From: [redacted]
To: Cleve Hill Solar Park; Jones, Hefin
Cc: [redacted]
Subject: EN010085 - Cleve Hill Solar Park - The Applicant"s Deadline 3 Submission (email 6 of 7)
Date: 01 August 2019 23:20:11
Attachments: [redacted]

Dear Hefin,

EN010085 - Cleve Hill Solar Park - The Applicant's Deadline 3 Submission (email 6 of 7)

Please find attached the Applicant's Deadline 3 submission.

Please do not hesitate to get in touch if you have any queries.

Kind regards,

Mike

Michael Bird

Tel: 01904 715470
[redacted]

Arcus
1C Swinegate Court East
3 Swinegate
York
YO1 8AJ

www.arcusconsulting.co.uk

CLEVE HILL SOLAR PARK

THE APPLICANT'S RESPONSES TO WRITTEN REPRESENTATIONS RECEIVED AT DEADLINE 2

August 2019
Revision A

Document Reference: 11.3.1
Submitted: Deadline 3

www.clevehillsolar.com

CLEVE HILL
SOLAR PARK

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List of Abbreviations

AADT	Average Annual Daily Traffic
AHLV	Area of High Landscape Value
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
AR HMA	Arable Reversion Habitat Management Area
BBPP	Breeding Bird Protection Plan
CCC	Canterbury City Council
CEMP	Construction Environment Management Plan
CHSP	Cleve Hill Solar Park
CHSPL	Cleve Hill Solar Park Limited
CNMP	Construction Noise Management Plan
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DEFRA	Department for Environment Food and Rural Affairs
DML	Deemed Marine Licence
EA	Environment Agency
EIA	Environmental Impact Assessment
EMF	Electric and Magnetic Field
ES	Environmental Statement
FCERM	Flood and Coastal Erosion Risk Management
FGM HMA	Freshwater Grazing Marsh Habitat Management Area
FRA	Flood Risk Assessment
FTC	Faversham Town Council
GREAT	Graveney Rural Environment Action Team
Ha	Hectares
HGV	Heavy Goods Vehicle
HMA	Habitat Management Area
HMSG	Habitat Management Steering Group
HRA	Habitat Regulations Assessment
IDB	Internal Drainage Board
ISH	Issue Specific Hearing
KCC	Kent County Council
kV	Kilovolt
JNCC	Joint Nature Conservation Committee
LBMP	Landscape and Biodiversity Management Plan
LIR	Local Impact Report
LNR	Local Nature Reserve
LVIA	Landscape and Visual Impact Assessment
MAFF	Ministry of Agriculture, Fisheries and Food
MEASS	Medway Estuary and Swale Strategy
MHWS	Mean High Water Springs
MR	Managed Realignment
MW	Megawatt
NEER	Natural England's Evidence Review
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PRoW	Public Rights of Way
PV	Photovoltaic
RIAA	Report to Inform Appropriate Assessment
RR	Relevant Representations
SBC	Swale Borough Council
SPA	Special Protection Area
SoCG	Statement of Common Ground
SSSI	Site of Special Scientific Interest
WWII	World War Two

1 INTRODUCTION

1. This document provides Cleve Hill Solar Park Ltd.'s (the Applicant's) response to the Written Representations (WRs) submitted to the Planning Inspectorate (PINS) by Deadline 2 on 26 June 2019, relating to the Development Consent Order Application (the DCO Application) for Cleve Hill Solar Park (the Development).

2. Table 1.1 lists the 19 organisations which submitted WRs. The Applicant has responded to the points raised by these stakeholders in Section 2 of this document.

3. A further 12 WRs were submitted by members of the public. These responses have been grouped by topic and are addressed on that basis in Section 3 of this document.

4. References to the Application documentation are provided where necessary according to the reference system set out in the Cleve Hill Solar Park Examination Library.

Table 1.1: List of organisations which submitted Written Representations

PINS Reference	Written Representation Received from
REP2-049	Faversham Town Council
REP2-050	Graveney with Goodnestone Parish Council
REP2-052	Kent County Council
REP2-054	Swale Borough Council
REP2-061	Bryan Cave Leighton Paisner LLP on behalf of National Grid PLC
REP2-062	Charles Russell Speechlys LLP on behalf of London Array Limited
REP2-065	CPRE Kent - WR on Ecology and Biodiversity
REP2-066	CPRE Kent - WR on Flooding
REP2-067	CPRE Kent - WR on Hydrology
REP2-070	Environment Agency
REP2-074	Faversham & Oare Heritage Harbour Group
REP2-080	Faversham and Swale East Branch Labour Party
REP2-082	Faversham Creek Trust and Convener of Faversham & Oare Heritage Harbour Group
REP2-085	Graveney Rural Action Environment Team (GREAT) - WR on National Policy Statement
REP2-087	Historic England
REP2-092	Kent Wildlife Trust
REP2-096	Natural England
REP2-100	Ramblers
REP2-101	Royal Society for the Protection of Birds

Table 1.2: List of Members of the Public who submitted WRs

PINS Reference	Written Representation Received from
REP2-058	Brian Jefferys
REP2-060	Bruno Erasin
REP2-063	Chris Lowe
REP2-072	F R Gomes
REP2-089	Jenny Cutts
REP2-094	Marie King
REP2-098	Patricia Benstead
REP2-102	Sarah Jefferys
REP2-103	Stephen Ledger
REP2-105	The Ely Family
REP2-112	Tom King
REP2-113	Chala Fiske

2 STAKEHOLDER ORGANISATION WRITTEN REPRESENTATIONS AND THE APPLICANT'S RESPONSES

2.1 REP2-049 Faversham Town Council

Table 2.1: The Applicant's Comments on Faversham Town Council Written Representation

Ref.	Statement	Applicant's Comment
Application by Cleve Hill Solar Park Limited for an Order Granting Development Consent for the Cleve Hill Solar Park Project		
1	This letter comprises the express views of Faversham Town Council (FTC) with regard to the above application. FTC recognise that climate change as a consequence of the burning of fossil fuels poses a clear and present threat to the future health and wellbeing of our planet. We agree that the UK should be investing in, and supporting renewable energy, however we do not support this particular application as we consider that, on balance, the identifiable concerns outweigh the potential 'clean energy' benefit of this project. Consequently, FTC, as the local representative body of Faversham residents, object to the proposal to construct and operate a solar power station on Graveney marshes. The remainder of this letter outlines our key concerns.	The Applicant is in agreement with Faversham Town Council's comments on the need for investment and support for renewable energy in order to address the causes of climate change.
Background on Faversham		
2	Faversham is an ancient market town, mentioned in the doomsday book, which won its first recorded charter in 1252. Faversham grew up as a consequence of its location on Faversham Creek with its link to the Swale and the North Sea beyond. It was once a thriving port and gained regional significance as an associate member of the Confederation of Cinque Ports. The barges once carried agricultural produce, gunpowder and bricks mainly to London but also further down the coast towards the open sea. The town itself retains a wealth of historic buildings, over 500 listed by English Heritage at last count, some of which date back to medieval times. Although the creek is now a much quieter place, there are plans to develop a 'heritage harbour' for the many over-wintering historic Thames barges. Faversham has a distinctive sense of place enhanced by its surrounding countryside. To the south there is the dramatic landscape of the North Downs AONB, fruit orchards including the DEFRA National Fruit at Brogdale, open pasture and parkland estates. To the north, east and west are the North Kent Marshes. This flat coastal landscape is just as important with its arable and grazing, dykes, flora and fauna. The marshland areas of Oare, Seasalter, Graveney and Cleve Hill are a mecca for Ornithologists. Many visit from other regions of the UK and beyond, staying and eating locally; supporting the economy of Faversham and its	The Applicant notes this characterisation of the surrounding area. The tourism impacts of the Development are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. The wildlife offer of the area and other attractors are referred to under paragraph 90. Public perception of renewable energy Development is discussed in section 13.2.4.4. A negligible effect on tourism in Swale is predicted during construction (section 13.5.1.3) and operation (section 13.5.2.1) of the Development.

Ref.	Statement	Applicant's Comment
	surrounding villages.	
The Size and Adverse Visual Impact		
3	The planned project site is located near the village of Graveney, about 2 km North-East of Faversham and 5 km West of Whitstable on the North Kent coast. We understand the site is planned to cover an area of approximately 890 acres (365 hectares). This is an area of land larger than the village of Graveney and the town of Faversham combined. The size of the proposed facility and its close proximity to towns and villages are to our knowledge, unprecedented in the UK. The facility will, if constructed, dwarf the communities which border it.	The Applicant notes these comments. The scale of the project responds to a need for greater renewable energy production as set out in the Statement of Need submitted with the Application [APP-253] and its addendum [AS-008].
4	The area under consideration is crossed and bounded by footpaths which allow both resident and visitors ready access to an area of countryside with uniquely expansive views and ready access to wildlife. The area is within the Eastern Swale Marshes Character Area, partially within the Eastern Fruit Belt Character Area, and predominantly within Graveney Marshes Landscape Character Area. It is bordered by the Saxon Shore Way, has a public right of way (PRoW ZR485) running through it and it is also close to and visible from the National Cycle Network Route 1. We consider the probable effect on the landscape character and visual amenity of the site and its surroundings for some distance to be severely negative and we do not agree that the landscaping mitigation which has been described would materially minimise the negative effect. Given the low level of the land within the site plan and the proposed height of the solar panels (up to 3.9m high) plus transformers throughout the site of 3m, screening with vegetation and positioning of the panels (East – West orientation) will make little or no difference when travelling through it or around it. It is our view that this facility would fundamentally and detrimentally change the appearance of this locality from the moment its construction begins. Footpaths will be bounded by fencing, CCTV cameras and lighting on poles. Inevitably this will adversely impact upon the public's perception and enjoyment of the unique character of this place.	Landscape and visual impacts are assessed in Chapter 7 - Landscape and Visual Impact Assessment (LVIA) of the ES [APP-037]. Section 7.5.2 assesses landscape effects during operation, and section 7.6.2.2 assesses visual amenity effects during operation on recreation and public amenity receptors. Significant landscape and visual effects are predominantly limited to close proximity to the site, with likely visibility of the Development diminishing rapidly within a short distance of the Development due to topography, existing vegetation and built form (e.g., the sea wall). The assessment is supported by figures [APP-054] and visualisations [APP-063 to APP-196]. Recreational amenity effects are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. Section 13.5.1.4 addresses effects during construction and section 13.5.2.2 addresses operational effects. One significant adverse impact on recreational receptors has been identified, on the Saxon Shore Way during construction of the areas of the Development closest to the footpath.
The increased flood risk		
5	Faversham is low lying and consequently at risk from flooding and rising sea levels. This is always apparent when there is a spring tide. The applicants of the Solar Park will have the responsibility for maintaining of the sea wall that forms a large proportion of its northern boundary. The presence of this sea wall acts to increase the flood at Faversham. The town council wants to see the area used as it once was, a flood plain.	The Flood Risk Assessment submitted with the Application provides further detail on flooding [APP-227]. The Environment Agency's Medway Estuary and Swale Strategy (MEASS) will set out a long-term strategy for managed realignment, which, in the consultation version, states that the Cleve Hill site is required in future to address coastal squeeze due to sea level rise. The Applicant does not agree that the presence of the sea

Ref.	Statement	Applicant's Comment
		wall acts to increase flood risk or levels at Faversham. The consultation draft of the MEASS allows for set-back defences which would perform a similar function to existing defences albeit further inland and closer to Faversham. This would create an intertidal area rather than a flood plain so would have little effect on flood storage capacity.
The detrimental impact of construction and site access.		
6	Construction is planned to take place over a 2-year period. All of the equipment, materials and plant will have to be brought in by large vehicles. This will have a major impact not only on the village itself but on the M2 and junction 7. Brenley Corner, as it's known locally, is already over capacity at peak times of the day. This junction is notorious for accidents and the subsidiary roads leading to the site will struggle to accommodate large vehicles. The road to the site is a windy rural lane with lots of tight bends. Graveney village school fronts this road with classroom windows 4-5metres from the road edge, its playing field is on the other side. We understand there will be 80 movements a day, that is one every 6 minutes. The village school is very popular with Faversham families who generally take their children to school by car. The amount of lorry movements and everything that goes with that from noise, vibration and poor air quality will have a detrimental effect on this rural village and school. The route to the site is also Sustrans National Route 1. This an extremely popular route for cyclists and no consideration has been made for this. Let's not shy away from the fact that HGV's have a poor safety record regarding cyclists.	Access and traffic impacts are assessed in Chapter 14 - Access and Traffic of the ES [APP-044]. In this chapter, Graveney Primary School is classed as a high sensitivity receptor to changes in road traffic. Sensitive receptors (including Graveney Primary School and local residents) were identified and assessed with regards to potential environmental effects of road traffic. This is set out within Chapter 14 - Access and Traffic of the ES and no significant environmental effects were identified. The M2, Brenley Corner junction has been considered in the assessment of construction traffic effects in section 14.4.2 of Chapter 14. The overall percentage change in respect of HGV movements on the M2 as a result of the Development is expected to be 1% and therefore further detailed assessment was not required. Noise and vibration impacts from construction traffic are assessed in Chapter 12 - Noise and Vibration of the ES [APP-042], section 12.5.3. Chapter 16 - Air Quality [APP-046], addresses the air quality impacts of the Development, with section 16.4.3 assessing effects from construction vehicles and concluding that these would not be significant. Measures proposed to manage construction traffic, including in the vicinity of the school are described within the outline Construction Traffic Management Plan (CTMP), Technical Appendix A14.1 of the ES [APP-245]. Measures include restrictions on HGV movements to avoid school opening / closing time and a construction vehicle speed limit of 20 mph past the school. The construction traffic route is used by HGV traffic in the current baseline, so is clearly capable of accommodating such vehicles. However, to address comments raised by Kent County Council in Appendix 1 to the KCC Local Impact Report (LIR) [REP1-004], topographic surveys of key points on the construction traffic route from the strategic route network has been commissioned and the results will be submitted to the Examination ahead of Deadline 4. The spread of vehicles arriving at the site will be influenced by the nature of the material being delivered. Many of the deliveries made by sea will be held at the port of entry before onward transport to the site. It is expected that these deliveries can therefore be released from the port in a controlled manner, e.g., in convoys. No significant effects on highway safety for any receptor are anticipated as a result of the Development, however mitigation measures are included in the outline CTMP, which

Ref.	Statement	Applicant's Comment
		sets out measures to control construction traffic as described above. These measures are secured by requirement 11 of the draft DCO [REP2-003]. As set out in the outline CTMP [APP-245] and the updated revision B version submitted at Deadline 3 (document reference 6.4.14.1, revision B), the condition of the road surface along the construction traffic route will be assessed and any significant defects repaired before, during and after construction.
Concern over battery safety.		
7	Faversham Town Council is very concerned with the scale of the storage area for the Batteries and the known fire risk.	The Applicant has submitted a WR on Electrical Safety at Deadline 3 (see document reference 11.4.1). This provides an outline of the regulatory and legal framework that the Applicant would be subject to on construction and operation of the Cleve Hill Solar Park, including responsibilities to ensure safety from fire.
8	Lithium-ion (Li-ion) battery fires are acknowledged as among the most difficult to control and suppress. There is some advice which suggests that you let the fire burn itself out but what about the toxic fumes that would be given off? Given the size of the Li-ion batteries suggested in the application, it would be a major catastrophe. What arrangements or consultations have taken place with the Kent Fire and Rescue Services?	
9	There is no technical detail on the storage system and considering the potential hazards involved it is paramount that it is provided and can be scrutinised by independent professionals who have the expertise to do so.	
Detrimental Impact on Wildlife.		
10	The proposed site is immediately adjacent to The Swale which is a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site. The Swale Estuary is also a National Nature Reserve (and Marine Conservation Zone) and the site is bordered on the North and West, by both the South Swale Local Nature Reserve and the Oare Marshes Local Nature Reserve. The site is almost wholly enclosed by land which is designated as Wetland of International Importance (Ramsar sites). Although the land which would be used to accommodate the facility is not itself protected or designated as a Ramsar site, it is of a markedly similar character and quality to the surrounding Ramsar areas. It is also clear from the PEIR and NTS that the rare birds and other species which use the surrounding protected areas also use the nearby land including the site itself as habitat. It is clear there is a high likelihood of long-term negative effects on Dark-bellied Brent Geese and Breeding Marsh Harriers. The nearby SPA boasts a population of 24 pairs of the latter, representing at least 15% of the breeding population in Great Britain.	The effects of the Development on habitats, birds and other wildlife are assessed in Chapter 8 - Ecology [APP-038], and Chapter 9 - Ornithology [APP-039] of the ES. The effects of the Development on the Swale SPA are also assessed in the Report to Inform an Appropriate Assessment [APP-026] which concludes that there will be no adverse impact on the integrity of the Swale SPA.

