

Proposed Solar PV Development

Byers Gill Solar EN010139

6.4.6.5 Environmental Statement Appendix 6.5 Habitats Regulations Assessment No Significant Effects Report

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RWE

Byers Gill Solar

Habitats Regulations Assessment No Significant Effects Report

2483386





RSK GENERAL NOTES

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Byers Gill Solar Habitats Regulations Assessment Report 2483386



EXECUTIVE SUMMARY

This Habitats Regulations Assessment (HRA) No Significant Effects Report has been prepared in relation to the proposed Byers Gill Solar (the Proposed Development) located between Darlington and Stockton-on-Tees in north-east England. The report was written following consultation with Natural England.

The Proposed Development is located within 10 km of three internationally designated sites of nature conservation importance, comprising Teesmouth and Cleveland Coast Special Protection Area (SPA), Teesmouth and Cleveland Coast Ramsar site and proposed Ramsar site, and Thrislington Special Area of Conservation (SAC).

Considering the distance between the Proposed Development and these European sites, and the scope of the Proposed Development, there is no potential for Likely Significant Effects (LSE) through direct land take, direct disturbance, pollution or hydrological impacts.

Whilst potential disturbance and displacement impacts during all phases of the Proposed Development (i.e., construction, operation and decommissioning) on qualifying SPA/Ramsar site bird populations were considered (with regard to potential use of the Proposed Development site as Functionally Linked Land), no LSE from the Proposed Development are anticipated either alone or in combination with other projects. Any potential impacts on European sites will be sufficiently mitigated through best practice measures to be set out in ES Appendix 2.6 Outline Construction Environmental Management Plan (EMP) (Document Reference 6.4.2.6).

As such, Stage 2 (Appropriate Assessment) of the HRA process is not required.



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1.0 INTRODUCTION

1.1 Purpose of this report

- 1.1.1 This document has been produced to report the findings of a Habitats Regulations Assessment (HRA) screening assessment in relation to Byers Gill Solar (the Proposed Development), a proposed solar farm located between Darlington and Stockton-on-Tees in County Durham. This assessment was undertaken by RSK Biocensus on behalf of Arup for RWE ('the Applicant').
- 1.1.2 The purpose of this assessment is to identify any internationally designated nature conservation sites (e.g., Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites) within the potential zone of influence of the Proposed Development, and to determine whether any potential impact pathways between the Proposed Development and any of these internationally designated sites exist, through which Likely Significant Effects could occur. Further details of the HRA process are provided in Section 3.
- 1.1.3 Based on their proximity to the Proposed Development, the following internationally designated sites and their qualifying features are discussed in detail within this report:
 - Teesmouth and Cleveland Coast SPA, Ramsar and proposed Ramsar site; and
 - Thrislington SAC.
- 1.1.4 This HRA report has been produced in conjunction with the following reports, which form part of the DCO planning application:
 - Environmental Statement Chapter 6 Biodiversity (Document Reference 6.2.6);
 - ES Appendix 6.1 Preliminary Ecological Appraisal Report (Document Reference 6.4.6.1);
 - ES Appendix 6.2 Wintering Bird Survey Report (Document Reference 6.4.6.2); and
 - ES Appendix 6.3 Breeding Bird Survey Report (Document Reference 6.4.6.3).
 - The following terminology is used throughout this report:
 - The Proposed Development the solar farm development outlined by the red line boundary including all infrastructure, cables and Solar PV module areas as shown in Figure 6.1.
 - Study area the land within the application boundary in which field surveys were conducted.



• Order Limits – the land area within the application boundary outlined by the red line boundary including all infrastructure, cables and Solar PV module areas as shown in Figure 6.1.



2.0 THE PROPOSED DEVELOPMENT

2.1.1 The Proposed Development covers approximately 490 ha comprising multiple land parcels north-east of Darlington in County Durham (at Ordnance Survey grid reference NZ 3575021286) (see Figure 6.1). The site of the Proposed Development is dominated by agricultural fields separated by hedgerows, with some smaller patches of broadleaved woodland. The cable route follows minor roads and agricultural fields which are frequently bordered by hedgerows, and also passes through rural residential areas and agricultural fields which are often lined by hedgerows.

2.2 Development proposals

- 2.2.1 The Proposed Development consists of a solar farm capable of generating over 50 MW Alternating Current (AC) of electricity with co-located Battery Energy Storage Systems (BESS), located between Darlington and Stockton-on-Tees in north-east England. The Proposed Development comprises six solar photovoltaic (PV) panel areas (Panel Areas A-F). The solar PV panels would be mounted on a metal frame in groups, fixed in position and aligned in east-west rows with panels facing south. An on-site substation would be located within Panel Area C.
- 2.2.2 The Proposed Development includes up to 32.5km of 33 kilovolt (kV) underground cabling between the Panel Areas and the on-site substation, as well as approximately 10km of 132 kV underground cable to connect the Proposed Development to the grid connection at the existing Norton substation (located to the north-west of Stockton-on-Tees) with both on-road and off-road options. A range of supporting infrastructure is required for the Proposed Development, comprising BESS; transformers and inverters for managing the electricity produced; storage containers to hold this equipment; and security measures such as fencing, CCTV and lighting. The Proposed Development includes environmental mitigation and enhancement measures to avoid or reduce adverse impacts on the surrounding environment and nearby communities.
- 2.2.3 The majority of the Proposed Development's planning boundary (the Order Limits) is located within the administrative boundary of Darlington Borough Council, with a section of the cable route situated within the administrative boundary of Stockton-on-Tees Council. A very small section of the Order Limits is within the administrative boundary of Durham County Council.
- 2.2.4 An Outline Construction Environmental Management Plan (CEMP) and Landscape and Ecology Management Plan (LEMP) have been produced detailing appropriate mitigation and enhancement measures to minimise adverse impacts on the surrounding environment and nearby communities, as presented in ES Appendix 2.6 Outline Construction Environmental



Management Plan (Document Reference 6.4.2.6) and ES Appendix 2.14 Landscape Ecological Management Plan (Document Reference 6.4.2.14).



