuDS removal

The TP removal from SuDS must be entered in the cell below and this will be subtracted from the land use loading calculated from Step 1. The calculated value should be justifiable with supporting evidence.

The CIRIA report "Using SuDS to reduce phosphorus in surface water runoff" (C808F) provides further information on the removal rates for different SuDS components and instructions for calculating the TP removal amount. The value entered should be the **total removal percentage**, accounting for both particulate phosphorus and dissolved phosphorus.

Where LDRU is selected, a standard SuDS removal of 85% is automatically applied and the CIRIA SuDS guidance for calculating run-off should not be used in combination.

Please input the TP removal amount (%) calculated for the SuDS. The calculated value should be justifiable with supporting evidence.

SuDS removal amount		%
SuDS removal amount (LDRU Override)	0	%

Sum total of land uses	**121.000**	**Hectares**

Note: The sum total of land uses must equal the development site area inputted in Stage 2 - the box will colour red if the areas do not match. For more information, please refer to the land use definitions in the help tab.

4.	Calculate loading from proposed land usage	Value	Unit
	TP load from proposed land usage	**26.80**	**kg/year**

Plate 3 *Stage 4 phosphorus budget calculation and nutrient neutrality results.*

Stage 4 **Calculate the net change in nutrient load from the proposed development**

Note: This stage calculates the net change in TP load to the catchment from the proposed development. This is derived by calculating the difference between the load calculated for the proposed development (wastewater, urban area, open space, etc.) and that for the existing land uses. The nutrient budget for the site has been calculated under current and post-2030 permit limits, where applicable. Where applicable, post-2025 WRC permit levels will also appear.

		Current	Post 2030		Summary	
					No. of dwellings / rooms	0
1.	Identify the load from additional population	Value	Value	Unit	Onsite treatment plant	Default septic tank
	TP Loading from additional population	**0.00**	**0.00**	**kg/year**	Current TP discharge concentr	0.00
					Post 2030 TP discharge concer	0.00
2.	Calculate net change in nutrient load from land use change	Value	Value	Unit	TP current land use	26.93
	TP load from land use change	**-0.13**	**-0.13**	**kg/year**	TP proposed land use	26.80
3.	Calculate nutrient budget for the development site	Value	Value	Unit		
	TP budget for the site	**-0.13**	**-0.13**	**kg/year**		
4.	Calculate precautionary buffer	Value	Value	Unit		
	Buffer amount	20	20	%		
	Precautionary buffer	**0.00**	**0.00**	**kg/year**		

Note: The figures used throughout this model are based on scientific research, evidence and modelled catchments and represent the best available evidence. However, it is important that a precautionary buffer is used that recognises the uncertainty with these figures and ensures, with reasonable certainty, that there will be no adverse effect on site integrity. As such, a 20% precautionary buffer added to the nutrient budget.

5.	**Total nutrient budget for the development site**	Value		Unit
	Total Phosphorus budget for the site	**-0.13**	**-0.13**	**Kg/year**

Current TP loading

Development will be Phosphorus neutral - no mitigation will be required

Post 2030 TP loading

Development will be Phosphorus neutral - no mitigation will be required

Plate 4 *Nitrate Vulnerable Zone (NVZ) Designation from the UK Soil Observatory (UKSO).*