Ref.	Statement	Applicant's Comment
11	We also believe that over reliance is placed on the suggested 40-hectare habitat management area north of the Cleve Hill substation. The plan assumes that the potential negative effects on these species will be simply offset by establishing a small grassland area nearby and / or that such species will simply relocate to similar habitats elsewhere. The success of this area will depend upon achieving a high carrying capacity for the SPA species. Whether or not this capacity can be achieved is unknown and is therefore, an environmental and ecological gamble.	As well as a general conversion of arable land to grassland across the Development site, an arable reversion habitat management area of 55.5 hectares, and a lowland grassland meadow habitat management area of 13.3 hectares are included as part of the Development. The management of the arable reversion habitat management area is set out in Chapter 9 - Ornithology [APP-039] of the ES, the Report to Inform an Appropriate Assessment [APP-026], and the method for determining the capacity of the area has been the subject of ongoing discussion with Natural England. Further information on the Applicant's latest position is provided in the Applicant's comments on responses to the Examining Authority's (ExA's) first written questions [REP2-006], in relation to question 1.1.27.
12	With both the Kent Wildlife Trust and Nature England opposing the scheme we cannot afford to risk the wild heritage and existing ecological environment of such an important site.	Discussions with Natural England and Kent Wildlife Trust are ongoing to agree the detail of measures to be implemented to provide mitigation and enhancement across the Development site, which is currently under intensive arable cultivation. A Statement of Common Ground with Kent Wildlife Trust has been submitted at Deadline 3 (see document reference 11.2.2). A Statement of Common Ground with Natural England was submitted with the Application [APP-256] and a further SoCG is expected to be submitted at Deadline 4. Both outline the key areas of agreement and disagreement on the Development proposals.
The negative impact on local heritage and archaeology		
13	The Graveney Marshes are a man made environment dating from the mid- medieval period onwards. Used predominantly for sheep rearing, fishing and wild fowl trapping, it consists of sea walls, artificial canals and decoy ponds. As a trading route from Europe there is likely to be evidence of Bronze Age, Roman, Saxon, Viking movement, trade and settlement that is deserving of further investigation and recognition. There has thus far been archaeological surveys conducted on the site of the existing substation with little investigation of the wider environment. These investigations, carried out by Wessex Archaeology in 2007 and 2008 uncovered minimal evidence of settlement but did unearth evidence of transient prehistoric and Roman use that is worth consideration given the small scale of the survey. There is much potential for the area to house finds of important archaeological significance and due to the limited scope of work carried out on the site, development could permanently damage any underlying archaeology and despite proposed mitigation by the developer, eradicate the possibility of ever knowing the true history of an area that is significant to the community and to the national heritage of	The archaeological baseline and the potential for unknown archaeology to exist within the Development site was fully assessed in Chapter 11 - Cultural Heritage and Archaeology [APP-041] of the ES. An outline Written Scheme of Investigation was submitted with the Application [APP-233], which includes mitigation for potential effects on unknown archaeology, and this document has been updated and submitted at Deadline 3 (document reference 6.4.11.4, revision B) to reflect comments made by Historic England in its Relevant Representation.

Ref.	Statement	Applicant's Comment
	trade with the UK.	
The lack of any substantial benefit to local communities.		
14	Faversham has a vibrant community who have worked hard over the last few decades to attract both visitors and new residents. A key part of the attraction is the built environment of the town itself but of course this is only enhanced by the semi-rural setting of the town. Faversham is bounded by an area of outstanding natural beauty to the south, the Swale Estuary to the north and characterful fruit farms and marshland both east and west. The placing of such a vast Solar Power Station so close to Faversham will inevitably, change perceptions of the area and affect its attractiveness as a place to live, work and spend time. FTC works alongside local civic groups seek to promote our town based on its rich natural and built heritage. We fear this development will thwart of efforts to the eventual detriment of the almost 20,000 people who live and work here.	The Applicant notes this characterisation of the surrounding area. The socio-economic, tourism and recreation impacts of the Development are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. Public perception of renewable energy Development is discussed in section 13.2.4.4.
15	This proposal is projected to have no direct positive economic impact on the local economy. There are no projections for increases in local employment, spend with local business, development of a supporting business ecosystem etc. The only benefit (of any kind) that Cleve Hill Solar Park can identify for the local area is their obligatory business rates payments to Swale Borough Council. We consider to be a poor value exchange in light of the concerns we have described in this response.	As well as the substantial business rate contribution of the Development, the draft DCO submitted at deadline 2 [REP2-003] includes Requirement 15, which requires that a skills, supply chain and employment plan is submitted before construction can commence. This plan will identify opportunities for individuals and businesses to access employment and supply chain opportunities associated with the construction, operation and maintenance of the Development.
16	In conclusion, Faversham Town Council, acting in the best interests of the residents of Faversham, are opposed to the granting of permission for the development of the Cleve Hill Power Station.	These comments are noted.

2.2 REP2-050 Graveney with Goodnestone Parish Council

Table 2.2: The Applicant's Comments on Graveney with Goodnestone Parish Council's Written Representation

Ref.	Statement	Applicant's Comment
Application by Cleve Hill Solar Park Limited for an Order Granting Development Consent for the Cleve Hill Solar Park Project		
1	Following the Preliminary Hearing held on 30th May and the Rule 8 letter published on 7th June, Graveney with Goodnestone Parish Council welcomes the opportunity to make Written Representation on the application for a Development Consent Order, as contained within this letter.	The Applicant notes these comments. The Applicant has engaged with Graveney and Goodnestone Parish Council since September 2017 through a series of briefing presentations, literature and invitations to its consultation events. The Applicant has sought to respond to all feedback provided by the Parish Council as set in the Applicant's Consultation Report [APP-022]. The Applicant has sought to understand the local feeling of the community in Graveney and Goodnestone Parish by conducting a multi-phased pre-application consultation since October 2017. The Applicant has gone beyond its formal consultation requirements and has engaged individually with several local residents by way of ongoing meetings on site and at neighbour's properties. The Applicant has responded to each concern raised as addressed in the Applicant's Consultation Report [APP-022]. Through its ongoing consultation activities, the Applicant has consistently sought to take local opinions into account in the evolution of the proposals.
2	Graveney with Goodnestone Parish Council is the most local tier of government and represents those who will be most affected by this proposal, namely, the residents of the twin villages of Graveney and Goodnestone. As such, this Written Representation does not seek to repeat information and opinions which can be found elsewhere, such as in submissions from CPRE, Swale Borough Council, or other such organisations, but to provide a local opinion which can only be obtained from those living in these villages. Our representation therefore does not rely on planning policy, scientific knowledge of the habitat or ecosystems contained within it, but on local feeling and local knowledge, which can only come from truly local people.	
Landscape		
3	Graveney and Goodnestone have been settlements since the 9th century and their existence predates the Doomsday Book. The larger village, Graveney, is characterised by the flat expansive nature of its marshes. People choosing to live in Graveney do so because of the wide, open and remote landscape; a landscape which is becoming increasingly difficult to find in this area of the country. Graveney Marshes are well known locally and a haven for not only wildlife, but also those seeking solitude, peace and remoteness. Visitors to the area come because of these characteristics, not despite them. The installation of solar panels, covering the marshes at the density and height proposed would destroy the landscape and its attractiveness to residents and visitors. The applicant seems unaware, or perhaps dismissive, of the idea that such an open, expansive and wild landscape could be attractive and desirable, maintaining that the introduction of 880,000 solar panels, up to 3.9m high, across an area of 958 acres, with a larger site boundary area extending to 1,214 acres, could even be seen as 'beneficial'. As the locally elected representative body, we find this attitude not only wrong but disrespectful to those who see beauty in this landscape and have chosen to	The landscape character of the area is described in section 7.3.2 of Environmental Statement (ES) Chapter 7 - LVIA [APP-037]. Impacts on the landscape character of these areas are assessed in section 7.5.2. Whilst there are areas of marshland in proximity to Graveney such as Graveney Marshes to the east of Seasalter Road / Faversham Road, the Development itself is proposed on land which is currently intensively farmed arable land. The Applicant has sought the views of the community on the site and issues of importance to the community through its pre-application consultation. The Applicant acknowledges that the area is used for local amenity and has consulted on ways in which local amenity could be continued and enhanced by suggesting additional permissive pathways in and around the site to improve connectivity. Positive responses were received to an additional permissive pathway connecting the southern and northern areas of the site to the eastern edge including the village of Graveney. The Applicant has suggested ways of improving biodiversity across the site from the existing baseline, which is intensively farmed agricultural land. The Applicant has suggested a range of mitigation measures to provide these enhancements as outlined in the Applicants Landscape and Biodiversity Management Plan (LBMP) [APP-203], which has been consulted on with statutory consultees. An updated version of the Outline LBMP has been submitted at Deadline 3 (document reference 6.4.5.2, revision B).

Ref.	Statement	Applicant's Comment
	live here.	The Applicant refers to the Statement of Need [APP-253] and its subsequent addendum [AS-008], which explains the need for 350 MW of renewable energy production.
Heritage		
4	Graveney is home to a number of 'heritage assets', including All Saints Church, Graveney Court and Sparrow Court. There are, of course, other listed buildings, some outside Graveney itself, which will be affected but these are the ones that will experience the brunt of the application. To call them heritage assets, whilst being technically correct, entirely undermines their importance to the local community. As residential properties, Graveney Court and Sparrow Court are in private ownership, but they remain important, historic, 15th century buildings within the village and their entitlement to protection and longevity is indisputable. This application would have a highly detrimental effect on their setting and thus heritage value. As a place of worship that has stood since the 12th century, All Saints Church is more than just a heritage asset, it is history in material form and this medieval church has remained almost unaltered from its original design. Countless generations of local people, some of whom are still resident in the village, have worshiped there and commemorated life events there. A place of worship is more than a building, it is an ethos, an atmosphere, a character, and a large part of this is down to its setting. The installation of densely packed, elevated solar panels on what is currently an open long distance view will materially affect the setting of the church and therefore its character and what makes it so valuable to the community. Screen planting, whilst perhaps more pleasant to look at than solar panels, would still interrupt the views that make the church so special and unique.	The effects on heritage assets are assessed in ES Chapter 11 - Archaeology and Cultural Heritage [APP-041]. The setting of assets is a key part of this assessment, for example the assessment of All Saints Church, Graveney carried out in section 11.5.2.3 of Chapter 11. In response to the consultation feedback received from the community, the Applicant has removed from its proposals 13.6 ha of solar panels on the elevated ground at Cleve Hill, in part to reduce the impacts on the setting of local heritage assets including the listed buildings All Saints Church, Graveney, Graveney Court and Sparrow Court.
Traffic		
5	Graveney and Goodnestone already have experience of a large scale construction scheme, when the London Array substation was constructed over the period 2009-2012 to serve the off shore wind farm. This project caused untold disruption to the life of the villages, with increased traffic generally, as well as a large number of HGVs travelling through the villages to reach the construction site. The verges were damaged, in many cases irreparably, and the roads suffered under the weight and volume of traffic. Graveney and Goodnestone have narrow roads, with the two mile primary route to the construction site having many width restrictions and blind bends, where it is often difficult for two cars to pass safely, let alone a	Construction traffic is proposed to be controlled through a CTMP, an outline version of which was submitted with the Application [APP-245] and at section 6.0 contains a range of measures designed to mitigate the impact of construction traffic on the local community. In response to its consultation and genuine commitment to reduce construction impacts, the Applicant has reduced the proposed maximum number of HGVs visiting site per day since its consultation on the PEIR from 75 to 40 vehicles and has consulted on the outline CTMP [APP-245]. To demonstrate its commitment, the Applicant has already undertaken initial road condition surveys which will be repeated before and during construction, and the Applicant will be legally bound to restoring good road conditions post construction.

Ref.	Statement	Applicant's Comment
	car and an HGV or even worse, two HGVs. The railway bridge in the centre of the village is already a bottleneck, due to the road being almost single track and the hump causing poor visibility, the proximity of the school, its junction with Sandbanks Lane and the number of cars parking there regularly. The road, which is part of a National Cycle Route, is also very popular with cyclists, encouraged by the local pub formerly being a well known and publicised cycling café, with adjoining shop. Accidents and near misses are a regular occurrence and the parish council has investigated traffic calming measures on a number of occasions. The idea of another, larger, infrastructure project being constructed in Graveney is unthinkable. The management of the HGV movements through the village would be a logistical nightmare and would leave residents, many of whom are elderly, and any remaining tourists unable to travel at will, and subject to the inconvenience, disruption and noise caused by vast amounts of heavy traffic travelling throughout most of the day for six days every week during the lengthy construction period.	
Conclusion		
6	In conclusion, Graveney with Goodnestone Parish Council cannot stress enough the highly detrimental and permanent effect this application would have on our parish if it were to be approved. We have left it to other bodies to provide information on planning policy and more specialised areas such as biodiversity and environmental concerns, but have sought to provide a tangible and authentic local viewpoint, which with all due respect, cannot be provided by less local bodies.	The effects of the Development have been fully assessed in the ES submitted in support of the Application. The Applicant is committed to being a good neighbour and will continue to engage with the parish council and local residents directly throughout all phases of development to continue to understand and seek to address residents' concerns.