3.0 METHODOLOGY

3.1 Legislation and policy

- 3.1.1 Article 6 of the Habitats Directive States that, an assessment is required to test if a plan or project proposal could significantly harm the designated features of a Natura 2000 site (also known as a 'European site'). The requirements of the Habitats Directive are transposed into English law by means of the Conservation of Habitats and Species (Amendment) Regulations, 2019, often referred to as the Habitats Regulations. This type of assessment is therefore generally known as a Habitats Regulations Assessment (HRA).
- 3.1.2 Natura 2000 sites form a network of areas designated to conserve natural habitats and species that are rare, endangered, vulnerable, or endemic within the European Community. This includes SACs (designated under the Habitats Directive) and Special Protected Areas (SPAs) (classified under Directive 2009/147/EC on the Conservation of Wild Birds; the 'Birds Directive'). In addition, any proposals affecting the following sites also require an HRA because these are protected by UK government policy: proposed SACs; potential SPAs; Ramsar sites both listed and proposed (Designated under the 1971 Ramsar Convention for their internationally important wetlands); and areas secured as sites compensating for damage to a European site.
- 3.1.3 The aim of an HRA is to determine, in view of a European site's conservation objectives and qualifying features, whether a project (either alone and/or in combination) would have a significant adverse effect on the site. The four distinct stages of the HRA process are summarised below:
 - Stage 1: Screening is the first stage of the process and identifies the likely impacts upon a European site of a project (either alone or in combination). Mitigation cannot be taken into consideration at this stage of the HRA. If the screening exercise concludes that Likely Significant Effects (LSE) cannot be ruled out, then Appropriate Assessment (Stage 2 of the process, see below) must be undertaken. It is important to note that the burden of evidence is to demonstrate, on the basis of objective information, that there will be no significant effect; if the effect may be significant, or is not known, that would trigger the need for an Appropriate Assessment.
 - 2. Stage 2: Appropriate Assessment examines the implications of the effects of the proposals for the site's conservation objectives (alone and in combination). At this stage, it needs to be determined, *beyond reasonable scientific doubt,* whether or not there will be adverse effects on the integrity of the site. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.
 - 3. Stage 3: Assessment of alternative solutions is the process which examines alternative ways of achieving the objectives of the project that



would avoid adverse impacts on the integrity of a European site, should the avoidance or mitigation measures detailed at the Appropriate Assessment stage be insufficient to avoid adverse effects.

4. Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain. An assessment is made as to whether or not the development is necessary for Imperative Reasons of Overriding Public Interest (IROPI). If it is, this stage also involves detailed assessment of the compensatory measures needed to protect and maintain the overall coherence of the Natura 2000 network.

3.2 Conservation objectives

- 3.2.1 The conservation objectives for a Natura 2000 site are intended to represent the aims of the Habitats and Birds Directive in relation to that site. Measures taken under the Habitats Directive should be designed to maintain or restore habitats and species of European importance at favourable conservation status (FCS). The conservation objectives of a site set the standards that must be met if the features of the site (i.e., habitats and species) are to be at FCS.
- 3.2.2 The conservation status of natural habitats is defined in Article 1 of the Habitats Directive as follows (European Commission, 2000):

"The sum of influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species.

The conservation status of natural habitats will be taken as favourable when:

- Its natural range and areas it covers within that range are stable or increasing;
- The species structure and functions which are necessary for its longterm maintenance exist and are likely to continue to exist for the foreseeable future;
- The conservation status of its typical species is favourable as defined in Article 1."
- 3.2.3 The conservation status of a species is defined in Article 1 of the Habitats Directive as follows (European Commission, 2000):

"The sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its population."

The conservation status of species will be taken as favourable when:

 Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;



- The natural range of the species is neither being reduced for the foreseeable future;
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long term basis."
- 3.2.4 In order to meet the conservation objectives of a site, the integrity of the site must be maintained. Deterioration or disturbance is assessed against the conservation status of species and habitats concerned. The integrity of a site is the coherence of its ecological structure and the functioning of its ecological systems, the features for which the site is designated (habitats and/or species), and the ability of the site to meet its conservation objectives. An adverse effect is therefore defined as something that impacts the site features, either directly or indirectly, and results in disruption or harm to the ecological structure and functioning of the site and/or affects the ability of the site to meet its conservation objectives.
- 3.2.5 The purpose of the HRA process is to demonstrate whether or not there will be an adverse effect on the integrity of a European site, in light of its conservation objectives. The following sections provide a summary of relevant information that may be used by the competent authority to determine whether a significant adverse effect on a qualifying site is likely, and therefore whether a statement to inform an appropriate assessment is required.