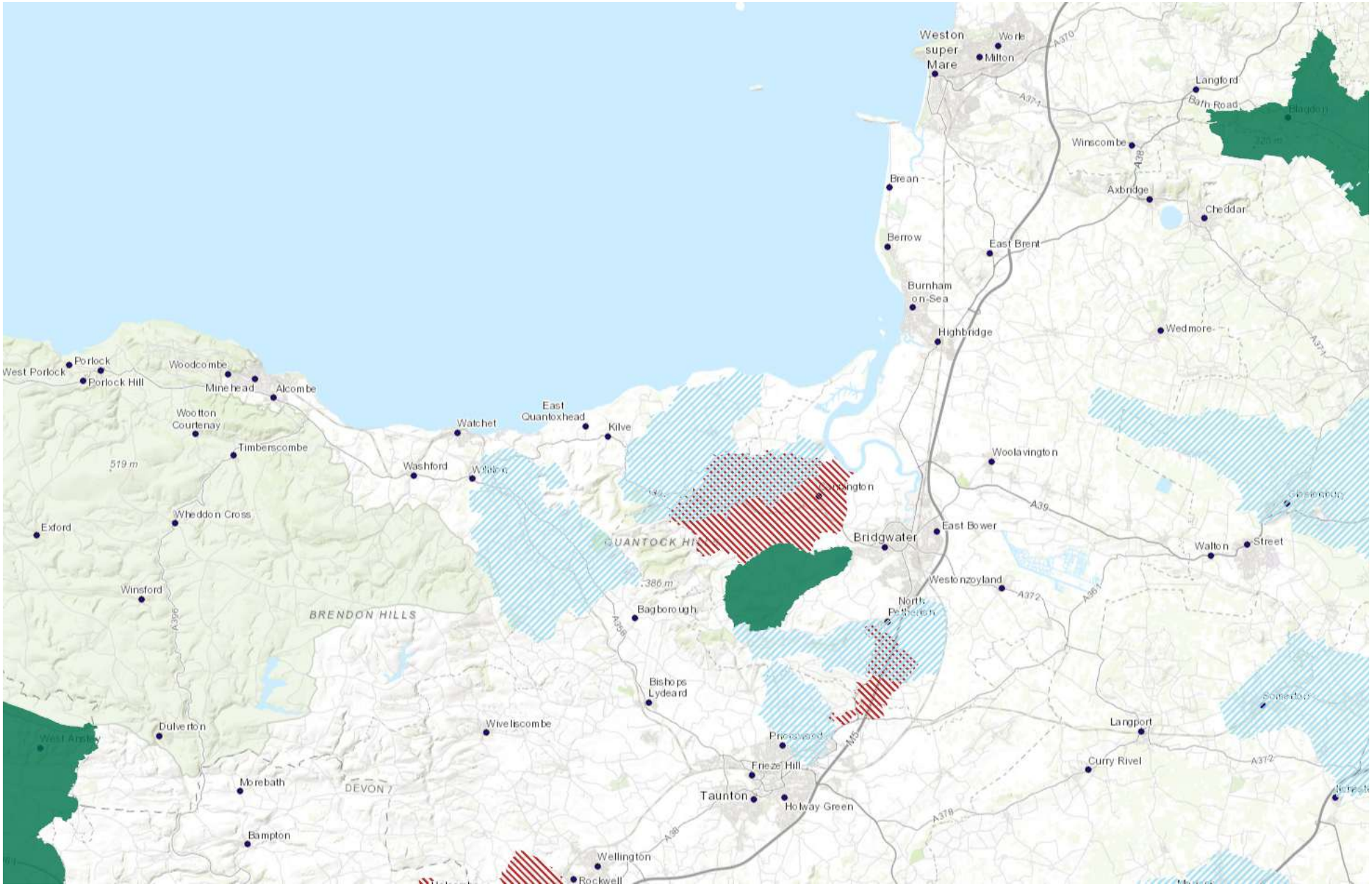


Plate 5 *Cranfield University Soilscapes Classification.*

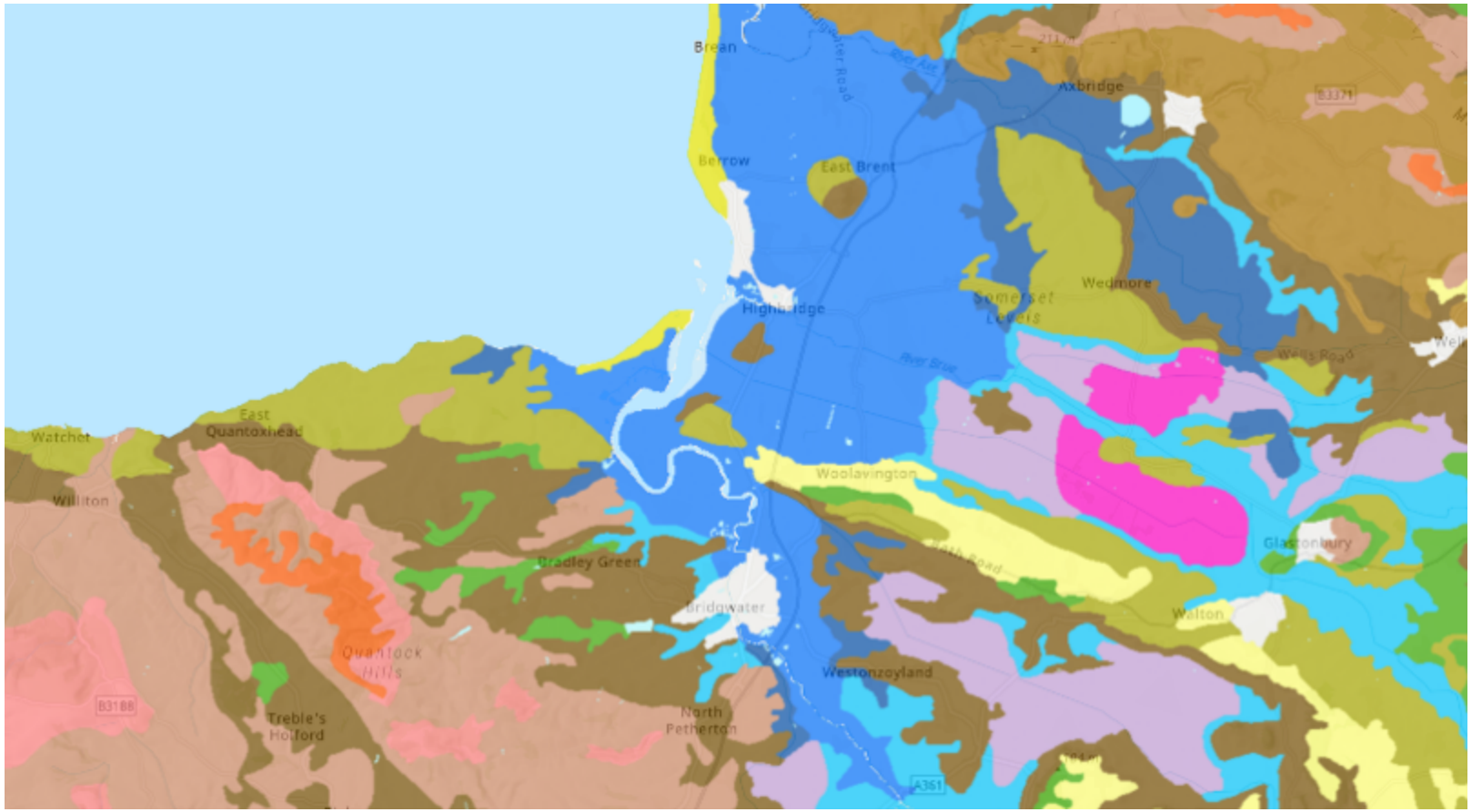


Plate 6 *Somerset Phosphate Budget Calculator V3 Soil Drainage Classifications.*

Free draining

Colour	ID	Name
	3	Shallow lime-rich soils over chalk or limestone
	4	Sand dune soils
	5	Freely draining lime-rich loamy soils
	6	Freely draining slightly acid loamy soils
	7	Freely draining slightly acid but base-rich soils
	10	Freely draining slightly acid sandy soils
	11	Freely draining sandy Breckland soils
	12	Freely draining floodplain soils
	13	Freely draining acid loamy soils over rock
	14	Freely draining very acid sandy and loamy soils