2.3 REP2-052 Kent County Council

Table 2.3: The Applicant's Comments on Kent County Council's Written Representation

Ref.	Statement	Applicant's Comment
Highways and Transportation (as Local Highway Authority)		
1	KCC is satisfied that the vehicle movements associated with the construction, operation and decommissioning of the proposed Solar Park can be accommodated on the local highway network with the appropriate mitigation in place. The traffic surveys and methodology used to provide the traffic forecasts are considered appropriate and therefore KCC takes the view that the vehicle movements generated will be acceptable.	The Applicant welcomes KCC's agreement.
2	Using first principles applied to the construction programme, the applicant has been able to forecast the traffic movements throughout the construction project and determined that the peak period of HGV traffic will result in approximately 40 arrivals and 40 departures per day. This peak would take place over four weeks; commencing at around week 27 of the two year programme. HGV movements would generally fluctuate below that figure over the remainder of the project, as illustrated in the submitted Environmental Statement (ES) (Volume 1 – Chapter 11 – Paragraph 14.3).	The Applicant agrees this accurately reflects the ES.
3	The route that will be taken by HGVs along Head Hill Road and Seasalter Road to access the development site is unrestricted and the traffic surveys indicate that these already handle regular volumes of HGV traffic flows. In the case of Head Hill Road, this currently experiences around 200 HGV movements per day, out of over 2,800 vehicle movements in total. This suggests that HGVs are a common feature expected along these roads and the white centre line marking, indicating a 5.5m carriageway width over the majority of the route, also points towards suitability. It is therefore considered that they are generally capable of accepting additional movements over a temporary period and these can be accommodated with appropriate mitigation.	The Applicant welcomes KCC's agreement and will work with the Highway Authority to ensure appropriate mitigation required is implemented.
4	KCC has engaged with the applicant to develop the Construction Traffic Management Plan (CTMP) and this has been influenced by the experience gained previously, when a similar major project was undertaken at Cleve Hill for the construction of the London Array Wind Farm and associated sub-station. This project, completed in 2012, also employed a CTMP throughout the duration of the build and used the same route between the A299 and Cleve Hill for all of the significant number of HGV movements involved. The CTMP was considered to have been operated successfully over the period it was used.	The Applicant welcomes the agreement from KCC and will continue to work with the Highway Authority to deliver the CTMP. An outline CTMP [APP-045] was provided with the application, a final version of which must be approved by KCC under Requirement 10 of the draft DCO [REP2-003] prior to commencement of construction. An updated version of the outline CTMP (revision B) has been submitted at Deadline 3 (document reference 6.4.14.1, revision B).

Ref.	Statement	Applicant's Comment
5	The London Array project also provided further highway mitigation in the form of permanent physical works and KCC is of the opinion that those works will continue to have the same mitigation benefit for the current development proposal. In particular, the project accommodated the delivery of a car park for Graveney Primary School in order to remove the need for vehicles associated with the school to park on Seasalter Road and that parking provision remains in place now for the current proposal to benefit from.	The Applicant acknowledges that the mitigation implemented for the London Array project will also be of benefit to the Development and agrees with KCC that this will be the case.
6	KCC is content that the CTMP can be agreed prior to the development commencing and that this will control vehicle movements through the imposition of: • A routing strategy • Timing of deliveries • Voluntary speed restrictions • Temporary signage • Holding areas • Monitoring and enforcement • Communication and local engagement	The Applicant is also confident that an appropriate CTMP can be agreed and will work with the Highway Authority to ensure appropriate documentation is delivered. An outline CTMP [APP-045] was provided with the application, a final version of which must be approved by KCC under Requirement 10 of the draft DCO [REP2-003]. An updated version of the outline CTMP (revision B) has been submitted at Deadline 3 (document reference 6.4.14.1, revision B).
7	In addition, it is agreed that road condition surveys will be carried out to record the impact of the development on the highway route. These road condition surveys will be carried out before, during and after the construction activities in order to ascertain if there is any deterioration of the highway infrastructure and consider if this can be attributed to the additional traffic resulting from the development. The road condition surveys will also seek to identify where any maintenance works may be required.	The Applicant welcomes KCC's view. An outline CTMP [APP-045] was provided with the application, a final version of which must be approved by KCC under Requirement 10 of the draft DCO [REP2-003]. An updated version of the outline CTMP (revision B) has been submitted at Deadline 3 (document reference 6.4.14.1, revision B).
8	The road condition survey that will be carried out prior to the development works will also seek to ensure that the road condition is suitable for the expected traffic and ensure that repairs can be managed during the project as required.	The Applicant agrees with this methodology. An outline CTMP [APP-045] was provided with the application, a final version of which must be approved by KCC under Requirement 10 of the draft DCO [REP2-003]. An updated version of the outline CTMP (revision B) has been submitted at Deadline 3 (document reference 6.4.14.1, revision B).
9	Finally, the onus will be on the developer to rectify any attributable damage or accelerated deterioration to the highway once the construction phase has been completed. Again, this is a similar undertaking to that previously carried out to the satisfaction of the Highway Authority in connection with the London Array project.	The Applicant agrees with this proposed approach and will work with the Highway Authority to ensure appropriate surveys/ remediation works are undertaken. An outline CTMP [APP-045] was provided with the application, a final version of which must be approved by KCC under Requirement 10 of the draft DCO [REP2-003]. An updated version of the outline CTMP (revision B) has been submitted at Deadline 3 (document reference 6.4.14.1, revision B).

Ref.	Statement	Applicant's Comment
Public Rights of Way (as Local Highway Authority)		
Existing Public Right of Way (PRoW) Network		
10	Public Footpaths ZR484, ZR485, ZR488, ZR692, CW90 and CW55 pass directly through the application site, whilst Public Footpath ZR486 abuts the southern boundary of the proposed development. The proposed site layout of the solar park has accommodated the definitive alignments of these existing PRoW, avoiding the need for any diversions or extinguishments.	The Applicant agrees that there is no requirement to permanently close or divert the existing public footpaths through the site or abutting its boundaries.
11	With regard to promoted routes, the Saxon Shore Way long distance path is currently aligned along Public Footpath ZR484/CW55. Natural England has also proposed that the England Coast Path (ECP) National Trail should be aligned along this route. Should this stretch of the ECP be approved by the Secretary of State, it is expected that the trail will be open by 2020. The number of people using the PRoW along this route is likely to increase because of the ECP, due to the higher level of promotion associated with National Trails.	The future designation of the England Coast Path forms part of the assessment in section 13.5.1.4, Recreation, of ES Chapter 13 – Socio-economics, Tourism, Recreation and Land Use [APP-043].
12	The County Council initially requested that electronic people counters were installed by the applicant at key gateway locations on the PRoW network, however the applicant commissioned 'Non-Motorised User' (NMU) video surveys. As the video surveys were only operating on four days, KCC disagrees with the applicant's view that data collected from their surveys is an accurate reflection of PRoW usage. Caution must therefore be taken when referring to the results of the NMU Survey (ES - Table 14.8), as the figures obtained during this limited study may not be truly reflective of actual path use.	The method, location and timing of 'Non-Motorised User' (NMU) counts were discussed and agreed with public rights of way officers from KCC. All surveys were undertaken using video equipment by a specialist survey company (recommended by KCC). The surveys were taken on four days covering before and during the school summer holidays and are considered to be accurate reflection of PRoW usage. It is acknowledged that KCC would like to see permanent counters installed along a number of PRoW to monitor the long term impact of the solar park on path use, however, this would require intrusive works and landowner agreement to install the equipment and associated infrastructure and it was not considered necessary given that alternative counting methods were initially considered adequate and subsequently agreed by KCC.
Impacts on the PRoW Network		
13	The CTMP states that it is intended to keep PRoW open and accessible during the construction phase of the project, where they pass directly through the development site (ES - Table 14.3). This approach is welcomed, as it would maintain network connectivity and minimise disruption for path users.	The Applicant welcomes KCC's agreement to the proposed approach to public rights of way during construction works.
14	However, the CTMP later acknowledges the possibility that temporary closures may be needed. The draft Development Consent Order (Part 3, Paragraph 11 and Schedule 4) lists six PRoW that will be temporarily stopped up in connection with the project, these closures must be discussed in advance with KCC to limit impact of the closures.	The Applicant will continue discussions with KCC Rights of Way Officers to provide further clarity and reassurance on the circumstances which could lead to public rights of way being temporarily stopped up. KCC will note that it has a measure of control over the temporary stopping up, as Requirement 6 of the draft DCO provides for a public rights of way management plan to be approved by the relevant planning authority (either SBC or CCC as relevant) in consultation with KCC prior to works being able to be commenced. This
15	To reduce the impact on the PRoW network, a	

Ref.	Statement	Applicant's Comment
	'hierarchy of intervention' is requested, which seeks the minimum impact during construction and comprises signage to keep routes open, using local management to hold PRoW users for a short period (e.g. to allow vehicles to pass) and temporary closures with very short diversions immediately around works where there is no other option. Alternative access routes (temporary diversions) should also be provided, to avoid fragmentation of the PRoW network.	management plan must provide a plan for minimising the length of the temporary stopping up, and details of publicity for such stopping up. The Applicant would also highlight that whilst powers of temporary stopping up are sought for the rights of way in the draft DCO [REP2-003], this is not to say that temporary stopping up is a fait accompli rather that the Applicant is seeking a full suite of powers that it may require to construct and operate the solar park and associated development.
16	There is a risk of surface damage along PRoW during the construction phase. The applicant is reminded that there must be no disturbance of the PRoW surface without the express permission of the County Council. Construction traffic vehicles should not pass along or across PRoW without prior approval from KCC. It would be the responsibility of the applicant to make good any damage to the surface of the right of way, which has resulted from the construction activity.	The Applicant notes these requirements and confirms that dialogue with the relevant KCC officers will be ongoing throughout the development of the project.
17	The proposed development would transform the character of the landscape from arable to industrial. These changes would affect Public Footpaths that pass directly through the development, in addition to the wider PROW network that surrounds the site. There would be visual impacts on the PRoW network during the construction, operational and decommissioning phases of this project. Whilst it is accepted that the severity and level of impact on each right of way will depend on the location of the route, the visual impacts on specific routes (e.g. ZR484 and ZR485) are likely to be significant.	Landscape and visual impacts are assessed in Chapter 7 - LVIA of the ES [APP-037]. Section 7.5.2 assesses landscape effects during operation, and section 7.6.2.2 assesses visual amenity effects during operation on recreation and public amenity receptors. The assessment is supported by figures [APP-054] and visualisations [APP-063 to APP-196]. Recreational amenity effects are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. Section 13.5.1.4 addresses effects during construction and section 13.5.2.2 addresses operational effects.
18	The submitted plans show that the Solar PV modules will be kept away from existing PRoW and have included what may be considered a relatively significant 'buffer', but the layout of the solar panels would still have an impact on the user experience. For users of Public Footpath ZR485, which passes directly through the field of PV modules for approximately 1.5km, visibility would be reduced from several kilometres to 'several tens of metres', with direct views of the panels' supports and structure. Considering the path currently passes across expansive arable fields and through open countryside, the effects on Public Footpath ZR485 may deter use of the path.	The Applicant welcomes KCC's acknowledgement that a buffer for the footpath ZR485 has been implemented. The Applicant acknowledges the Council's views with regards to future use of Public Footpath ZR485.
19	It is acknowledged by the applicant in the ES (Chapter 13) that there would be a substantial change in views for users of the PRoW network. The applicant has assessed visual impacts at specific points along PRoW, providing photomontages along the routes, but they have not fully considered the overall	Section 13.5.2.2 Recreation of ES Chapter 13 - Socio-economics, Tourism, Recreation and Land Use [APP-043] does consider the overall impact of walking the paths, and in respect of the Saxon Shore Way, and refers to: *"views to the inland side of the path over a length of path of approximately 5.2 km where the path runs adjacent to fields*

Ref.	Statement	Applicant's Comment
	cumulative impacts (as a whole) of walking the entire lengths of paths.	*containing solar PV modules"*
20	Having noted the consultation feedback from local users who use the paths on a regular basis, KCC does not consider that the assessments made by the applicant reflect the likely impacts of the whole development. The County Council considers that there may be risk that the proposed development could deter local users of the PRoW, who currently use the paths on a regular basis for the purpose of outdoor recreation.	The whole Development, and a range of receptors have been considered in the assessments in ES Chapter 13 - Socio-economics, Tourism, Recreation and Land Use [APP-043] section 13.5.1.4.
21	With regard to future vegetation growth along PRoW that pass through the site, KCC supports the proposal that the grassed surfaces of ZR488 and ZR485 would be maintained by the site operator.).	The Applicant welcomes KCC's agreement to the proposed surface treatments of the footpaths.
22	Consideration should be given to the location of any scrub planting, so that it does not encroach on any PRoW or affect access. Any new planting should be set back at least one metre from the PRoW and a management regime should also be agreed with the KCC.	These comments are noted. The outline LBMP [APP-203] includes maintenance and management of the vegetation within the areas of the public right of way. An updated outline LBMP has been submitted at DL3 and incorporates reference to these comments (document reference 6.4.5.2, revision B).
23	In respect of wider network connectivity, the roads surrounding the proposed development site provide vital links between off-road PRoW. Concerns are therefore raised with the predicted increase in HGV movements along these routes during the construction and decommissioning phases of the project, as these could introduce safety concerns for NMUs and deter people from walking along roads to access PRoW.	This potential effect is assessed in ES section 14.4.2 of Chapter 14 - Access and Traffic [APP-044]. The Outline CTMP [APP-245] contains control measures to ensure the impacts of construction traffic on a range of receptors, including non-motorised users, are minimised. A final version of the outline CTMP must be approved under Requirement 10 of the draft DCO [REP2-003] prior to commencement of construction.
PRoW Network Development		
24	The proposed development provides an opportunity to enhance public access in the region and contribute towards the delivery of Right of Way Improvement Plan (ROWIP) objectives. Given the scale of the proposed development site, the provision of new public access being offered by the applicant is disappointing. The proposed new permissive route would be a useful addition to the existing PRoW network, but the route would only be permissive in nature and is therefore likely to be extinguished following the decommissioning of the site.	The Applicant consulted on alternative options for access, and the application design reflected the responses received. The Applicant is also mindful of the need to balance recreational pressures with other considerations such as compatibility with the existing network, availability of parking, public transport and other access points to the network, and environmental designations (points which were raised by respondents in reply to consultation).
25	KCC supports the proposal for a new Permissive Path through the site that would connect Public Footpaths ZR488 and ZR484. However, the use of the route is not assured, as the path would pass between fields of new PV modules, which may not be appealing to some walkers.	The Applicant welcomes support from the Council regarding the proposed new Permissive Path connecting Public Footpaths ZR488 and ZR484. Public perception of renewable energy development is discussed in section 13.2.4.4.
26	KCC's request for a new off-road footpath between Public Footpaths CW90 and CW55 has not been included. This new path would be a valuable off-road walking route for the public, providing an alternative to the	The Applicant has discussed the designation of this route as a public footpath with the landowner and understands that they are amenable to delivering this new footpath independently from the Development. The Applicant hopes to provide an update on this during the Examination following further