4.0 HRA SCREENING

4.1 Overview

- 4.1.1 A search for designated sites was undertaken in March 2022 to inform the PEA for the Proposed Development and updated to inform this report. This identified four European sites within 10km of the Proposed Development (see Figure 6.1):
 - Teesmouth and Cleveland Coast SPA located c.5.4km east of the Proposed Development;
 - Teesmouth and Cleveland Coast proposed Ramsar site, located c.5.4km east of the Proposed Development;
 - Teesmouth and Cleveland Coast Ramsar site, located c.7.2km east of the Proposed Development; and
 - Thrislington SAC, located c.10km north of the Proposed Development.
- 4.1.2 Descriptions of these internationally designated sites and their qualifying features are provided below, based on information from Natural England's Designated Sites View website¹ and relevant site citations. Given that they relate to the same sites, the Teesmouth and Cleveland Coast SPA and proposed Ramsar sites are grouped together for the purposed of this report.
- 4.1.3 Based on the potential scope of impacts from the Proposed Development, a search area of 10km around the Proposed Development in which any European sites should be subject to detailed assessment was adopted. The next nearest European site, Castle Eden SAC, is located approximately 16.3km north-east of the Proposed Development. Considering this distance, and the scope of the Proposed Development, further consideration of Castle Eden SAC or any other European sites was not required.

4.2 Impact pathways

- 4.2.1 The Proposed Development relates solely to the construction of a solar farm and associated infrastructure, with no other development types such as housing or recreation planned in association. As such, the Proposed Development will not lead to an increase in human activities (e.g., recreational activities) in the wider area surrounding the Order Limits. As such, increased recreational pressure and disturbance on any European sites does not represent a potential impact pathway from the Proposed Development.
- 4.2.2 As the Proposed Development is located at least 5.2km from the nearest European site, the construction and operational phases of the development will be at a sufficient distance for there to be no significant direct or indirect light, noise or other pollution of any European sites. Additionally, as the Order

¹ See <u>www.designatedsites.naturalengland.org.uk</u> (accessed 29/08/2023).



Limits is not linked hydrologically to any relevant European sites, there is no risk of surface run-off or other pollution events which would potentially affect the hydrological functioning of any European sites.

Functionally Linked Land

- 4.2.3 Considering the proximity of the Proposed Development to European sites designated for features of ornithological interest, it is necessary to examine potential functional linkage. Bird populations which form qualifying features of internationally designated sites often also use suitable land adjacent to (i.e., outside of) these designated sites. As such, where this land is used by a significant proportion of the population comprising a qualifying feature for European site designation, impacts on relevant species within this land (e.g., through development proposals) can also affect the functional integrity of the European site.
- 4.2.4 This land outside of the European site boundary that is important to an ornithological qualifying feature of the European site is termed 'Functionally Linked Land' (FLL). This has been defined by Natural England as: "areas of land occurring within 20km of an SPA, that are regularly used by significant numbers of qualifying bird species". In this context, 'significant numbers' of a particular species are defined as: those exceeding 1% of the SPA/Ramsar site citation population; those exceeding 0.5% of the UK population; or more than 1,000 individuals. It is recognised that definitions of FLL may also take account of other factors (e.g., local context), allowing a more subjective view to be taken based on expert judgement.
- 4.2.5 The Teesmouth and Cleveland Coast SPA, Ramsar site and proposed Ramsar site are designated for their important populations of tern and wader species, and for being used by over 20,000 waterbirds (see Table 1 for details). The majority of the bird species for which these European sites are designated are typically confined to coastal habitats; roosting, nesting and foraging at sea, along estuaries and tidal channels, and on mudflats, beaches and saltmarshes. The Proposed Development site is therefore unsuitable to form FLL to European sites for these species. Whilst forming part of the waterbird assemblage for these European sites, populations of species more likely to use inland FLL for foraging and roosting (notably lapwing (*Vanellus vanellus*), golden plover (*Pluvialis apricaria*) and curlew (*Numenius arquata*)) do not form qualifying features of these European sites.
- 4.2.6 Consideration of potential LSE on bird populations associated with Teesmouth and Cleveland Coast SPA, Ramsar site and proposed Ramsar site is detailed in Table 1. This is informed by detailed ornithological field survey data collected within the Order Limits and an appropriate buffer in 2021-2022. Further information on these European sites is provided below.



4.3 Teesmouth and Cleveland Coast SPA (UK9006061)

- 4.3.1 The Teesmouth and Cleveland Coast SPA is a wetland of European importance, located on the coast of north-east England between Castle Eden Dene Mouth in the north and Marske-by-the-Sea in the south. The coastal parts of the site include a rocky limestone headland with sandy beaches stretching to the north, and much of Tees Bay to the south. of Hartlepool, the Magnesian limestone is replaced by sandstones and mudstones, as far as Saltburn, creating low cliffs and sandy beaches.
- 4.3.2 The SPA comprises of a wide variety of habitats including intertidal sand and mudflats, rocky shore, saltmarsh, freshwater marsh, saline lagoons, sand dunes and estuarine and coastal waters on and around the Tees estuary, which has been heavily modified by human activities. These habitats provide feeding and roosting opportunities for important wintering and passage waterbird populations including internationally important numbers of redshank (*Tringa totanus*), knot (*Calidris canutus*) and ruff (*Philomachus pugnax*). Freshwater and brackish pools also support breeding avocet (*Recurvirostra avosetta*) in summer.
- 4.3.3 In summer, little terns (*Sternula albifrons*) breed on the sandy beaches within the site and feed at sea, and common terns (*Sterna hirundo*) breed at various locations and feed within the River Tees and associated waterbodies and within the wider estuary mouth and bay. In late summer, Sandwich terns (*Thalasseus sandvicensis*) aggregate in important numbers at Coatham Sands, Seal Sands, North Gare Sands/Seaton Snook and Bran Sands when on passage.
- 4.3.4 In summary, the qualifying interests of Teesmouth and Cleveland Coast SPA are avocet (breeding), common tern (breeding), knot (non-breeding), little tern (breeding), redshank (non-breeding), ruff (non-breeding), Sandwich tern (non-breeding) and the waterbird assemblage of over 20,000 birds during the non-breeding season. Population sizes are specified in Table 1.
- 4.3.5 The conservation objectives for the SPA are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:
 - the extent and distribution of the habitats of the qualifying features;
 - the structure and function of the habitats of the qualifying features;
 - the supporting processes on which the habitats of the qualifying features rely;
 - the population of each of the qualifying features; and
 - the distribution of the qualifying features within the site.
- 4.3.6 HRA screening for Teesmouth and Cleveland Coast SPA is presented in Table 1.