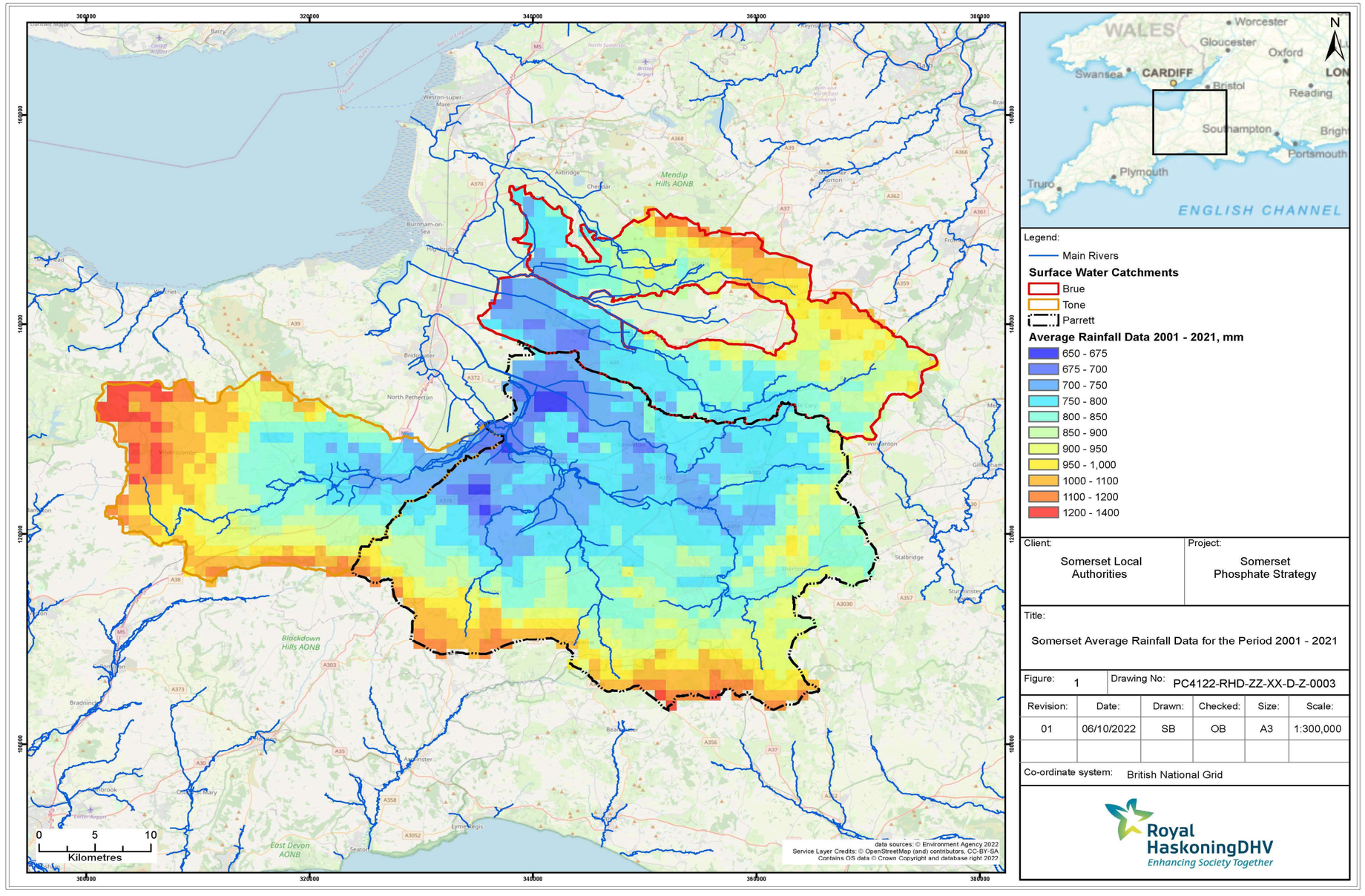
Impermeable - drained for arable

Colour	ID	Name
	1	Saltmarsh soils
	2	Shallow very acid peaty soils over rock
	8	Slightly acid loamy and clayey soils with impeded drainage
	9	Lime-rich loamy and clayey soils with impeded drainage
	15	Naturally wet very acid sandy and loamy soils
	16	Very acid loamy upland soils with a wet peaty surface
	20	Loamy and clayey floodplain soils with naturally high groundwater
	21	Loamy and clayey soils of coastal flats with naturally high groundwater
	22	Loamy soils with naturally high groundwater
	23	Loamy and sandy soils with naturally high groundwater and a peaty
	24	Restored soils mostly from quarry and opencast spoil
	25	Blanket bog peat soils
	26	Raised bog peat soils
	27	Fen peat soils