Ref.	Statement	Applicant's Comment
	Faversham Road and addressing safety concerns. It is understood that the landowner is amenable to this proposal.	progression of discussions with the landowner.
27	Given the benefits of this link, it is requested that the applicant reconsiders the option to dedicate the route as a Public Footpath or Permissive Path within the DCO. The dedication of this route as a PRoW would secure its long term protection, deliver a substantial public benefit and contribute towards a positive legacy for the Solar Park after its decommissioning. The proposed route should be included within the DCO application, to ensure the route is created for the public.	
Minerals and Waste (as Minerals and Waste Planning Authority)		
Mineral Safeguarding		
28	The adopted Kent Minerals and Waste Local Plan 2013-30 (KMWLP) safeguards economic land-won minerals in Kent and any minerals and waste infrastructure.1 This is in line with the National Planning Policy Framework (NPPF) 2019 and the National Planning Policy for Waste (NPPW) 2014 requirements to ensure that the County has sufficient mineral supply and waste management provisions.	The Applicant notes these comments.
29	The County Council, as Minerals and Waste Planning Authority, notes that the proposed site conflicts with two Mineral Safeguarding Areas (MSA), which are safeguarded under Policy CSM5 of the adopted KMWLP. The safeguarded minerals are: • Sub- Alluvial River Terrace Deposits • Brickearth (Faversham – Sittingbourne Area)	The Applicant understands that the Site covers two Mineral Safeguarding Areas.
30	The minerals are of a superficial nature and prior extraction could be possible. The County Council requests that a Mineral Assessment is submitted by the applicant. The Minerals Assessment should detail the physical characteristics of the deposits and their economic potential. It is recognised that the ES (Volume 1 - Chapter 10) does discuss ground conditions, but it does not make reference to the economic minerals.	It had been agreed between the Applicant and KCC that minerals could be addressed via the Planning Statement [APP-254] submitted with the application. However, the Applicant understands that KCC has now requested a separate document to explain why the minerals are not affected. Initial discussions have suggested that this can be dealt with procedurally by converting the comments set out in the Planning Statement [APP-254], Appendix A, Section 6.1.10 into a separate document. This matter is expected to be addressed during the Examination through a Statement of Common Ground between the Applicant and KCC to be submitted ahead of Deadline 4.
31	The County Council recognises that the proposed scheme is largely a surface development that can be erected and dismantled without significant disturbance to the ground it is sited upon. At present it is not clear whether the economic minerals highlighted above are threatened with permanent sterilisation. The County Council recognises that the lifetime of the development could be considered semi-permanent. Therefore, a Minerals Assessment is required to assess the safeguarding issues of the threatened economic geologies above with consideration against KMWLP policy DM7 and any of its potential exemptions.	
32	The County Council would recommend that	

Ref.	Statement	Applicant's Comment
	any Minerals Assessment should have adherence to the KCC Minerals and Waste Safeguarding SPD2. The County Council will actively engage with the applicant on the approach to safeguarding matters and will offer the applicant advice as necessary.	
Waste Management Facility or Minerals Infrastructure Processing/Handing Safeguarding		
33	The proposed Cleve Hill Solar Park does not affect any safeguarded waste management facility or minerals processing or infrastructure.	The Applicant agrees that this is the case.
Sustainable Drainage Systems (as Lead Local Flood Authority)		
34	The County Council as Lead Local Flood Authority recognises that the introduction of solar farms to a greenfield location without incorporation of basic controls can have implications that could lead to an increase in flood risk elsewhere. The applicant has completed a Flood Risk Assessment to assess both coastal flood risk and local flood risk, including the local ditch system.	A Flood Risk Assessment has been undertaken [APP-227], which concludes that over a 100-year period, there would be a negligible effect on flood risk as a result of the Development (see paragraph 164) and beneficial over a shorter time period (see paragraph 165).
35	The Flood Risk Assessment prepared by Arcus Consultancy Services provides an assessment of potential increase in surface water runoff associated with the proposed development. A Drainage Strategy is proposed to be implemented to mitigate any potential increase in surface water runoff. Mitigation action will include appropriate seeding but other surface finishes to protect against erosion may be necessary in some localised areas. For example, in areas with a concentration of flow, a gravel coverage may provide better protection.	According the submitted FRA [APP-227] there are unlikely to be areas of concentrated flow due to the flat nature of the site. Further clarity will be sought from KCC on the localised areas referred to in this comment.
36	From a flood risk management or surface water drainage perspective, the County Council is broadly satisfied with the mitigation proposed for the scheme.	The Applicant welcomes KCC's agreement.
Heritage Conservation		
37	The County Council has provided comments on three areas of heritage covered in the ES (Chapter 11): • Archaeology • Built Heritage • Historic Landscape	These comments are noted. SBC and Historic England have also commented on these matters.
Archaeology		
38	KCC is supportive of the way in which the applicant has assessed, surveyed and is proposing to mitigate the archaeological impacts of the scheme. The pre-application study was developed in discussion with both the County Council and Historic England. The study has provided a good general understanding of the site's archaeological potential and the potential impacts of the proposed development. KCC agrees that where there is uncertainty, taking a worse case approach is appropriate. KCC also agrees that within much of the development works,	The Applicant welcomes the Council's view. This approach reflects the Applicant's understanding, and the Outline WSI submitted with the Application [APP-233].

Ref.	Statement	Applicant's Comment
	there is scope for adjustment of the scheme to preserve any particularly significant archaeological remains that may be identified. Mitigation through a programme of archaeological works is an appropriate response and can be covered through agreeing an archaeological Written Scheme of Investigation, as has been proposed.	
Built Heritage		
39	KCC is of the view that no designated built heritage assets will be directly affected by the development proposal, though the setting of a number will be indirectly affected by the development during and following construction. While KCC has contributed to initial discussions on this aspect, further representations should be sought from Historic England, Swale Borough Council and Canterbury City Council.	The Applicant welcomes the Council's view that no designated built heritage assets will be directly affected by the Development. The Applicant is in consultation with Historic England, SBC and CCC regarding indirect effects on the settings of designated heritage assets. CCC does not anticipate any settings issues to designated heritage assets within the council area. Reponses to SBC and Historic England's Written Representations on heritage matters are included in this document in sections 2.4 and 2.15.
40	The development will have an effect on one undesignated built heritage asset; a Second World War Type 24 pill box located on the edge of the development. KCC accepts that the setting of the pill box will be compromised by the erection of the solar panels in its original field of fire but agrees that the indirect effect is reversible on decommissioning. Given the constraints of access to the pill box, KCC is of the view that the impact is acceptable and supports the proposal for recording of the pill box and its setting including original field of fire in advance of development.	The Applicant understands and welcomes this view.
41	The proposal to convert the pill box to a bat roost requires further consideration. While the pill box may provide an opportunity for ecological enhancement, it is the Council's view that this should not be to the detriment of the heritage significance of the asset. Any modifications should avoid damage to the asset and be reversible. KCC notes the proposals set out in Outline Landscape and Biodiversity Management Plan Appendix J and is of the view that elements of the proposed conversion would lead to the obscuring of the heritage asset by soil mounding and vegetation that would not be reversible on decommissioning without affecting the protected species that would be established in the pill box.	The Applicant understands this position and will consider the options for establishing a bat roost without affecting the heritage significance of the asset before discussing further with KCC and making any changes to the proposals. Suggested alterations are included in the outline LBMP submitted at Deadline 3 (document reference 6.4.5.2, revision B).
Historic Landscape		
42	KCC notes that the development is very large in area and will change the character of the site from reclaimed and farmed land to an industrial one. It is agreed that the legibility of the former marshland is helped by the	The Applicant will explain the assessment rationale and present for agreement with KCC in a SoCG. It is hoped that this SoCG can be agreed and submitted to the Examination in advance of Deadline 4.

Ref.	Statement	Applicant's Comment
	retention of the drainage ditches and sea wall and the removal of development on Cleve Hill helps to maintain the distinction between marsh and higher ground. The ES assessment methodology does not explicitly set out levels of impact for the historic landscape. It is KCC's view that for the resultant overall effect, the magnitude of effect must be considered at least Medium (possibly High); and the sensitivity potentially Medium. This is due to the historic landscape being important to the setting of a number of designated heritage assets. The effects of the development on the Historic Landscape should be used in consideration of the effects of the scheme on the landscape and the setting of designated built heritage assets which will be led on by Historic England, Swale Borough Council and Canterbury City Council.	
Interpretation		
43	KCC welcomes the intention to erect heritage information panels at appropriate locations around the site and the potential support to projects such as the Forgotten Frontline and the Defence of Swale project, both which have associated interests with the site's heritage.	The Applicant welcomes KCC's support for the proposed interpretation and heritage projects.
Biodiversity		
Ornithology Mitigation		
44	To mitigate for the loss of arable field used by wintering and passage, it is proposed to create an area of permanent grassland – this area is significantly smaller than the proposed development site and KCC is concerned that it will not provide sufficient space to implement the mitigation. However, from the information submitted, KCC understands that Natural England is in discussion with the applicant about the proposed mitigation and therefore, KCC is deferring to Natural England on this matter as they are statutory consultee for developments that will impact SPA, SSSI and Ramsar Sites.	The Applicant acknowledges KCC's comments and notes KCC are deferring to Natural England on ornithological mitigation. The Applicant continues to discuss this issue with Natural England and further progress will be reported to the Examination through an updated Statement of Common Ground expected to be submitted by Deadline 4.
45	The Ornithological Technical Appendix (A9.1) provides details of the breeding bird surveys, however, there appears to be limited information provided on the proposed breeding bird mitigation. The development will result in the loss of ground nesting bird habitat and therefore there is a need for clarification that the proposed mitigation for wintering/passage birds will also be suitable for breeding birds.	Paragraph 371 and 372 of ES Chapter 9 - Ornithology [APP-039] assess the potential effect of loss of arable habitat to solar panels on ground-nesting birds including lapwing, skylark and yellow wagtail. The assessment concludes that if the more open habitat preferring species do not find that space between the arrays is sufficiently large to be attractive to them, then there would be lower numbers of skylark and yellow wagtail, although the larger grassland extents provided by the Habitat Management Areas will provide enhanced habitat for these species. Paragraph 10 of the outline LBMP [APP-203] describes the ornithological objectives of the outline LBMP. There are no specific parts of the outline LBMP that set out measures to mitigate for ground-nesting birds, beyond the general aims of the habitat management in areas between the arrays (as grazing marsh grassland) and in the HMAs (specifically the AR HMA and LGM HMA). The residual effect for these species would be negative

Ref.	Statement	Applicant's Comment
		and not significant, but overall the residual effect on the farmland bird community (which includes species associated with field margin habitats) was assessed as uncertain positive and not significant.
46	The County Council understands that it will only be the arable land that will be lost to the proposed development and the adjacent habitats along the field margins and ditches will be retained.	The Applicant agrees with this statement.
Other species		
47	The majority of non-avian species were recorded around the field margins and ditches which are to be retained within the proposed development site. While there may be a short term impact (to some areas) during construction, it is likely that current interest of the site (for these species) can be maintained and potentially improved.	These comments are noted and agreed.
Habitat Creation		
48	The submitted information within the ES (Chapter 8 – Paragraph 174) has detailed that the following will be implemented on site if planning permission is granted: • New ditch habitat, along the north side of the electrical compound (c. 0.15 ha) • New buffer grassland, adjacent to the ditches throughout the site (c. 27 ha) • Lowland meadow, in fields Y and Z (c. 14 ha) • Scrub/grassland on the slopes of the bund around the electrical compound (c. 1.48 ha)	These comments are noted and agreed.
49	An Outline Landscape and Biodiversity Management Plan has been submitted to demonstrate how these areas will be managed. However, KCC would like to highlight that only one management plan should be produced, and it will need to incorporate all land management requirements in the one document. The management plan should consider how the proposed ditches will be managed to prevent surface water flooding, without other conflicting management works. This type of conflict could arise if there is not one overall management plan	The Applicant continues to discuss this issue with Natural England and further progress will be reported to the Examination through an updated Statement of Common Ground expected to be submitted by Deadline 4. It is appropriate to have more than one type of management plan to control activities on the Development site to make a distinction between the development phases of construction, operation and decommissioning, and to deal with specific issues in greater detail, such as traffic or construction noise impacts on the SPA. Updates to management plans submitted at Deadline 3 will make clearer what the interaction and hierarchy is between these control documents to aid interpretation and avoid conflicts arising.
Implementation		
50	The County Council would like to highlight that there would be a need for the following to be implemented if planning permission is granted: • The retained vegetation areas to be properly protected during construction • Proposed management to be actively implemented for the lifetime of the development • Ongoing species monitoring to demonstrate	The Applicant notes KCC's comments. These requirements are incorporated into the version of the outline LBMP submitted at Deadline 3 (document reference 6.4.5.2, revision B).

Ref.	Statement	Applicant's Comment
	if the mitigation is successful OR if changes to the management plan are required	
Habitat Regulations Assessment		
51	The Planning Inspectorate will be required to carry out an Appropriate Assessment and the applicant will need to provide the information to enable the work to be undertaken	The Report to Inform and Appropriate Assessment [APP-026] addresses this requirement.
Conclusion		
52	The County Council looks forward to working with the applicant and Planning Inspectorate and welcomes the opportunity to comment on matters of detail throughout the Examination. Should you require any additional information or clarification, please do not hesitate to contact me.	These comments are noted.