4.4 Teesmouth and Cleveland Coast Ramsar site (741)

- 4.4.1 The Teesmouth and Cleveland Coast Ramsar site falls entirely within Teesmouth and Cleveland Coast SPA. It is a wetland of international importance, comprising intertidal sand and mudflats, rocky shore, saltmarsh, freshwater marsh and sand dunes.
- 4.4.2 Teesmouth and Cleveland Coast Ramsar site qualifies due to its populations of non-breeding knot, redshank and Sandwich tern, and for being regularly used by over 20,000 wintering waterbirds. As the Ramsar site is designated for species and features which also form qualifying features for Teesmouth and Cleveland Coast SPA, potential LSE on this Ramsar site are considered jointly with effects on the SPA in Table 1.



Table 1. HRA screening for Teesmouth and Cleveland Coast SPA, Ramsar site and proposed Ramsar site

Teesmouth and Cleveland Coast SPA, Ramsar site and proposed Ramsar site			
Qualifying feature	LSE Screening		
The site qualifies under Article 4 of the Birds Directive (2009/147/EC) for the following reasons:	The Proposed Development is over 5km from any of these designated sites (see Figure 6.1). As such, the Proposed Development will not cause any direct habitat loss within these designated sites.		
 The site regularly supports more than 1% of the Great Britain populations of the following four species listed in Annex I of the EC Birds Directive: Avocet (18 individuals, 1.2% GB population); Common tern (399 pairs, 4.0% GB population); Little tern (81 pairs, 4.3% GB population); Ruff (19 individuals, 2.4% GB population); and Sandwich tern (1,900 	As the Order Limits is over 5km from any of these designated sites, considering the scale of the Proposed Development, there is no potential for disturbance impacts on these designated sites (e.g., from noise, vibration, dust or light spill) during the construction or operation of the Proposed Development. Regarding the potential for the Proposed Development to comprise Functionally Linked Land (FLL) to these designated sites (i.e., to be used by a significant proportion of a population comprising a qualifying feature of one or more designated sites), no species recorded during the wintering and breeding bird surveys (carried out in 2021/22 and 2022, respectively) are listed as individual qualifying features of Teesmouth and Cleveland Coast SPA, Ramsar site or proposed Ramsar site. Habitats within the Order Limits are generally unsuitable for qualifying species and are highly unlikely to support any significant populations of these qualifying species.		
individuals, 4.3% GB population. The site regularly supports more than 1% of the biogeographic population of the following two regularly occurring migratory species not listed in Annex I of the EC Birds Directive:	Regarding potential impacts on waterfowl which may form part of the qualifying waterfowl assemblage, during the field surveys of the study area undertaken in 2021-22, various waterfowl species were recorded (primarily in winter). These included great crested grebe (<i>Podiceps cristatus</i>) with a peak count of 55, pink-footed goose (<i>Anser brachyrhynchus</i>) with a peak count of 2,353, and wigeon (<i>Anas penelope</i>) with a peak count of 2,000, all of which were recorded during the third transect survey in February 2022. The highest number of waterfowl recorded within or adjacent to		
 Knot (5,509 individuals, 1.5% NE Canada/Greenland/Icelan d /UK); and Redshank (1,648 individuals, 1.1% East 	the Order Limits was 4,823 during the third transect survey in February 2022. This total constitutes 24% of the assemblage qualification populations (i.e., regularly supporting more than 20,000 waterfowl). Therefore, the waterfowl assemblage recorded could potentially form a significant proportion of the SPA/Ramsar- designated waterfowl assemblage. However, the Proposed Development avoids the standing water		
Atlantic population). The site is used regularly by over 20,000 waterfowl (waterfowl as defined by the Ramsar convention) or 20,000 seabirds in any season:	where these large wintering waterfowl aggregations were recorded; especially the waterbody adjacent to Field 177 and the adjacent fields which supported large populations of great crested grebe and wigeon (see <i>Appendix 6.2 Wintering Bird Survey</i> <i>Report</i>), which is <i>c</i> .1.5km south-east of the Order Limits. Displacement of birds is very unlikely given the low numbers of		



Teesmouth and Cleveland Coast SPA, Ramsar site and proposed Ramsar site			
 On average, 26,014 individuals were counted every year between 2011/12 and 2015/16. 	 wintering birds recorded within the Order Limits, and the CEMP and LEMP will include the maintenance of appropriate buffers between solar panels and riparian boundaries and watercourses/waterbodies, with biodiversity enhancement areas to remain free of solar panels to provide continued availability of habitat to birds. In general, solar farms are passive developments which require minimal operational work. Any effects during operation are expected to be of low adverse magnitude and not significant. 		