Impermeable - drained for arable & grassland

colour	ID	Name
	17	Slowly permeable seasonally wet acid loamy and clayey soils
	18	Slowly permeable seasonally wet slightly acid but base-rich loamy
	19	Slowly permeable wet very acid upland soils with a peaty surface

Plate 7 *Average Annual Rainfall Classification from the Somerset Phosphate Budget Calculator V3.*



Appendix 17-1 Long List of Major Accidents and Disasters

Table 17-1 Long List of Major Accidents and Disasters

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
Geophysical				
Earthquakes	No	The Proposed Development is not located in a geologically active area and, as such, earthquakes are not considered to be a real risk or serious possibility.	N/A	N/A
Landslides	No	The risk of landslides would be considered as part of the geotechnical design, ensuring the risk is designed out in terms of the vulnerability of the Proposed Development to these types of events. However, given the flat nature of the land this risk is considered low. The Proposed Development is not anticipated to increase the risk of landslip within the Scoping Site Boundary or elsewhere as it is not substantially heavy, and the Proposed Development is relatively flat. The Proposed Development would not significantly change the erosion potential of the soil or stability of the land. British Geological Survey (BGS) (Ref.1) determines that the susceptibility to landslides in the vicinity of the Proposed Development ranges from moderately low to low.	N/A	N/A
Sinkholes	No	The Proposed Development is not anticipated to increase the risk of sinkholes within the Scoping Site Boundary or elsewhere as it is not substantially heavy, and the site of the	N/A	**Chapter 17: Other Environmental Matters (Ground Conditions)**

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
		Proposed Development is not located in a Coal Mining Reporting Area. The Proposed Development would not significantly change the potential for a sinkhole to develop.		
Hydrology				
Flooding	Yes	Parts of the Scoping Site Boundary are located within Flood Zones 2 and 3 (Ref.2). Both the vulnerability of the Proposed Development to flooding, and its potential to exacerbate flooding, will be covered in the Flood Risk Assessment (FRA) and reported in the Environmental Statement (ES). Mitigation will be considered and, where necessary, incorporated into the Proposed Development design.	Property and people in areas of increased flood risk	**Chapter 10: Water Environment** **Outline CEMP**
Tsunamis/Storm Surges	No	The Proposed Development is not located in a tsunamis risk zone. The Proposed Development is not considered to be more vulnerable to storm surges than any other development.	N/A	N/A
Meteorological				
Blizzards	No	The Proposed Development is not considered to be more vulnerable to blizzards than any other development. It would be designed to cope with the local climate and extreme weather events. Blizzards should not affect the integrity of the Proposed Development.	N/A	N/A
Cyclonic Storms	No	Although storms occur in the UK, their destructive force tends to be much less than in other parts of the world and the Proposed Development is not particularly vulnerable to any potential effects. It would be designed for the local climate and weather extremes.	N/A	N/A

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
Thunderstorms	No	As the Proposed Development includes metal components, there is a risk of lightning strikes. However, these risks would be removed or reduced through inbuilt control systems and can therefore be scoped out.	N/A	N/A
Droughts	No	Droughts are only considered as a disaster due to water shortages for essential services and where there are indirect impacts on food production, loss of soils etc. The Proposed Development is not considered to be vulnerable to drought.	N/A	N/A
Extreme temperatures	No	While impacts such as exposure of site infrastructure to greater heat intensity and work/delivery disruption due to heavy snow, these are not expected to have a significant impact on the Proposed Development. It would be designed to account for temperature fluctuations from climate change.	N/A	N/A
Air Quality Events	No	The Proposed Development is not considered to be more vulnerable to air pollution than any other development. It would be designed to cope with the local air quality, which is anticipated to be good (there are no Air Quality Management Areas (AQMAs) within 5 km of the Proposed Development). High air pollution should not affect the integrity of the Proposed Development.	N/A	N/A
Wildfires	No	The Proposed Development is not located close to any densely wooded areas. The ground investigation shows the site and surrounding area are in part underlaid by peat at depth. It is recognised that the risk of wildfire may increase as a result of climate change. It is unlikely that the Proposed Development will initiate a peat fire due to the small quantities of flammable materials stored on site during construction and operation (and maintenance). The potential	N/A	N/A