2.4 REP2-054 Swale Borough Council

Table 2.4a: The Applicant's Comments on Swale Borough Council's Written Representation

Ref.	Statement	Applicant's Comment
INTRODUCTION		
1	This report relates to a Nationally Significant Infrastructure Project (NSIP) which seeks direct Government approval to construct and maintain a very large solar power and battery storage facility, both of which have an electrical capacity of over 50MW. As such, each on their own is classified as an NSIP and, rather than being dealt with under normal Town and Country Planning regulations, possible approval is dealt with under powers conferred by The Planning Act 2008. This ultimately means that any approval will be by way of a Development Consent Order (DCO) issued by the Secretary of State for Business, Energy and Industrial Strategy; and this DCO may also authorise compulsory purchase of the site by the applicant. The Borough Council cannot therefore decide if approval is or is not granted, but the Council is a so-called Host Authority by virtue of the site falling mainly within this Borough, and we can submit our views on the matter to the Planning Inspectorate who are the Examining Authority making a recommendation on the project to the Secretary of State.	The Applicant agrees that the scale of the application is such that it will be determined under the NSIP process. Reference should be made to the DCO application documents which set out in detail the development for which the DCO is sought. The latest version of the draft DCO was submitted in advance of Deadline 2 [REP2-026]. An updated version of the dDCO has been submitted at Deadline 3 (document reference 3.1, revision C).
2	As a Host Authority we are involved in various stages of the process. These began with pre-application consultation by the applicant, attendance at exhibitions and information meetings, producing a review of Preliminary Environmental Information (PEIR), and submitting a report on the adequacy of the applicant's pre-application consultation (AOC). We have also been invited to submit a relevant Representation (RR) and a Local Impact Report (LIR). The main purposes of an RR is to make the Examining Authority (ExA) [The Planning Inspectorate] aware of a wish to comment on the application in order to be able take part in the actual examination process, and to let them know what matters one might wish to raise. The Council did not submit an RR for two reasons. Firstly, as a Host Authority we are known to the ExA and are automatically entitled to take part in the examination process and; Secondly, at that time (end of January 2019) the Council had made no resolution as to its possible view on the project or what issues we might wish to comment upon. We have now submitted an LIR (the deadline for this was 12th June) and this is appended to this report for Members' information.	The Applicant agrees this is a summary of the process, although notes that the environmental impact assessment scoping stage is omitted from consultation and that SBC did not provide a scoping response, or make a relevant representation. No comments were provided at scoping on the EIA methodologies proposed. SBC provided a Section 42 response to the Preliminary Environmental Information Report (PEIR) covering procedural matters on the following issues: planning framework, EIA cumulative, noise and vibration, socioeconomics and tourism, recreation, climate change, landscape, historic environment, air quality, EMI, glint and glare and contamination.
3	The LIR sets out the likely impacts of the project in a largely factual manner with reference to compliance to Local Plan policies.	ES Chapter 5 - Development Description [APP-035] provides a detailed description of the Development.

	It contains a description of the site and of the project, so those are not repeated here. However, the project is on a huge scale, many times larger than any other previous solar power project in the UK, and is in fact the first solar park in England to be of the necessary scale to be submitted as an NSIP. It is intended to be a subsidy-free producer of renewable carbon free energy which will contribute towards UK targets for reducing carbon di-oxide emissions, whilst producing enough electricity to power over 90,000 homes. The majority of the area will be covered by solar panels facing east and west rather than the traditional south facing orientation (this is almost unique in terms of solar parks so far built around the world), and there will be a large substation and battery storage facility surrounded by a high earth bank. This earth bank responds to the fact that the site is low lying land on the coast that is at risk to tidal flooding, despite existing sea defences. This flood risk also means that the solar panels themselves will be set at least 1.2m of the ground, with the tops up to 3.9m above ground level. This is higher than in most solar farms. The construction programme is expected to last over two years alone, and the project is intended to have a 40 year life span.	
4	The development site is on the coast between Faversham and Whitstable, adjoining The Swale SSSI, SPA and Ramsar site of international importance for migratory wading birds; although none of the solar panels or the substation/battery storage facility itself will be built within these areas. The area to be built on is flat, mostly poor quality agricultural land crossed by drainage ditches. Much of its significance derives from its unique landscape, its close proximity to The Swale, and use of the area and its ditches by species that use The Swale or live or hunt in the ditches, some of which is birdlife, but other protected species are present. The area is not covered by any planning designations related to wildlife apart from where the site boundaries incorporate the sea wall and an area of grazing marsh (not to be built on). However, the whole site is part of a Local Plan defined Area of High Landscape Value (Kent Level) in recognition of its locally valuable landscape quality, where views can extent much further than normal due to the flatness and lack of tall vegetation.	These comments are noted and agreed.
PROPOSAL		
5	Full details of the application can be found on the Planning Inspectorate's dedicated project website at; https://infrastructure.planninginspectorate.gov.uk/projects/south-east/cleve-hill -solar-park/ where all the application plans and papers	These comments are noted and agreed.

	can viewed. Details of the application can also be seen on the applicant's own website at; https://www.clevehillsolar.com/ although some of the documents are very large.	
6	The location is adjacent to the relatively new London Array off-shore windfarm substation, which has its own dedicated connection to the National Grid. It is intended to connect the solar power production/battery storage facility to the Grid via the existing switch house there, which is underutilised as the London Array project was never fully completed.	
7	In recognition of the proximity of the site to The Swale one major part of the project is to manage 72ha of current farmland adjacent to existing grazing marsh to provide habitat suitable for geese that currently resort to the development site as part of their use of The Swale. This is an approach which the applicant has negotiated with Natural England to mitigate impacts on birds using The Swale.	
SUMMARY INFORMATION		
8	Site Area (ha) 491.2 Area to be covered by solar panels (ha) 177.3399 Possible number of solar panels 884,388 Possible number of energy storage units 7,440 Maximum height of panels above ground level 3.9m Maximum height of substation components 12.8m	The area to be covered by solar panels refers to the maximum surface area of solar PV modules proposed, which should read 176.3399 hectares.
PLANNING CONSTRAINTS		
9	Potential Archaeological Importance Environment Agency Flood Zone 3 The Swale Site of Special Scientific Interest, Special Protection Area and Ramsar site	The Applicant notes that SBC's summary of planning constraints does not reflect the full range of issues set out in SBC's WR.
APPLICATION PROCESS		
10	Instead of a typical planning application process, the decision making on this NSIP project is made by an examination which is mainly a written process with a very limited number of one day public hearings related mainly to particular topics. The examination is spread over a six month (maximum) period after which the ExA have three months to submit a report to the Secretary of State who then has three months to approve or refuse development consent. If approved, the Council will be responsible for overseeing and approving details reserved by "Requirements" (essentially planning conditions) of the authorising DCO, and for enforcing any non-compliance. The draft "Requirements" submitted by the applicant with the application in the draft DCO are attached as an appendix to this report, and the Council can comment on these (and on any part of the draft DCO) should it so wish.	The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2 [REP2-026] in response to SBC's comments on the Application process.
11	The formal and finite six month examination	

	period began on 30th May 2019 with a procedural meeting and the Council (and everyone else) is now required to submit its Written Representation by 26th June. Others can then comment upon it, and the hearings are currently set to take place in late July (including an accompanied site visit) with the examination period closing at the end of November at the latest. The Council may wish to participate in the hearings, although one simply relates to compulsory purchase matters which we are not involved in.	
12	One important difference between this application and a normal planning application is that the critical test is conformity with National Planning Statements (NPSs) rather than with the Council's Local Plan. However, there is no NPS for solar power or battery storage technology, which leaves the question of which policies to rely on open to question.	
LOCAL REPRESENTATIONS		
13	The Council is not involved in arranging local consultations about such a project. The onus here is on the applicant to make the project known and to invite representations to the Examination. In January 2019 the ExA published 867 Relevant Representations (RRs) about the project from a variety of statutory bodies, other organisations and individuals. These included RRs from Graveney and Oare Parish Councils and Faversham Town Council, the CPRE, the RSPB, the Faversham Society, local action group GREAT, Public Health England*, Natural England*, National Grid, the Environment Agency* and Historic England.	The Consultation Report [APP-022] and Appendices [APP-023] submitted as part of the Applicant's submission provides a summary of all of the pre-application consultation activity undertaken and responses received.
14	NOTE *These three bodies have agreed Statements of Common Ground (SOCG) with the applicant, and it is likely that the Council will be asked to do so too. Such SOCGs are routine in planning appeal procedures and are intended to reduce the need for discussion over matters which are not contentious, but to make clear where differences lie	SOCGs have been agreed with Natural England [APP-256], Public Health England [AS-019] and EA [AS-017] and submitted to the examination. A draft SOCG has been discussed with SBC and it is the Applicant's intention to seek to progress this in advance of Deadline 4.
15	All RRs will now be for the ExA to consider, along with any further Written Representations submitted now. Subjects raised in these RRs include; • Need for the project • The efficiency of solar power • Habitat loss in an area of international importance • Loss of agricultural land • Flood risk across the site • Landscape impact in an area locally designated for its high landscape value • Effects on public rights of way and on walkers • Construction traffic volume and routing through the village for two years • Effect on heritage assets and archaeology • The sheer scale of the project	The Applicant provided responses to Relevant Representations in March 2019 [AS-009].

	• Loss of rural character and tranquility • Loss of valuable views and natural beauty • The fact that east/west solar panels has not been tried before on this scale, and it will almost entirely cover the site with few gaps • Contrary to the aims of tariffs on new housing which is to protect this area • Concerns over battery storage technology and eventual disposal • The height of the solar panels themselves • The impact on plans for the site to be used for Managed Retreat of the coastline which will not be possible whilst the solar park is operating • Noise and pollution • It is necessary reduce carbon dioxide emissions and tackle climate change • Preference for alternative locations for solar power including use of rooftops	
DISCUSSION		
16	The Council now has the opportunity to make comments on the merits of the application much as a Parish Council might comment on a normal planning application. I have attached as an appendix to this report a suggested representation covering what appear to be the most likely issues of concern from the Council's perspective. It is now for Members to consider whether they agree with the points being suggested, or whether they would wish to add or subtract from them. Whatever the result, the final version of the Council's comments is due with the ExA by Wednesday 26th June 2019.	The Applicant understands this is text from a Committee Report seeking input from Council Members. The Applicant disagrees with the comparison of the role of the Host Authority for an NSIP with that of a Parish Council for a Town and Country Planning Act application with the former requiring a significantly higher level of engagement and technical input in the pre-application stages of the development. The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2 [REP2-026] in response to SBC's comments on the Application process.
RECOMMENDATION		
17	Members are requested to resolve that the attached draft Written Representation be submitted to the ExA with or without amendments, on the basis that this may be debated at the forthcoming hearings (which some Members might wish to attend to clarify their views direct to the ExA), and may be the subject of written questions from the ExA.	The Applicant understands this recommendation to relate to the SBC Committee Report seeking input from Members.

Table 2.4b: The Applicant's Comments on Swale Borough Council's Written Representation

Ref.	Statement	Applicant's Comment
Planning Act 2008–Section 88 and The Infrastructure Planning (Examination Procedure) Rules 2010–Rule 6		
1	Application by Cleve Hill Solar Park Limited for an Order Granting Development Consent for the Cleve Hill Solar Park Project	The Applicant notes and agrees with this statement.
2	Further to your letter of 18 April and the Preliminary Meeting held on 30 May providing the timetable for the examination of this Nationally Significant Infrastructure Project (NSIP) as set out in Annex C to your letter, the Borough Council's Planning Committee met on Thursday 20 June to consider its	The Applicant understands that the WR provides the views of elected members of SBC. The earlier submission of the SBC LIR [REP1-005] is interpreted to more closely reflect the analysis of SBC planning and technical officers prior to input from elected members.

	substantive response to this application for a Development Consent Order. This letter comprises that response including the express views of the Planning Committee, based on the report explaining the role of that representation (copy attached) and the Local Impact Report (LIR) already submitted to you.	
3	Members have been informed not just by the report, but also by asking the CPRE and GREAT who oppose the application, as well as the applicant, to make individual presentations to them ahead of their meeting. Those presentations took place on the 4th June (CPRE and GREAT) and 6th June (the applicant) before the Planning Committee considered the application, and Members were given the opportunity to ask questions at both presentations to better understand the various issues and points of view over this controversial project.	The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2 [REP2-026] in response to SBC's comments on the Application process.
SUMMARY OF THE COUNCIL'S REPRESENTATION		
4	Swale Borough is a largely rural Borough on the north Kent coast. It has the longest coastline of any District in Kent and a high quality natural environment. It is an integral part of the "Garden of England" and played host to the first cherry orchards in England at Teynham. The area's economy is founded on agriculture but its high quality natural resources and good access to the Thames Estuary has made it well known for brick manufacture and the building of London. The Borough has a particularly varied character ranging from internationally important estuarine habitats (an SSSI, SPA and Ramsar site) to the nationally important Kent Downs Area of Outstanding Natural Beauty (AONB) with much grade 1 agricultural land and ancient woodland in between. The Borough is also rich in built heritage with and 50 conservation areas and over 1800 listed buildings.	The Applicant agrees this is a factual summary of the wider characteristics of Swale Borough but not all of the characteristics identified are relevant or are affected by the Development. Detailed assessment of the impacts on Swale Borough are provided in the ES as referenced in responses below.
5	The Council has an up to date Borough wide Local Plan adopted in July 2017 with policies designed to ensure consistency in decision making and protection for the very special environment that it has. This solar park and battery storage project is not included in that Local Plan and its scale, nature and location cut across many of the policies in that Plan. The area that the project is intended to occupy has been identified as being of locally high landscape value, and it is without doubt important for internationally important bird populations. What might at first sight appear to be poor quality and intensive monoculture land is in fact a resource that both supports the importance of the adjacent estuary for migrating birds, and is in itself home to an extensive array of wildlife due to its position and the fact that it is dissected by numerous	The Swale Local Plan underwent consultation in 2014 and was adopted in 2017 and as such predates the CHSP proposal so it would not be anticipated that the Local Plan would include provision for the CHSP. The Applicant responded to the call for sites for the new Swale Local Plan requesting an allocation is included for the Development. The ES included a comprehensive assessment of landscape and visual impacts in Chapter 7 - LVIA [APP-037] and of ecological and ornithological impacts of the Development in Chapter 7 - Ecology [APP-038] and Chapter 9 - Ornithology [APP-039]. The drainage ditches are identified as being of local importance in Table 8.6 of Chapter 8 - Ecology [APP-038].

	species rich drainage ditches.	
6	The very low lying, flat open nature of the area offers long coastal views and means that the area is subject to potential tidal flooding. This means that this project, which is not intended to foster management or flood risk across the site, is especially vulnerable to flooding and has been designed to defend against flood risk by means including artificially raising the height of the solar panels and creating a substantial earth wall around the substation and battery storage compound; features that would not be necessary if it were not for the flood risk. This is especially damaging in the context of such a flat site where long distance views at ground level are such a feature; views that will in places be entirely obscured not just by the solar panels themselves, but also by the substation bund and by planting designed to screen and obscure views of the raised solar panels. Both the solar panels and the screening intended to hide them will affect the amenities of nearby residents and the settings of nearby listed buildings and the Graveney Church conservation area.	The Applicant has undertaken a Flood Risk Assessment [APP-227], which concludes that over a 100-year period, there would be a negligible effect on flood risk as a result of the Development (see paragraph 164) and beneficial over a shorter time period (see paragraph 165). A SoCG has been agreed with the EA which confirms the acceptability of the FRA [AS-017]. Impacts on Landscape Character have been assessed in section 7.5 of ES Chapter 7 - LVIA [APP-037].
7	Intensive construction traffic over a long construction period will use unsuitable narrow country lanes, and this will be repeated, perhaps at even more intensive level, during decommissioning. These lanes have already suffered long term effects from the construction of the adjacent London Array substation despite promises to survey these roads and reinstate any damage caused during that construction.	The Applicant has engaged in consultation with KCC Highways and local residents throughout the development process and has developed an Outline CTMP [APP-245] to mitigate construction impacts. The Outline CTMP submitted at Deadline 3 (document reference 6.4.14.1, revision B) includes details of highways condition surveys undertaken, and proposed for the construction phase at section 6.13.
8	The Council understands that as an NSIP the primacy of the Development Plan is normally set aside in favour of National Policy Statements (NPSs) but that there is no such NPS for solar power or battery storage projects. As such, a decision to approve a solar power and battery storage project of this scale would be taken in a National policy vacuum which may prejudice the formulation of that policy and result in a development that is ultimately incompatible with whatever National policy guidance might yet emerge.	The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2 [REP2-026] in response to SBC's comments on the Application process.
9	Whilst the Council acknowledges the major contribution of the project to "carbon free" energy generation, the development is contrary to many adopted Local Plan policies aimed at protecting the wider special landscape, ecology and heritage of the local area; and the need for such a large solar park or battery storage facility has not been established at a National level. Accordingly, the Council considers that it would be dangerous and perverse to approve such a development at this time.	The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2 [REP2-026] in response to SBC's comments on the Application process. The Applicant disagrees with SBC's comment that the development is contrary to many Local Plan policies. Compliance with Swale local Plan Policies has been assessed in the Planning Statement [APP-254] in Appendix A. This does not identify that the development is contrary to the Local Plan policies. In light of the policy support for the Development, the Applicant disagrees that the grant of consent for the Development would be "dangerous and perverse".