Overall Conclusion - Likely Significant Effects can be ruled out, further AA is not required

4.5 Thrislington SAC (UK0012838)

- 4.5.1 Thrislington is a *c*.23 ha site located *c*.10km south of Durham city and contains the largest of the few surviving stands of CG8 Sesleria albicans Scabiosa columbaria grassland in Britain. This habitat type is restricted to the Magnesian Limestone of County Durham and Tyne and Wear, north-east England. It now covers less than 200 ha and is found mainly as small, scattered stands. Like other unimproved calcareous grassland occurring on other types of limestone and chalk, it is species-rich and particularly important for its botanical and invertebrate interest. Magnesian limestone grasslands hold an unusual assemblage of plants, some at the limits of their southern or their northern ranges.
- 4.5.2 Potential LSE of the Proposed Development on this designated site are assessed in Table 2.

Thrislington SAC		
Qualifying feature	LSE Screening	
 The site qualifies under Article 4 of the Habitats Directive (92/43/EEC) as it hosts the following Annex I habitats: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco- Brometalia</i>); 'Dry grasslands and 	The Order Limits is over 9km from this designated site (see Figure 6.1). As such, the Proposed Development will not cause any direct habitat loss. Given the distance between Thrislington SAC and the Order Limits, and the scope for impacts from of the Proposed Development, there are no potential impact pathways. As such, no significant effects are anticipated to arise from the Proposed Development.	

Table 2. HRA screening for Thrislington SAC



Thrislington SAC scrublands on chalk or limestone'. Overall Conclusion – Likely Significant Effects can be ruled out, further AA is not required



5.0 IN-COMBINATION ASSESSMENT

- 5.1.1 The potential for the Proposed Development to contribute to in-combination effects with other plans and projects is assessed below. Searches for relevant developments were conducted online through relevant planning authority websites.
- 5.1.2 Searches were undertaken for planning authorities which are within 10km of the Proposed Development.
- 5.1.3 Other existing development and/or approved developments are expected to be completed before the construction of the Proposed Development and are scoped out of the assessment. These are as follows:
 - High Meadow Farm (Letch Lane) Solar Farm;
 - Aldi distribution centre;
 - Field at School Aycliffe Land Solar;
 - Eaglescliffe Solar;
 - Lambs Hill Wind Farm;
 - Stob House Solar Farm;
 - Red Gap Moor Wind Farm;
 - Walkway Wind Farm;
 - Land West of Hunger Hill Solar Farm; and
 - Land at Bluehose Solar Farm.
- 5.1.4 Table 3 identifies developments that may give rise to significant cumulative effects by virtue of overlaps in temporal scope, due to the scale and nature of the 'other development'/receiving environment, or any other relevant factors.



Application Reference	Plan or Project	Distance from the Order Limits
EN010150	Lighthouse Green Fuels Project A 'waste-to-sustainable aviation fuel' facility with on-site generating station capacity of up to 150 MW. The facility will treat a combination of commercial & industrial waste, refuse derived fuel (domestic waste) and solid recovered fuel and convert it to various energy-related products, including sustainable aviation fuel and naphtha.	c. 9.5km east of the Order Limits
EN070009	H2Teesside A hydrogen production plant of up to 1,200 megawatt thermal capacity; hydrogen distribution pipelines; an air separation unit or oxygen supply pipeline; carbon dioxide capture and compression facilities and a connection to the Northern Endurance Partnership infrastructure (also known as Net Zero Teesside); a natural gas supply connection; other gas pipelines; an electricity grid connection; water supply and treatment infrastructure; wastewater treatment and disposal infrastructure; and other utilities connections, telecommunications and other associated and ancillary infrastructure.	c 6.3km east of the Order Limits
EN010103	Net Zero Teesside power and Net Zero North Sea Storage Limited The Net Zero Teesside Project A full chain carbon capture, utilisation and storage ('CCUS') project, comprising a CO2 gathering network, including CO2 pipeline connections from industrial facilities on Teesside to transport the captured CO2 (including the connections under the tidal River Tees); a combined cycle gas turbine ('CCGT') electricity generating station with an abated capacity circa 850 gigawatts output (gross), cooling water, gas and electricity grid connections and CO2 capture; a CO2 gathering/booster station to receive the captured CO2 from the gathering network and CCGT generating station; and the onshore section of a CO2 transport pipeline for the onward transport of the captured CO2 to a suitable offshore geological storage site in the North Sea.	c 6.3km east of the Order Limits
22/0334/EIS	Summerville Farm Stockton-on-Tees Borough Council Hybrid planning application comprising of 1) full application for the erection of 385 dwellings	Directly adjacent south of the Order Limits