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
		risk of fire from the Proposed Development has been considered separately in the "Fires" section below. Fires that could potentially occur as an impact of another disaster scenario (i.e. lightning strike), have also been assessed within this table, the risks of such events occurring are at a manageable level. Should weather conditions during construction become hot and dry for a long period of time, further consideration would be given to hot work activity locations. Therefore, the risk of a disaster occurring is considered to be low and is not considered further.		
Biological				
Human disease	No	The Proposed Development would not give rise to any disease epidemics at any phase of the project lifetime.	N/A	N/A
Animal disease	No	The Proposed Development would not be a source of any disease epidemics and spread would be controlled through containment of infected animals including prohibition of transportation.	N/A	N/A
Plant disease	Yes	Standard control measures would be implemented by the appointed contractor during construction to handle and dispose of any diseased or invasive plants to prevent their spread on and off-site. The spread of these species could outcompete the local flora and damage local infrastructure. Where required, an Invasive Species Management Plan (ISMP) will be prepared for inclusion within the Outline Landscape and Ecology Management Plan (Outline LEMP) during construction and Outline Decommissioning	Habitats and species	**Chapter 9: Ecology and Biodiversity and Chapter 11: Landscape and Visual** **Outline LEMP** **Outline DEMP**

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
		Environmental Management Plan (DEMP) during decommissioning.		
Societal				
Terrorism/Crime /Civil Unrest	No	It is considered the Proposed Development is unlikely to be a target for these types of incidents due to its rural location and low number of exposed targets.	N/A	N/A
War	No	The Proposed Development is not considered to be more vulnerable to war than any other development.	N/A	N/A
Transport				
Road Accidents	Yes	During construction there will be an increase in heavy construction plant and equipment on the local road network which may increase the risk of road traffic accidents. The potential for transport effects will be considered within **Chapter 15: Transport and Access**. The potential for glint and glare, which may cause an impact on vision, that may affect road users will be considered in **Chapter 17: Other Environmental Topics** (Glint and Glare). Mitigation will be considered and, where necessary, incorporated into the Proposed Development design.	Road users	**Chapter 15: Transport and Access** **Chapter 17: Other Environmental Topics** (Glint and Glare)
Rail Accidents	Yes	There is a railway line that runs 700 m west of the Proposed Development, as identified in **Chapter 15: Transport and Access**. The potential for glint and glare, which may be cause an impact on vision, that may affect train drivers during the operation (and maintenance) phase will be considered in **Chapter 17: Other Environmental Topics** (Glint and Glare).	Rail users	**Chapter 17: Other Environmental Topics** (Glint and Glare)

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
		Mitigation will be considered and, where necessary, incorporated into the Proposed Development design.		
Aviation Disasters	Yes	The closest airfield is the Westonzoyland Airfield located approximately 7 km south of the Proposed Development. Middlezoy Aerodrome is also located 8 km south of the Proposed Development. The potential for glint and glare, which may cause an impact on vision, that may affect plane pilots will be considered in **Chapter 17: Other Environmental Topics (Glint and Glare).** Mitigation will be considered and, where necessary, incorporated into the Proposed Development design.	Aircraft users	**Chapter 17: Other Environmental Topics** (Glint and Glare)
Engineering Accidents/Failures				
Cyber accident/ failure	No	The Applicant is accountable for ensuring the resilience of their assets to national security risks, including from cyber-attacks. The Proposed Development will implement good industry standard controls against cyber accident and failure to reduce this risk.	Employees and people using grid network	N/A
Infrastructure	No	The Proposed Development will be developed following the most up to date regulations and standards in place at the time of its development. These requirements have been developed to reduce the risk of accidents of failures and draw upon experiences from around the world.	N/A	N/A
Bridge failure	No	Crossings of drainage ditches and watercourses (for example culverts or small bridges) may be required for access tracks and connections. Any such crossings would be designed to relevant standards, so the risk of failure is	N/A	N/A