WRITTEN REPRESENTATION ON BEHALF OF SWALE BOROUGH COUNCIL		
10	This is a project of national significance with big implications for issues of international, national and local importance. The potential impacts on national energy production and carbon reduction targets are acknowledged and the Council is keen to support the production of renewable energy both in new developments, and where that is the focus of a new development. The Council has granted planning permission for a number of solar energy projects and is familiar with their nature and impacts. By way of contrast, the battery storage element of the project is new and largely untested at this scale.	The Applicant welcomes SBC's acknowledgement that the Development makes a contribution to low carbon development. As the Applicant's Written Representation on NSIP Policy and Procedure [REP2-026] demonstrates, the NSIP determination process differs from the local planning application process administered by SBC. As such, the potential impacts have to be assessed against national energy targets. The project responds to a need for greater renewable energy production as set out in the Statement of Need submitted with the Application [APP-253] and its addendum [AS-008]. As of June 2019[1] there is approximately 700 MW of battery storage installed in the UK alone with projected capacity by the end of the year potentially 1.2 GW. It is not therefore considered by the Applicant to be an untested technology.
11	The Council is the guardian of a very special and diverse area. This area includes an internationally important area for wildlife including a European Special Protection Area (SPA), a Ramsar site, Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Local Nature Reserves (LNRs), an Area of Outstanding Natural Beauty (AONB) and other areas of high landscape value (AHLVs). It is also rich in built heritage with many ancient monuments, 50 conservation area and over 1,800 listed buildings. The area has a rich agricultural tradition as part of the "Garden of England" and played host to the first cherry orchards in England at Teynham in the year 1533 under the reign of King Henry VIII who, incidentally, ordered the destruction of Faversham Abbey in 1538.	The Applicant agrees that this is a description of the wider Swale Borough. It would highlight however that not all of these characteristics are affected or relevant to the assessment of the Development.
12	The Borough's coastal location (it has the longest coastline of any District in Kent) means that Faversham has an important sea-going tradition being a confederate member of the Cinque Ports and a place with strong trading links and a rich history. The low lying position of Faversham means that it is at risk from flooding and from rising sea levels. Part of the long term plan for the coast here is managed realignment, including long term release of the current application site's sea defences, with the area being returned to habitats which will increase biodiversity. Delaying this by constructing the solar park and battery storage facility represents a delay to biodiversity enhancement and loss of carbon storage opportunity in the meantime.	The long-term management of the coast is the subject of the MEASS, which is awaiting final publication by the Environment Agency. The Applicant has engaged with the EA in detailed discussion since September 2017 including responding to the EA's consultation on the MEASS. As a result, the Applicant and the EA have taken each other's positions into account. The MEASS is expected to include solutions under either scenario of the Development going ahead or not, and the Applicant is working to ensure that the DCO for the project allows for managed realignment to take place on the site if the EA are able to demonstrate that it can be delivered in Epoch 2 (2039 to 2069). To this end, the draft DCO submitted at Deadline 3 includes an updated Requirement 16 which requires the Development to be decommissioned following 40 years of operation if the

[1] https://www.solarpowerportal.co.uk/blogs/uk_battery_storage_capacity_could_reach_70_growth_in_2019_as_business_model

		EA can demonstrate that managed realignment can be delivered. The carbon sequestration potential of managed realignment on the Development site has been considered in a WR submitted at Deadline 3 (see document reference 11.4.5).
13	The development proposed is not an ordinary solar energy project. Its scale is far in excess of any such project previously tried in the UK. The east west orientation of the solar panels themselves means that the traditional shade gaps between south-facing rows of panels will be absent. The flood risk across the site means that both the panels and the substation/battery storage area need to be designed to withstand a possible beach of the sea defences.	Solar arrays in the UK and around the world have been developed to a wide range of parameters to take into account site characteristics (e.g., slope, aspect), latitude, desired generation characteristics and commercial responses to government subsidy regimes. This results in differences in orientation, inter-array spacing, and angle of tilt and height of panels above ground level. Every site is unique in terms of where it may be viewed from and it is clear that a west facing array observed by a viewer looking east will look very similar to a south facing array observed by a viewer looking north. Notwithstanding its specific parameters, the Development proposed is ground-mounted solar PV development, for which there is a great deal of precedent in the UK and globally. There are 2.5 m spacing gaps between the low points of array tables, secured in the Outline Design Principles (Deadline 3 document reference 7.1, revision B). The electrical compound has been designed to be resistant to a breach of the existing flood defences. The remainder of the Development has been designed to be resilient to an overtopping of the existing flood defences. The Applicant has undertaken a Flood Risk Assessment [APP-227], which concludes that over a 100-year period, there would be a negligible effect on flood risk as a result of the Development (see paragraph 164) and beneficial over a shorter time period (see paragraph 165). A SoCG has been agreed with the EA which confirms the acceptability of the FRA [AS-017].
14	Nor is the development site a typical area of arable land. It adjoins The Swale SPA/Ramsar site/SSSI, is crossed by species rich ditches, and is recognised as of local landscape significance due to its lack of contours and resultant extensive unbroken views. It is also not an area blessed by good road access, but it is crossed and bounded by footpaths which allow access to the sorts of views and solitude that are rare and unique in this busy part of southeast England. All of these factors bring challenges often absent on a typical solar energy site developed on agricultural land.	The ecology assessment undertaken has not categorised the ditches as "species-rich". The ditches within the Development site are typical of those found within arable land across the UK. The road access to the Development was utilised to build the existing Cleve Hill Substation between 2009 and 2011. There is one existing public right of way which crosses the Development site between solar panels (ZR485). Impacts on this path are fully assessed in the ES Chapter 13 – Socio-economics, Tourism, Recreation and Land Use [APP-043]. Coastal access and permissive paths bordering the site also form part of the assessment in section 13.5.1.4 and in a wider context within the chapter. Solar arrays in the UK and around the world have been developed to a wide range of parameters to take into account site characteristics (e.g., slope, aspect, hydrology, land use, ecology, ornithology, cultural heritage), latitude, desired generation characteristics and commercial responses to government subsidy regimes. None of the issues addressed at the Development are unusual for a solar development on agricultural land in the UK.

15	The development as proposed will cover a vast area of land in solar panels, broken up only where existing ditches and a line of National Grid pylons force these breaks. The effect on the undeveloped and remote character of the area will be dramatic, and will significantly alter the landscape and functioning of the area. The development area will be saturated with solar panels, and no opportunity has been taken to leave occasional substantial open areas within the solar park to allow views from footpaths or meaningful wildlife corridors to exist. There will in fact be almost no benefits to the local area save for the possible increased biodiversity arising from less intensive agricultural practices on an area to be managed for wildlife, and where ditch edges are not intensively farmed.	The Applicant disagrees with this description. ES Chapter 5 - Development Description [APP-035] provides a more detailed description of the Development. Approximately 45% of the land currently arable is proposed to be utilised for solar panels. The management of the remaining 55% of the arable land is the subject of the outline LBMP [APP-203]. ES Chapter 8 - Ecology [APP-038] and Chapter 9 - Ornithology [APP-039] provide detailed assessments of the impacts of the Development. The Habitat Management Steering Group (HMSG) established in early 2018 and including representation from Natural England, Kent Wildlife Trust, the Environment Agency and the Royal Society for the Protection of Birds has discussed the impacts of the Development, and the Outline LBMP [APP-203] was developed and agreed following consultation through this forum. The Outline LBMP sets out the detail of the ecological mitigation, maintenance and enhancement measures proposed as part of the Development. The design of the solar park has evolved to increase separations between public rights of way and the Development infrastructure, particularly along ZR 485. A full assessment of the benefits of the development is provided in the Applicant's Statement of Need [APP-253] and its addendum [AS-008] and in ES Chapter 13 - Socio-economics, Tourism, Recreation and Land Use [APP-043]. The benefits of renewable energy generation and reduced carbon emissions apply to the local area in the same way that they do to the whole country.
16	Local residents and heritage assets in the form of the Graveney Church conservation area and grade 1 and II listed buildings will have their aspects, settings and amenities compromised. Users of footpaths will have their views changed beyond recognition, and in an effort to reduce views of solar panels, new tree planting will wipe out long range views across the site both from private properties and public footpaths, dramatically adversely impacting upon the public's perception and enjoyment of the character of the place.	The Applicant has undertaken a full assessment of the impacts of the development in the ES which addresses cultural heritage impacts in ES Chapter 11 - Cultural Heritage and Archaeology [APP-041] and in the Heritage Statement [APP-257]. Impacts on public footpaths are assessed in Chapter 13 - Socio-economics, Tourism, Recreation and Land Use [APP-043]. The landscaping scheme set out in the Outline LBMP [APP-203] was developed in consultation with local residents. The design of the Development was also adjusted following consultation to set back the areas of the Development in closest proximity to properties at Nagden and Warm House. SBC were updated regularly throughout the pre-application phase on the evolving project design, and comments made by SBC in meetings and during Section 42 consultation in relation to changes to the design, such as the removal of panels from the slopes of Cleve Hill and Graveney Hill, were taken into account through adjustments between the publication of the PEIR and the finalisation of the Application layout design.
17	The Council understands that as an NSIP, the views of the Council and local residents and	The Applicant strongly disagrees with SBC's interpretation of the Planning Act 2008 and application of policy in the NSIP

	other groups will be taken into account. However, locally derived policy is normally overridden by National Policy Statements (NPSs). There is no such NPS for solar power or battery storage projects. Accordingly, local policy must be given greater weight than might otherwise be the case in an NSIP examination, and the Council has a Local Plan adopted within the last two years which contains many policies that the project is at odds with. To override such policies for a project of such exceptional scale without any current higher status guidance is likely to lead to unforeseen consequences and a free for all in solar energy or battery storage projects, as few sites will have the same range of environmental constraints that are found here. This is not the intention of the NSIP process, which is founded on following NPS guidance, not on leading and potentially prejudicing formulation of such guidance. The Council considers this to a fundamental objection to this proposal	process. The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2 [REP2-026] in response to SBC's comments on the Application process. The Applicant disagrees with SBC's comment that the development is contrary to many Local Plan policies. Compliance with Swale local Plan Policies has been assessed in the Planning Statement [APP-254] in Appendix A, this does not identify that the development is contrary to the Local Plan policies. The Applicant notes that the environmental issues relevant to the Development site are not unique. The Applicant considers that the areas cited in the WR such as flood risk, landscape, ecology, ornithology and cultural heritage are issues commonly encountered and assessed for solar PV projects.
18	Smaller solar power installations have been developed locally and these sit within the wider landscape in a way which allows their more limited impacts to be mitigated without destroying the very character of their surroundings. Here, the exceptionally open nature of the landscape leaves no alternative than to try to hide the development by means which cut across its long distance uninterrupted views. The percentage ground cover of the total site area is artificially lowered by the inclusion of sea walls and a habitat creation area, but within the area to be developed the east-west orientated panels will be set very close together, they will be installed higher up than normal, and they will have more of the appearance of vast buildings than rows of solar panels. The battery storage element of the project may have many unknown impacts, and to experiment with such a sensitive location on such a scale is unacceptable to the Council.	Whilst it is acknowledged that smaller solar schemes can often be accommodated in the landscape, it is not always the case and 35 separate 10 MWp schemes would be needed to provide equivalent generation capacity to the Development. Further consideration of alternative low carbon energy solutions are set out in Chapter 4 - Site Selection, Consideration of Alternatives and Development Design [APP-34]. Indeed, the construction of multiple small-scale solar farms in more sensitive and visible locations could have a potentially greater impact on a wider number of locations within the Swale Borough Council area. CHSP has been designed to minimise the impact across a wider area by selecting a site that can accommodate the scale of development whilst mitigating effects wherever possible. Ground cover for the site has not been artificially calculated and is based on the percentage of cover within the area of current arable land-use. This shows site coverage by solar panels is approximately 45%. The development is for PV solar panels which as the elevation drawings [APP-053] demonstrate have no resemblance to "vast buildings". The Applicant disagrees with this statement by SBC. It is also recognised that storage is vital to the further deployment of renewable energy to ensure fluctuating demand is managed across the energy system. As of June 2019[2], there is approximately 700 MW of battery storage installed in the UK with projected capacity by the end of the year potentially 1.2 GW. It is not therefore considered by the Applicant to be an untested technology. It is unclear what is meant by "unknown impacts" however, the Council should be confident that all efforts will be made to minimise the visual