Application Reference	Plan or Project	Distance from the Order Limits
	with associated infrastructure, access and landscaping and 2) Outline application with some matters reserved (appearance, landscaping, layout and scale) for the erection of up to 285 dwellings. Approx. 26.58 hectares.	
22/01342/FULE	Burtree Garden Village Darlington Borough Council Hybrid planning application for full planning permission for Burtree Garden Village Strategic Access Road, outline application for demolition and development of 750 dwellings; office and community facilities. Approx. 50.59 hectares.	<i>c</i> 2.7km south-west of the Order Limits
22/00727/FUL	Gately Moor Darlington Borough Council Solar farm and energy storage facility together with associated works, equipment and infrastructure. Approx. 123.37 hectares.	Lies within the Order Limits
22/1511/FUL	California Farm Stockton-on-Tees Borough Council Proposed solar farm (49.9mw) and battery energy storage system (BESS) and associated infrastructure, access and landscaping. Approx. 80 hectares.	Directly adjacent to the south of the Order Limits
DM/21/02816/FPA (21/00958/FUL)	Whinfield Durham County Council Installation of a solar photovoltaic array/solar farm with associated infrastructure. Approx 42.30 hectares.	Lies directly adjacent to the north and south of the Order Limits
21/01086/FUL	Bishopton Lakes Darlington Borough Council Change of use of land for the siting of 24 no. holiday lodges together with new access track and other associated infrastructure works. Approximately 5.10 hectares.	Directly adjacent to the south of the Order Limits
21/2290/FUL	High Meadow 2 Stockton-on-Tees Borough Council Construction of a temporary 10.8MW Solar Farm, to include the installation of Solar Panels with transformers, a DNO control room, a customer substation, GRP comms cabin, security fencing, landscaping and other associated infrastructure. Approx 15.03 hectares.	<i>c</i> 400m north of the Order Limits
20/2692/FUL	Middlefield Farm Stockton-on-Tees Borough Council Installation of a ground mounted photovoltaic (PV) solar energy generation system (Solar Farm), co-located battery storage, 132kV substation, associated equipment and infrastructure. Approx. 28.60 hectares.	<i>c</i> 80m north of the Order Limits



Application	Plan or Project	Distance from the
Reference		Order Limits
DM/19/00283/OUT	Forrest Park Durham County Council Outline planning application for an Industrial and Trade Park with ancillary office space, Hotel, Pub and Roadside Restaurant and Retail Units with petrol station and associated infrastructure including an electric power station, parking and landscaping. Approx. 55.15 hectares.	<i>c</i> 600m west of the Order Limits
22/00146/OUT	Beaumont Hill Darlington Borough Council Outline planning permission with all matters reserved except access for a residential development up to 600 no. dwellings, convenience store (up to 400m2) and associated parking, open space, landscaping and infrastructure works. Approx. 34.64 hectares	c 1km south of the Order Limits
15/00804/OUT	Berrymead Farm 1 Darlington Borough Council Outline planning permission for the erection of 370 No dwelling houses (Use Class C3) and land reserved for a primary school and nursery (D1) (Additional Information received 8th September 2016) (Additional information and amended plans received 3 July 2017, 6th July 2017 and 1 November 2017). (Additional and Amended plans received 23 January 2018) Approx 21.21 hectares.	<i>c</i> 1.7km south of the Order Limits
21/3097/FUL	Harrowgate Lane 2 Stockton-on-Tees Borough Council Application for the erection of 178 dwellings to include creation of new access from Redmarshall Road and Darlington Back Lane, associated infrastructure, landscaping and SUDS. Approx. 9.40 hectares.	<i>c</i> 1.7km south of the Order Limits
22/00213/FUL	Burtree Lane Solar Darlington Borough Council Installation of a solar farm comprising of ground mounted bifacial solar panels, access tracks, string inverters, transformers, substation, storage containers, underground cables and conduits, perimeter fence, temporary construction compound and associated infrastructure and planting scheme. Approx. 58.96 hectares.	<i>c</i> 2km south-west of the Order Limits
15/01050/OUT	Burtree Lane (S) Darlington Borough Council Outline planning permission for residential development for up to 380 residential dwellings, with access arrangements, open	<i>c</i> 2.3km south-west of the Order Limits



Application Reference	Plan or Project	Distance from the Order Limits
	space and landscaping with all matters reserved except for access (Amended Description) (Additional information received 8th September 2016) (Amended plans and information received 27th, 30 June 2017, 3 November 2017 and 31 January 2018). Approx. 17.05 hectares.	
20/2131/FUL	Thorpe Bank Stockton-on-Tees Borough Council Installation of a ground mounted photovoltaic (PV) solar energy generation system (Solar Farm) with associated equipment and infrastructure. Approx. 38.50 hectares.	c 2km north of the Order Limits
22/01329/FUL	Long Pasture Darlington Borough Council Proposed ground mounted solar farm consisting of the Installation of 49.9MW solar photovoltaic array/solar farm with associated infrastructure. Approx. 104.50 hectares.	<i>c</i> 700m south of the Order Limits
DM/20/01991/FPA	Cowley House Farm Durham County Council Installation and operation of a Solar Farm and associated infrastructure. Approx. 87.77 hectares.	c 3.6km north of the Order Limits
17/00632/OUTE	Land North Of Coniscliffe Road Darlington Borough Council Outline planning application for the erection of up to 535 Dwellings, landscaping, ancillary works and wider highway mitigation measures with all matters reserved except access. Approx. 28.27 hectares	<i>c</i> 6.2km south-west of the Order Limits.
23/00782/FUL	Site Of Former Blackwell Grange Golf Club (East) Darlington Borough Council Residential development consisting 44 No. dwellings, with associated access, landscaping, SUDS pond and infrastructure, demolition of agricultural building and the regeneration of Blackwell Grange historic parkland Approx. 23.34 hectares	<i>c</i> 7.4km south of the Order Limits.
	Land East Of Lingfield Estate	
22/00423/FUL	Darlington Borough Council Industrial development comprising of the erection of 3 no. industrial buildings of Class B2 and/or B8 use (industrial, storage and distribution) with ancillary office space, access, gatehouse, landscaping, parking, service areas and associated works Approx. 10.27 hectares	<i>c</i> 4.6km south of the Order Limits.