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
		considered to be low and bridge failure is therefore scoped out of further assessment.		
Tunnel failure or fire	No	There are no tunnels located in proximity to Proposed Development.	N/A	N/A
Reservoir (dam) failure	No	With the nearest reservoir situated more than 4 km away, it is unlikely that any flooding would extend to the Proposed Development.	N/A	N/A
Flood defence failure	Yes	Parts of the Proposed Development may be at risk of flooding from flood defence failure. If applicable, this will be covered in the FRA and reported in ES, both in terms of the risk to the Proposed Development and increased risk caused by the Proposed Development. Mitigation will be considered and, where necessary, incorporated into the Proposed Development design.	Property and people in areas of increased flood risk	**Chapter 10: Water Environment**
Mast and tower collapse	No	Overhead Lines (OHL) may form part of the Proposed Development. There are also existing electric overhead line power lines near the Proposed Development. During construction, any work required near electric overhead power lines would be adequately controlled and consulted on with the operator, and appropriate site-specific risk assessments completed which would consider such aspects as the voltage and height as well as size and reach of any machinery or equipment.	N/A	N/A

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
Utilities failure (electricity, gas, water supply, other pipelines and sewage)	Yes	The Proposed Development has the potential to affect existing utility infrastructure. To identify any existing infrastructure constraints, both consultation and a desk-based study will be undertaken. Consultation with relevant utilities providers is a routine part of solar development and consultees may include water, gas and electricity utilities providers and telecommunications providers as appropriate. This will be covered under **Chapter 17: Other Environmental Topics** (Telecommunications and Utilities).	Employees and local residents	**Chapter 17: Other Environmental Topics** (Telecommunications and Utilities)
Fires	Yes	There may be potential for fire associated with the Battery Energy Storage System (BESS). The BESS design would include cooling systems designed to regulate temperatures to within safe conditions which reduces the risk of fire. In addition, the Proposed Development design would include adequate separation between battery banks to reduce the likelihood of an isolated fire becoming widespread. Fire detection and suppression features would be installed in accordance with prevailing National Fire Chiefs Council (NFCC) / Health and Safety Executive (HSE) good practice at the detailed design stage. The BESS design will take account of NFCC guidance on separation from occupied buildings, which proposes an initial minimum distance of 30 m before any mitigation is considered. An Outline Battery Safety Management Plan will be prepared for the Proposed Development and submitted alongside the DCO application. The Outline Battery Safety Management Plan will be considered in the iterative design of the Proposed Development so that design requirements	Local residents, local sensitive habitats and species	Outline Battery Safety Management Plan (Standalone document to be submitted with the DCO Application)

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
		to ensure fire safety (such as having adequate provision of land for water storage) and management of any firewater runoff are captured.		
Electrical hazards (electric shock, arc flash, arc blast).	No	The Proposed Development concerns high voltage electrical equipment which carries risks associated with its accidental discharge. This risk would be controlled through an appropriate maintenance schedule and adherence with the Health and Safety at Work in terms of appropriate control measures. There are negligible risks to the environment or other people.	Employees	N/A
Industrial Accidents				
Major Accident Hazard Sites	No	There are currently no Control of Major Accident Hazards (COMAH) establishments within 5 km of the Proposed Development (Ref.3). The future Gravity Smart Campus facility is located partially within the Scoping Site Boundary Depending on the final scheme, some industrial end users could potentially meet COMAH thresholds. The status of the facility will therefore be kept under review as the scheme develops and, where relevant, the potential for interaction with the Proposed Development will be considered through the iterative design process and consultation. The COMAH database will be revisited when drafting the Environmental Statement but assuming baseline conditions remain the same Major Accident Hazard Sites can be scoped out of further assessment.	Employees, local sensitive habitats and species	N/A