2 https://www.solarpowerportal.co.uk/blogs/uk_battery_storage_capacity_could_reach_70_growth_in_2019_as_business_model

		impact of the battery storage elements and also to ensure relevant safety standards are upheld. A written representation on Electrical Safety has been submitted at Deadline 3 (document refence 11.4.1).
19	The flood risk across the site makes it fundamentally unsuitable for a minimal impact development. Both the defences around the substation and the artificially high positioning of the solar panels are direct responses to the flood risk, yet they exaggerate the landscape impact of the development. The erection of a high rectilinear earth bund around the substation/battery storage area set forward of Cleve Hill will appear totally alien to the current distinctive transition between undulating farmland and the flat former marshland landscape. The unbroken sweeping view now possible across the northern side of Cleve Hill from Nagden to Seasalter will be broken into with a high bund and structures up to 12.8m tall and, even where the substation is not in the view, the solar panels from at least 3.3m and up to 3.9m high will remove any views unless one is already on the sea wall or higher land.	The Applicant has undertaken a Flood Risk Assessment [APP-227], which concludes that over a 100 year period, there would be a negligible effect on flood risk as a result of the Development (see paragraph 164) and beneficial over a shorter time period (see paragraph 165). A SoCG has been agreed with the EA which confirms the acceptability of the FRA [AS-017].
20	The Council's concerns include the following main areas which are discussed below: • Landscape impact • Biodiversity impact • Heritage impact • Amenity impact • Traffic impact, and • Issues arising from the draft Development Consent Order	SBC made no response at scoping stage and therefore made no comments on the EIA methodologies proposed. SBC provided a Section 42 response to the Preliminary Environmental Information Report (PEIR) covering procedural matters on the following issues: planning framework, EIA cumulative, noise and vibration, socioeconomics and tourism, recreation, climate change, landscape, historic environment, air quality, EMI, glint and glare and contamination. The Written Representation now raises impacts in respect of biodiversity impact, heritage impact, amenity impact and traffic impact which have not been raised previously by SBC during the extensive pre-application consultation process. Those impacts have been considered by the Applicant and assessed in the ES and RIAA. The Applicant's responses below identify where relevant evidence can be found in the suite of DCO submission documents.
Landscape Impact		
21	The development covers an extensive area of land with a repetitive pattern of solar panels tilted west and east, boundary fencing, and CCTV cameras and lighting on poles. New hedgerows and woodland to the south of the development, woodland on the bund around the electrical compound, shrubs to the landside of the seawall, sheep grazing below the solar panels, retention of the biodiverse ditches, and retention of the Public Rights of Way are also parts of the proposal. The development site falls within the National Character Area 81: Greater Thames Estuary yet it does not fully meet the definition of the landscape type as "tidal salt marsh and reclaimed grazing marsh". As highlighted by	The Applicant has taken this into account in the preparation of ES Chapter 7 - LVIA [APP-037].

	the Swale Landscape Character and Biodiversity Appraisal SPD the land is currently under cereal production and is therefore not currently technically marshland, and could be described as poor condition with regards its lack of representation of the landscape type. In addition, existing pylons across the development site are a feature of all of the Swale Marshlands Character Area.	
22	However, the landscape of Graveney Marshes retains the features of a marshland described as flat, open, remote and expansive character in keeping with the rest of the marshlands along the Swale. With regards the development itself, the solar panels are to be set at a height below the seawall and so, apart from along the Public Right of Way internal to the development, the sense of openness and expansiveness is retained although this is broken by the electrical storage facility bund and tree planting. The new industrial style landscape over such an extensive area will diminish the sense of remoteness and isolation. The introduction of the bund and tree planting around the battery storage area, as well as scrub planting behind the seawall at the junction with the Public Right of Way and new footpath is also contrary to the vegetation typologies in the Marshland Landscape Character Area as it will break up the open expansive character.	The SBC comments here generalise the impacts across a wide area and do not acknowledge the detail within the assessment undertaken within section 7.5 of ES Chapter 7 - LVIA [APP-037], which predicts a significant effect for the area of the site itself within the Area of High Landscape Value. However, the effect on the areas of the Area of High Landscape Value that lie outside the site itself is not assessed as significant.
23	Existing trees and hedgerows of the adjacent Fruit Belts Landscape Areas create a more intimate and introspective landscape. The new tree belts in the south of the site assist with localised screening and are in keeping with the spirit of the Fruit Belts Character Area featuring shelter tree planting. However, hedgerows are not a feature of Marshland Landscape Character Areas and proposed hedgerows would be incongruous, so they should only be located close to the Fruit Belt's Character Area and not within the Marshland Character Area.	ES Chapter 7 - LVIA [APP-037] assesses the landscape impacts of the Development and has taken into account the characteristics identified. The landscaping scheme set out in the Outline LBMP [APP-203] was developed in consultation with local residents. The design of the Development was also adjusted to remove solar PV modules from sections of the Development in closest proximity to properties at Nagden and Warm House.
24	In terms of visual impact, the key receptors are identified as residents of the immediate locality, users of the Public Rights of Way including the Saxon Shore Way, and users of middistant roads. The Saxon Shore Way is also due to become part of the English Coast Path. It is observable that some residents will have views of the development from their property, some more than others. Screen planting is proposed in relevant locations and as the dwellings are located on the border of the Fruit Belts Character Area such planting is in keeping. However, residents, particularly at Nagden and Warm House, who enjoy the distant open views of the Marshland Character Area could lose the view of the 'open sky' expansive character which is blocked not only by the solar panels but also by tree planting aimed to screen the	The landscaping scheme set out in the Outline LBMP [APP-203] was developed in consultation with local residents. The design of the Development was also adjusted to remove solar PV modules from the design for sections of the Development in closest proximity to properties at Nagden and Warm House. SBC was updated regularly throughout the pre-application phase on the evolving project design, and comments made by SBC in meetings and during Section 42 consultation in relation to changes to the design, such as the removal of panels from the slopes of Cleve Hill and Graveney Hill, were taken into account through adjustments between PEIR and the Application layout design.

	development. The users of the Public Right of Way passing through the site will be below the panels and will have distant views replaced by views through the panel stilts and structure. Users of the Public Rights of Way beyond the development will have various views of the development as illustrated in the applicant's photomontages.	
25	The predominant medium distant views of the development are from the Isle of Sheppey and specifically the elevated Isle of Harty, as well as from Victory Wood to the south east and from Oare in the west. The Development will be visible from these locations, albeit in the distance. The number of receptors is limited with the highest number of receptors likely at Church Road, Oare.	ES Chapter 7 - LVIA [APP-037] assesses the landscape impacts of the Development and has taken into account the characteristics identified.
26	Apart from tree belt and some hedgerow planting to the immediate south of the development, any such planting within the site or to the north is not something that the Council would wish to see, as it is contrary to the open flat landscape character.	The landscaping scheme set out in the Outline LBMP [APP-203] was developed in consultation with local residents. The design of the Development was also adjusted to remove from the proposal large sections of the Development in closest proximity to properties at Nagden and Warm House. SBC was updated regularly throughout the pre-application phase on the evolving project design, and comments made by SBC in meetings and during Section 42 consultation in relation to changes to the design, such as the removal of panels from the slopes of Cleve Hill and Graveney Hill, were taken into account through adjustments between PEIR and the Application layout design. Concerns regarding the introduction of landscape mitigation were not raised by SBC during consultation.
27	The Council is extremely concerned that the project does not adequately recognise the sensitivity of the landscape here, or seek to minimise its impact in two particular respects, both of which were drawn to the applicant's attention as long ago as July 2018, without resulting in any changes to the scheme. (i) Firstly, the Council is concerned about the siting and shape of the substation and battery storage compound. This facility is sited on flat low lying land vulnerable to flooding, which requires a very substantial earth bund to be constructed around it. This bund is intrusive in its own right, but its position and configuration pay no attention to the site's existing features. The site is adjacent to higher ground used by the London Array substation, which avoided intruding into the long uninterrupted views across the flat landscape. To have adopted the same strategy now would have avoided the need for the bund in the first place, and the Council questions why the same approach is not being proposed now. Furthermore, the layout of the substation's earth bund follows no existing features and does not reinforce existing boundaries or ditch alignments. It simply imposes its functional requirements without regards to its situation.	The Applicant disagrees with this statement. As set out in the Consultation report [APP-022], the Applicant undertook extensive consultation during the pre-application stage of the application including with SBC. SBC was updated regularly throughout the pre-application phase on the evolving project design, and comments made by SBC in meetings and during Section 42 consultation in relation to changes to the design, such as the removal of panels from the slopes of Cleve Hill and Graveney Hill, and incorporating the London Array access track were taken into account through adjustments between PEIR and the Application layout design. In the course of pre-application consultation SBC raised 3 concerns. • Solar panels removed from Cleve Hill itself within the site – This was taken on Board by the Applicant and Panels were removed from the design for this location. • Shape of the substation and battery storage compound. This was discussed with SBC at the Section 42 response stage of the process and a full written explanation was provided in PEIR responses explaining why the requested change was not possible. Similarly, the issue was discussed with SBC at the PPA meetings outlined in the Consultation Report [APP-022]. Whilst the Applicant

	(ii) This is particularly disappointing given the fact that the battery storage facility which makes up most of this area is to be comprised of small individual units. Unlike a large single building which may have fixed proportions and a minimum footprint, these battery storage units do not appear to need to be positioned in solid regularly shaped groups but could be disaggregated and re-aligned to fit almost any shape of compound. The compound could then be re-planned to have greater regard to the natural features, contours and views available across the site. The Council requested consideration of re-positioning the substation compound to reduce its effect on the views across the landscape, with particular reference to it being sited behind Cleve Hill where it would not intrude into the long views across the landscape to the north. (iii) The applicant's limited response to this suggestion (essentially that at paragraph 4.4.2.3 of the Environmental Statement) is confined to suggesting that they wish to avoid the substation being seen from All Saints Church and the Graveney Church conservation area; and wishing it to be seen alongside the London Array substation, not separately. This response does not explain why the unchanged substation layout ignores the natural features of the landscape. Nor does it explain why it is not set on Cleve Hill itself alongside the London Array substation where it would not intrude into views across the flat landscape, but where it will blur the distinction between Cleve Hill and its marshland surroundings, and in a location where a flood defence bund would not be required. (iv) Secondly, the London Array substation is served by a very high standard new road from Seasalter Road, which loops right around the southern edge of that substation and leads directly to the location of the proposed new substation and battery storage compound. However, initial solar park plans showed the creation of a new spur route to the new substation starting part way along the London Array access road and running around the northern side of the London Array substation before joining back up with the London Array road before the new substation. This route does not go anywhere that the London Array road does not, and is mainly on the northern side of the ditch marking the southern edge of the flat land north of Cleve Hill. The Council therefore asked why it was felt at all necessary to propose the so-called "Northern Access Option" (NAO), which involves replacing the gravelled surface of an informal	acknowledges the change was not made it is misleading to suggest the request has been overlooked as is implied by the text here. The change has been considered and detailed reasoning provided in that screening is required for cultural heritage reasons as to why the change cannot be accommodated. A full appraisal of the need for the bund and the landscape impact of its inclusion are set out in the Applicant's Flood Risk Assessment [APP-227) and in Chapter 7 - LVIA [APP-037]. • London Array. The requested dual use of the existing London Array access track has been included within the application as a direct result of the comments raised by SBC. The Applicant does not understand the reference to this change not being made. It is usual at this stage of a DCO application to have several access options as there are different consultees and Landowners with different requirements to be balanced. The Applicant has acknowledged SBC's views on this matter and has included the track within the DCO application which is a positive response to the requested change.

	farm track with a new tarmac surface. This involves apparently unnecessary permanent work within the open landscape, when the London Array substation managed to avoid any incursions into that area. (v) This work still remains part of the proposal, and the applicant's only response to the Council's concern is merely to add in the option of also using the existing London Array road for access to the site. This does not come with any preference or priority for its use, or any restriction on development of the NAO in addition to use of the existing London Array road. The NAO is still shown as works for which the draft DCO provides for at Schedule 2 (item 3). The Environmental Statement is clear that only one of these routes is necessary, but both are still included in the proposals (see Figure 5.10). The Council sees no justification whatsoever for the works to the NAO and seeks that this be removed from any DCO that might be granted.	
Biodiversity Impact		
28	The site's position adjoining the SPA makes it special. It may be a different habitat from that found in the SPA but it is linked to it. This beneficial linkage is not guaranteed as there are no legal restrictions on what form of agriculture can be practised on the site. Potentially, any change in the nature of agriculture across the development site could upset or drive away species that rely on the current regime but, in practice, the sorts of agriculture possible here have not yet done so. Natural England has been involved in negotiations with the applicant to mitigate direct impacts on species that use the site as hinterland to the SPA, and this has resulted in the application including an area of habitat reversion by way of management of currently arable land in a manner favourable to species resorting to the SPA. This may lead to some guarantee of a refuge for such species, which will be a benefit of the scheme. However, that measure will not mitigate loss of the vast area of open fields to other wildlife, such as ground nesting birds which shelter amongst growing crops. These birds are not likely to nest on bare ground under continuous solar panels.	The Applicant would highlight that in its LIR SBC at Paragraph 2.1 acknowledge they do not have expertise in Biodiversity and defer matters to KCC and Natural England. The LIR states that where SBC's opinion is in conflict with that of the deferred consultee the consultee opinion should be given greater weight. A full assessment of the scheme's impacts on species currently using the site, together with ground nesting birds and the biodiversity gains that will be achieved as result of the development has been undertaken. ES Chapter 8 - Ecology [APP-038] and Chapter 9 - Ornithology [APP-039] provide detailed assessments of the impacts of the Development. The HMSG established in early 2018 and including representation from Natural England, Kent Wildlife Trust, the Environment Agency and the Royal Society for the Protection of Birds has discussed the impacts of the Development, and the Outline LBMP [APP-203] was developed and agreed following consultation through this forum. The Outline LBMP sets out the detail of the ecological mitigation, maintenance and enhancement measures proposed as part of the Development. Statements of Common Ground have been agreed with Natural England [APP-256] and progressed with Kent Wildlife Trust (see Deadline 3 submission document reference 6.2.2), whilst RSPB has stated that it is not able to commit the required resources to reaching agreement on a Statement of Common Ground.
29	The solar panels will not straddle the ditches crossing the site in which various species live. However, it is not clear to the Council what the likely impact will be on the activities of birds of prey which hunt along the ditches. Currently, it appears that these birds traverse the entire site and they may then search out the wildlife rich ditches. These ditches will not be as visible when tall solar panels cover much of the area in between, and their surroundings will change, becoming narrow	