Application Reference	Plan or Project	Distance from the Order Limits
18/00033/DC / 21/00987/DC	Ingenium Parc Darlington Borough Council Hybrid application for 100,000 square metre employment development including Class B8, up to 46,000 square metres, Class B1 b/c and up to 11,000 square metres Class B2 including associated landscaping, access and parking with proposed phase 1 infrastructure works consisting of the industrial estate, distributor road and initial landscaping works submitted in detail. Approx. 40.8 hectares	<i>c</i> 6.2km south of the Order Limits.

- 5.1.5 The Proposed Development includes appropriate avoidance and retention of ecological features and the creation of biodiversity enhancement areas, as detailed in ES Chapter 6 Biodiversity (Document Reference 6.2.6). In combination with other mitigation and enhancement measures (as detailed in Section 6.9 of ES Chapter 6), this will ensure that significant effects on ecological receptors are minimised or avoided.
- 5.1.6 Other developments within 10km of the Proposed Development have the potential for overlapping spatial and temporal interactions, mainly due to the likely temporal overlap of construction periods with the Proposed Development and habitat loss of agricultural land. Due to the implementation of a CEMP during construction to mitigate light, noise and pollution impacts, and the design of biodiversity enhancement areas with no panels within the Order Limits, the potential for cumulative effects to the SPA, Ramsar and SAC sites is seen to be minor adverse and not significant.



6.0 CONCLUSIONS

- 6.1.1 This HRA Screening Report has been prepared as part of an application for the Proposed Development. It comprises Stage 1 (screening) of the HRA process.
- 6.1.2 Three internationally designated sites were identified within 10km of the Proposed Development, comprising Teesmouth and Cleveland Coast SPA and proposed Ramsar site, Teesmouth and Cleveland Coast Ramsar site, and Thrislington SAC.
- 6.1.3 The Screening Assessment concluded that there is no potential for LSE through direct land take, disturbance, pollution or hydrological impacts. Whilst potential disturbance and displacement impacts on qualifying SPA/Ramsar site bird populations was considered (with regard to potential use of the site as FLL) during all phases of the development (construction, operation, decommissioning), no LSE alone or in combination with other plans or projects are anticipated. Any potential impacts on European sites will be sufficiently mitigated through best practice measures to be set out in ES Appendix 2.6 Outline Construction Environmental Management Plan (Document Reference 6.4.2.6).
- 6.1.4 A conclusion of No Likely Significant Effects can therefore be determined, and no further Habitats Regulations Assessment will be required.



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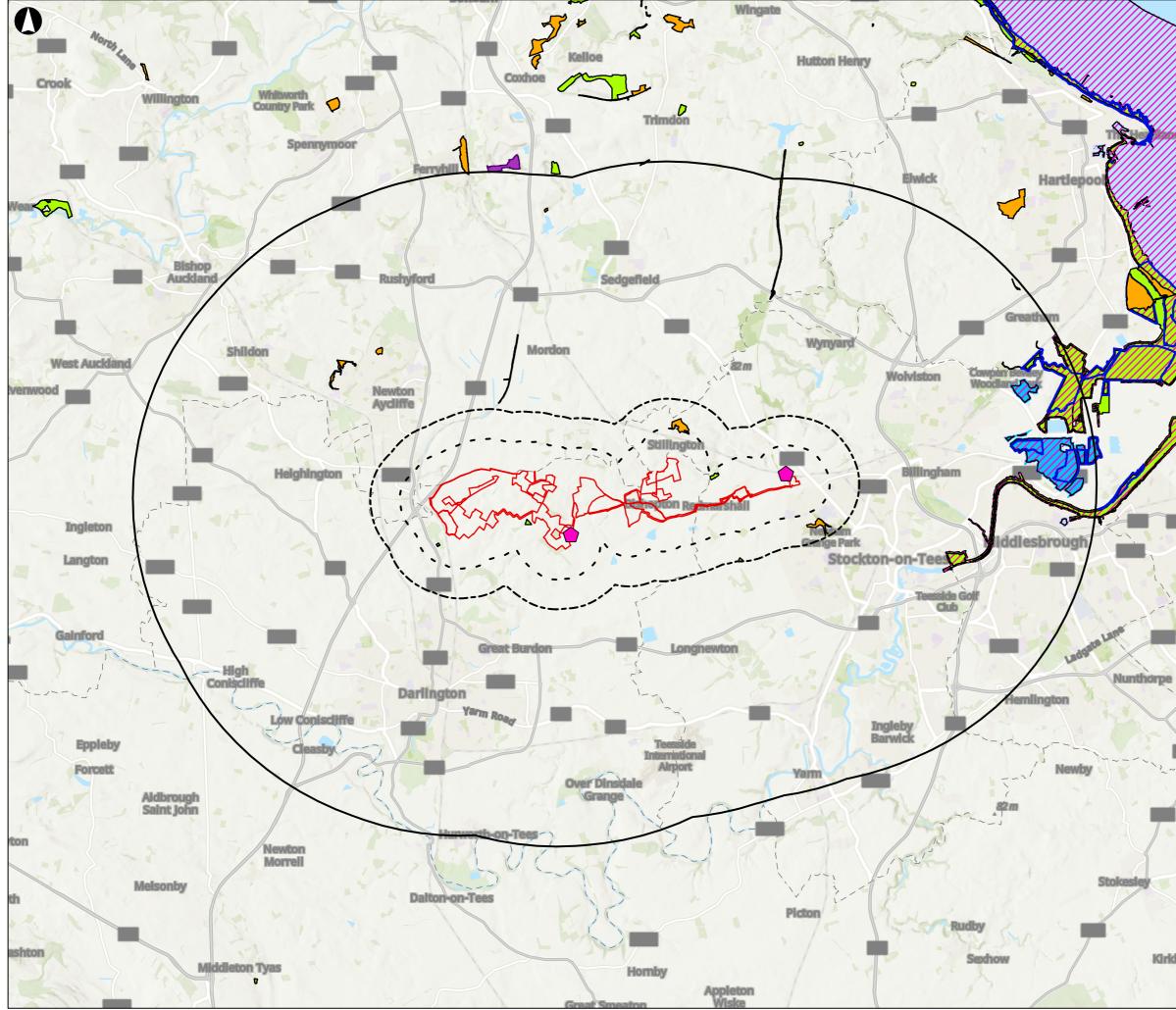
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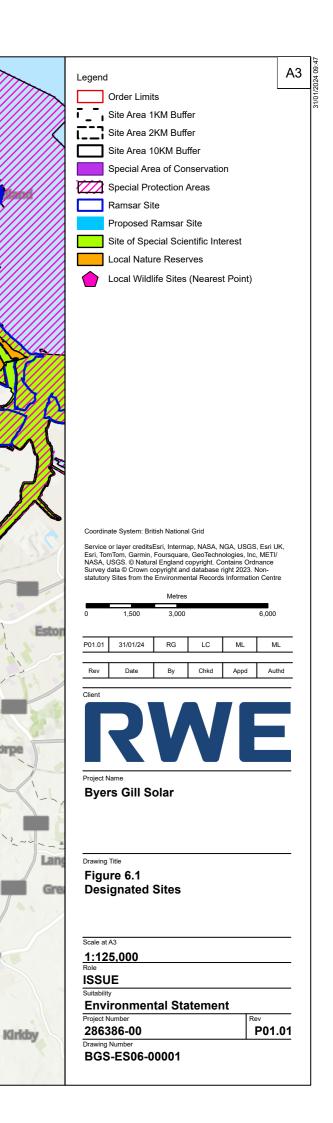