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
Nuclear	No	The Proposed Development is located approximately 11 km east of the Hinkley Point Nuclear Power Station. This site is regulated by the Office for Nuclear Regulation (ONR) (Ref.4) and will have its own set of robust mitigation measures to reduce the risk of a major accident. ONR recommends that a consultation zone of 3 km around the nuclear site be used for non-COMAH regulated energy storage developments such as the Proposed Development (Ref.5). Nuclear incidents can be scoped out for further assessment.	N/A	N/A
Fuel Storage	No	The Proposed Development is not located close to any Fuel Storage sites.	N/A	N/A
Mines and Storage Caverns	No	The Proposed Development is not located close to any Coal Mining Reporting Areas.	N/A	N/A
UXO	No	Overall, the Proposed Development is located within an area of low risk from unexploded ordnance (UXO). However, the Scoping Site Boundary is located immediately to the north of the former ROF Bridgwater munitions manufacturing site. Although the majority of the Scoping Site Boundary is on agricultural land rather than within the former industrial facility, an Unexploded Ordnance (UXO) risk assessment will be undertaken as part of the Preliminary Risk Assessment (PRA), to establish whether a credible UXO risk exists. If a credible risk is identified, appropriate UXO risk management measures will be set out in the Outline CEMP, informed by the findings of the PRA.	Employees, local residents	**Chapter 17: Other Environmental Topics** (Ground conditions)

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
		This will be evaluated as part of the risk assessment under **Chapter 17: Other Environmental Topics** (Ground conditions).		
Pollution Accidents				
Pollution incident affecting Air Quality	Yes	Construction activities may cause an increase in the exposure to dust and emissions from vehicles and construction plant. This would be temporary in nature and emissions associated with construction plant and vehicles are managed under specific air quality legislation. Effects of the Proposed Development on Air Quality will be considered as part of **Chapter 17: Other Environmental Topics** (Air Quality). Gaseous hazardous substances are not expected to form part of the operation (and maintenance) of the Proposed Development, however there is potential for release of toxic substances to air originating from a fire at the BESS. Mitigation measures would be presented in the Outline Operational Environmental Management Plan (OEMP) and Outline Battery Safety Management Plan.	Employees, local residents, local habitats and species	**Chapter 17: Other Environmental Topics** (Air Quality).
Ground Receptors	Yes	During the construction phase there may be an increase in the risk of leaks and spillages of hazardous materials associated with the construction activities. This risk would be controlled through standard control measures which would form commitments within the Outline Construction Environmental Management Plan (CEMP). During operation (and maintenance) there are not expected to be any hazardous substances that could be released to groundwater/other land-based receptors.	Employees, local residents, local habitats and species	**Chapter 9: Ecology and Biodiversity and Chapter 17: Other Environmental Topics** (Ground Conditions)

Major Accident or Disaster	Further Consideration in MADs short-list?	Justification	Potential Receptors	Covered in other Chapters/documents?
Aquatic Receptors	Yes	During the construction phase there may be an increase in the risk of leaks and spillages of hazardous materials associated with the construction activities. This risk would be controlled through standard control measures which would form commitments within the Outline CEMP. Liquid hazardous substances are not expected to form part of the operation (and maintenance) of the Proposed Development, however there is potential for release of toxic substances entrained within firewater originating from a fire at the BESS. Mitigation for this event includes the measures as outlined above for fire risk.	Employees, local residents, local aquatic habitats and species	**Chapter 10: Water Environment** and Outline Battery Safety Management Plan

References

Ref.1 BGS (2020) GeoIndex Onshore. Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.119862408.1258548596.1767101609-2039685742.1767101609

Ref.2 Ordnance Survey (2026) Flood Risk Map. Available at: https://check-long-term-flood-risk.service.gov.uk/map

Ref.3 HSE (2026) COMAH 2015 Public Information Search. Available at: https://notifications.hse.gov.uk/COMAH2015/Search.aspx

Ref.4 ONR (2026) Operational sites/facilities. Available at: https://www.onr.org.uk/our-work/what-we-regulate/operational-power-stations/operational-sitesfacilites

Ref.5 ONR (2020) Land use planning - Development on and around nuclear sites. Available at: https://www.onr.org.uk/our-work/what-we-regulate/other-regulationslegislations/land-use-planning