FIGURES

Figure 6.1 Designated sites



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APPENDIX A – RELEVANT LEGISLATION

International legislation

The following international conventions and directives apply to biodiversity protection in the UK. Post-'Brexit', even though European Union (EU) directives no longer directly apply to the UK, the provisions therein are enshrined in both domestic legislation and international agreements. Legislation has been enacted to ensure the regulations derived from these remain in force².

Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (Birds Directive) 2009 https://www.legislation.gov.uk/eudr/2009/147

The Birds Directive 2009 relates to the conservation of all species of naturally occurring birds in their wild state in the territory of the EU Member States (MSs) to which the treaty applies. Under the Birds Directive, the most suitable areas of conservation of the Annex I species are to be designated as Special Protection Areas (SPAs), as part of the European Natura 2000 network. Post Brexit, SPAs are no longer considered part of Natura 2000 and are instead components of the UK's 'national site network', but their highly protected status is unchanged. Maintaining a coherent network of protected sites with overarching conservation objectives is still required in order to fulfil the commitment made by government to maintain environmental protections and continue to meet the UK's international legal obligations.

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) 1992

https://www.legislation.gov.uk/eudr/1992/43

The Habitats Directive 1992 requires EU MSs to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of community interest, which are listed under Annex I, II, IV and/or V. Species listed under Annex IV are known as 'European Protected Species' (EPS), and have retained their protected status in UK domestic legislation post-Brexit.

Under the Habitats Directive, EU Member States are required to contribute to the Natura 2000 network through the designation of Special Areas of Conservation



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² Further information relating to England and Wales can be found here: <u>https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017</u>. A similar exercise has been undertaken in Scotland and Northern Ireland.



(SACs) for natural habitat types listed in Annex I and habitats of species listed in Annex II. Post Brexit, SACs are no longer considered part of the European Natura 2000 network and are instead components of the UK's 'national site network', but their highly protected status is unchanged.

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat 1971: the Ramsar Convention

Accessible via https://jncc.gov.uk/our-work/ramsar-convention/

The Ramsar Convention is an intergovernmental treaty focused on the conservation and sustainable use of wetland, primarily as habitats for water birds. Under the convention, each ratified country is required to identify and designate sites (Ramsar sites) that meet the criteria for identifying a wetland of international importance, i.e. containing representative, rare or unique wetland types. In addition, the convention promotes international co-operation to promote the wise use of all wetlands and their resources.

Habitats Regulations Assessment

There is a requirement under the EU nature directives, and enshrined in countryspecific domestic legislation, to undertake a screening exercise to determine whether any sites that form part of the 'national site network' (formerly Natura 2000) are likely to be significantly affected by any proposal (project or plan). The assessment must consider the proposals alone and also in combination with other plans and projects, if they result from activities that are not directly connected with, or necessary to, the management of the designated sites. If significant effects are likely, an Appropriate Assessment (AA) will need to be carried out. The screening, any AA, and any subsequent assessment, are collectively known as a Habitats Regulations Assessment (HRA). The HRA needs to take into account each of the 'Qualifying Features' (habitats or species) that justified the site being designated. Ramsar sites are treated in the same way as SACs and SPAs in HRAs, as are sites which have not been fully adopted i.e. candidate SACs (cSACs) and potential SPAs (pSPAs).