	corridors between alien glass and metal structures, potentially disorientating and driving away such species. The effect of almost continuous solar panels is likely to be far less attractive as a wildlife corridor than the current intervening seasonally changing cropping on open agricultural land, and it is not clear how this will affect the biodiversity of the site. Whilst it does seem likely that the actual ditch edges will be less disturbed than they might be now, the areas between the ditches will be far less valuable, and the overall habitat will be extremely fragmented and less cohesive. This is of concern to the Council, and contrary to Local Plan policy DM 28 which is aimed at preserving and, where possible, enhancing such biodiversity.	
30	The solar panels will be sited east-west with almost no gaps between them within their blocks. This will remove the potential for sheep to graze between panels, as might be seen in a traditional south facing solar array. It will also mean that there are far fewer opportunities for birds to nest across the site other than on the perimeters of blocks. No opportunity has been taken to leave significant gaps between blocks of panels to create opportunities for sheep grazing or wildlife corridors, and the only gaps are those forced on the applicant by ditches, pylons or public rights of way (including the proposed permissive path). Another way to develop the site might have been to set panels out in a less intensive manner allowing for breathing space, grazing and wildlife to occupy occasional open areas of significant size. This would also lessen the monotony and landscape impact, as the solar panels might then more be seen to sit within the landscape rather than consume it. This current layout is an arrangement that the Council considers to have been poorly considered and should not be permitted.	The gaps between the low points of parallel arrays will be a minimum of 2.5 m wide. This parameter is secured in Table 5.1 of the Outline Design Principles (Deadline 3 document reference 7.1, revision B). Solar panels themselves will cover less than half of the land currently farmed as arable. ES Chapter 8 - Ecology [APP-038] and Chapter 9 - Ornithology [APP-039] provide detailed assessments of the impacts of the Development on wildlife. The Applicant has prepared Biodiversity Metric Calculations which have been submitted at Deadline 2 [REP2-045] and predict an overall net gain in biodiversity as a result of the habitat changes proposed as part of the Development. The Applicant disagrees with the suggestion that the layout is poorly considered. The proposed layout is based upon extensive technical assessment and pre-application consultation including consultation and input by SBC over an 18 month period.
Heritage Impact		
31	There are three conservation areas, one grade 1 and 10 grade II listed buildings within 1km of the development site. None of these will be directly affected by the works proposed, but from some there are clear views across the site which forms part of their setting. The flat open landscape presents a particular setting to these heritage assets which links them to the coastal location and speaks of their reason for being. The proposed solar panels, and the proposed planting intended to screen them from these assets will change these settings. Local Plan policies CP 8, DM 32 and DM 33 seek to preserve or enhance these settings, in line with the aims of national policy. Whether this harm is substantial or less than substantial is a matter that can be discussed, but in either	A full assessment of the heritage and archaeological impacts of the development is provided in ES Chapter 11 - Cultural Heritage and Archaeology [APP-041] and in the Heritage Statement [APP-257]. A further Written Representation on Heritage Policy has been submitted by the Applicant [AS-027] which sets out how the impacts on heritage features should be assessed for an NSIP project and the balancing effect that should be applied. The Applicant disagrees with the Council's stance on the absence of relevant National Policy. The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2 [REP2-026] in response to SBC's comments on the Application process.

	case it is best avoided. If harm cannot be avoided, development that will lead to substantial harm should not be permitted other than in exceptional circumstances. Development giving rise to less than substantial harm should be weighed against the public benefits of the proposals. Thus, the question of the benefits of the scheme arise, and the Council is not in a position to assess that. That is a national question, but there is no NPS regarding solar power or battery storage technology which provides guidance on how to balance the questions of need and harm, or in what circumstances should a solar power installation be permitted when it potentially harms the setting of heritage assets.	
32	Accordingly, the Council considers that it is justified in raising concern about the acceptability of this project in terms of the effect on heritage assets that the development will give rise to.	The Applicant disagrees with SBC's position as a full assessment has been undertaken in ES Chapter 11 - Cultural Heritage and Archaeology [APP-041] and in the Heritage Statement [APP-257] and no substantial harm to any designated heritage asset has been identified. As such the development is compliant with both National and Local policy requirements.
Amenity Impact		
33	The placing of solar panels up to 3.9m tall across such a vast area will change perceptions of the area and affect its attractiveness as a place to live, work and spend time. Residents of the few houses with direct views across the site are few in number, but the impact of the development on them will be dramatic. Views from these properties currently stretch for several miles in some directions, and these views are a key part of their amenity. The sense of isolation is also important here, and this too will be adversely affected by the almost endless rows of solar panels that will dominate views. Although the closest solar panels will be 3.0m tall (rather than the 3.9m elsewhere within the development), setting back the boundaries of rows of solar panels as suggested by the applicant will do little to reduce the sense of enclosure that these properties will experience; a change that is perhaps so significant that it is a matter of public interest, not simply the loss of a private view. The additional planting proposed to screen the panels will effectively completely remove many views across the site, and the Council's concern is that the quality of a landscape, or of views across it, is not conserved by introducing incompatible development and then attempting to screen it from view by planting. Local Plan policy DM 14 aims to ensure that new developments do not give rise to harm to amenity, and that they reflect the positive characteristics and features of the site. This development does not do this, nor does it offer any amenity benefits other than those related to trying to	This response refers predominantly to residential visual amenity. A Residential Visual Amenity Assessment was undertaken as part of the Application [APP-210]. Magnitude of change is assessed in the Residential Visual Amenity Assessment was undertaken as part of the Application. Tables 5.5 and 5.6 cover Nagden and Warm House. The landscaping scheme set out in the Outline LBMP [APP-203] was developed in consultation with local residents. The design of the Development was also adjusted to remove solar PV modules from sections of the Development in closest proximity to properties at Nagden and Warm House. SBC were updated regularly throughout the pre-application phase on the evolving project design, and comments made by SBC in meetings and during Section 42 consultation in relation to changes to the design, such as the removal of panels from the slopes of Cleve Hill and Graveney Hill, were taken into account through adjustments between PEIR and the Application layout design. Compliance with Planning policy is assessed in the Planning Statement Appendix A [APP-254]. The Applicant disagrees with the Council's assessment of compliance with DM14. It is the Applicant's view that with the agreed mitigation amenity is not harmed by the development.

	minimise its impact; each of which has its own impacts.	
34	The site is crossed and bounded by public footpaths used by those seeking out the isolation and access to wildlife that these paths offer. These footpaths will not be permanently obstructed or diverted, but they may be made so unwelcoming that users decide to avoid them. Users of the Saxon Shore Way footpath will be walking directly adjacent to the development for some distance and will observe unfolding views of the electrical storage facility and the solar panels as they progress along the trail. The trail is located on top of the elevated seawall so views of the sea and the birds on the mudflats are not obscured. Car parks serving the Saxon Shore Way are at some distance from the development so 'dedicated' users are mostly impacted. The development could have significant adverse effects on the attractiveness of the area for visitors and on the local economy which the Council is seeking to promote, based on the rich natural and built heritage of the area. The effects of the development may reach far beyond its boundaries as the footpaths link to extensive coastal access paths, and the impact of the development will be to significantly reduce the amount of finite undeveloped coast left to enjoy. Moreover, as part of a continuous coastal access path, the reduction in attractiveness of the paths across and around the development site may dissuade those seeking access to the currently long unbroken stretch of undeveloped coast along The Swale, and they may choose to go elsewhere. The Council is particularly concerned with the effect on footpath ZR485 which crosses the site at ground level, and which will be entirely lined by solar panels above head height, completely removing any view other than that of the solar panels themselves. The proposal to position solar panels along the full length of this path at close range makes no attempt to minimise the effect upon this path. It ought to have been possible to leave all or most of one or other side of the path open by omitting certain blocks of solar panels, but this opportunity has not been taken and the development shows no commitment to minimise its effects on users of the path. There will be almost no views through the development from this path, just views of the development. The Council does not consider that the impact on users of footpath ZR485 has been treated with as much consideration as it could have been, and considers that this is an objection to the project.	Public Rights of Way forms part of the assessment in section 13.5.1.4 Recreation of ES Chapter 13 - Socio-economics, Tourism, Recreation and Land Use [APP-043]. The same Chapter also considers the impact on wildlife tourism. The Saxon Shore Way / England Coast Path forms part of the assessment in section 13.5.1.4. As described in Table 4.3 of ES Chapter 4 - Site Selection, Development Design and Consideration of Alternatives [APP-034], between the PEIR layout and the Application layout, areas of solar panels were removed from the proposed layout, thereby reducing the coverage of arable areas by 10%. These changes were undertaken in response to consultation responses to the PEIR including SBC's request to remove panels from the slopes of Cleve Hill and Graveney Hill (Field Y). The separation between ZR 485 and the Development infrastructure was also increased and Viewpoint 22 (e.g., [APP-171] and [APP-172]) has been included in the visualisations to demonstrate the view from this location.
Traffic impact		
35	The proposed construction access route comprises country lanes through villages, past	In its LIR SBC at Paragraph 2.1 acknowledge they do not have expertise in highway safety and defer matters to KCC as

	the village church and village primary school. It is a route designated in the Council's Local Plan as a rural lane protected by policy DM 26. This route was used by the traffic involved in constructing the London Array substation, and it was argued then that it was not suitable for the nature and amount of traffic involved. Despite local opposition, that project was approved. The LIR indicates the degree of additional traffic now predicted compared to that experienced when the London Array substation was constructed. The amount of traffic now predicted over a similar period is now far higher than then, and this will be repeated on decommissioning. The Council believes that arguments against use of the same construction access route now apply with greater weight now.	the Highway Authority. The LIR states that where SBC's opinion is in conflict with that of Kent then the Kent opinion should be given greater weight. It should be noted that SBC sought to oppose the development of the London Array substation and traffic impacts were one of their grounds for planning refusal. However, the decision to refuse the application was overturned on appeal and traffic impacts and the use of the local road network were found to be acceptable. The Applicant has engaged in consultation with KCC Highways and local residents throughout the development process and has developed an Outline CTMP [APP-245] to mitigate construction impacts. An updated version of this document has been submitted at Deadline 3. KCC is satisfied that the vehicle movements associated with the construction, operation and decommissioning of the proposed Solar Park can be accommodated on the local highway network with the appropriate mitigation in place.
36	The Council also believes that this amount of traffic running for at least 12 hours every week day (and every Saturday morning) for two years, plus traffic associated with and running before and after the extended start up and close down periods (at least one hour each end of each working day) will have a very significant adverse effect on residents living along the route, and on users of the road. These users include walkers, children crossing the road between Graveney Primary School and its playing field on the opposite side of the road, cyclists in increasing numbers and drivers, all of whom are likely at the very least to be inconvenienced by such a high volume of HGV and other commercial traffic over such extended hours, over such a long period. The suggested Construction Traffic Management Plan lacks detail and talks generally about the possibility of lorries waiting in lay-bys on the A299, but not specifically about measures to prevent lorries meeting on the route. It is highly likely that this amount and nature of expected construction traffic on such a poor road will lead to safety being compromised.	The Applicant has engaged in consultation with KCC Highways and local residents throughout the development process and has developed an Outline CTMP [APP-245] to mitigate construction impacts. An updated version of this document has been submitted at Deadline 3.
37	The construction route has very few pavements or streetlights, and in many places two HGVs or even an HGV and a car find difficulty passing. The road surface is very poor in places and the extent of repairs the applicant will be prepared to fund prior to the start of construction is unclear. Whatever the extent of these works, it is likely that the road will deteriorate throughout the construction period even if an undertaking is given to re-instate damage after construction ends. The London Array project sought to secure mitigation and reinstatement by means of a legal agreement with KCC covering the	The Applicant has engaged in consultation with KCC Highways and local residents throughout the development process and has developed an Outline CTMP [APP-245] to mitigate construction impacts. An updated version of this document has been submitted at Deadline 3. Discussions in respect of the CTMP remain ongoing with KCC. A road condition survey has been undertaken to inform the CTMP, and further surveys are proposed before, during and after construction. The road will be made suitable prior to commencement of construction and restored to that standard post-construction. The Applicant notes SBC's comments on the London Array

	following requirements; • To provide a Traffic Marshall, pedestrian barrier and a school crossing facility at Graveney Primary School • To enhance road signage and improve the footway near to Graveney Bridge • To reimburse KCC for any highway damage, and • To provide a car park for Graveney School	Scheme which was opposed by the Council. Their objection to that development included highway grounds so did not support the mitigation proposals highlighted.
38	These measures showed a clear commitment by the developer to address highway safety concerns and to recognise the impact of traffic on the village roads. The Council considers that similar or further highway safety and repair arrangements should be put in place now, and it asks for safeguards to be secured to avoid the currently poor road surfaces being further broken up during construction, and to ensure that repairs are done afterwards.	
The Development Consent Order itself		
39	The Council's concerns here fall into two parts; • The obligations being placed upon the Council • The lack of clarity in the Requirements	The Applicant notes this comment.
40	The draft DCO states at paragraph 6.7 of the Explanatory Memorandum that (as a departure from the model provisions) the DCO Requirements oblige the Council to consult various bodies on submissions requiring the Council's approval, rather than it being the applicant's responsibility. It is not clear why this burden should fall on the Council as this often results in the Council going back and forth between applicants and specialist consultees in a time consuming way. Nor is it clear why the DCO should prescribe who the Council is required to consult. The Council would prefer that the obligation to consult any named relevant body should fall on the applicant. It is the Council's preference that the applicant should be required to carry out consultation before submitting a request for approval to the Council, and only after reaching agreement with the relevant consultee, a copy of which shall be included with the submission. The consultee should be asked to confirm their position independently to the Council.	The Infrastructure Planning (Model Provisions) (England and Wales) Order 2009 (the "Model Provisions") was revoked by the Localism Act 2011. Nonetheless, those Model Provisions are still considered useful guidance, where relevant, when drafting terms of a DCO. The Model Provisions prescribed that details needing approval pursuant to the Requirements of a DCO, would be determined by the Infrastructure Planning Commission ("IPC"), after consultation with the "relevant planning authority". The IPC was abolished by the Localism Act 2011 and so cannot provide that function. Therefore, since 2011 the Requirements of most DCOs have been drafted such that the relevant planning authority is the determining body onshore (the MMO being the determining body offshore). This is appropriate because it is the relevant planning authority that is responsible for enforcement under Part 8 of the Planning Act 2008 (the Act"). This is the "departure from the model provisions" referred to in the Explanatory Memorandum and, as a matter of law, it is a necessary one. It should not be controversial. In respect of this application, as the majority of the site falls within the jurisdiction of SBC it is the relevant planning authority for the purposes of the Act. Therefore, under the Act it is the responsibility of SBC to manage and determine applications made to discharge the Requirements of the dDCO. The Examining Authority ("ExA") will be aware that there are many examples of made DCOs that: (a) name the relevant planning authority as the determining body for Requirements; (b) prescribe appropriate consultees; and (c) prescribe that

		the relevant planning authority should consult those consultees before determining an application. It is the experience of those advising the Applicant that it is very typical during the examination of DCO applications for particular stakeholders, such as SNCBs, to require they be named consultees in the terms of Requirements in order to ensure that their views will be considered. The ExA will, no doubt, be familiar with this too. The dDCO in this application draws upon those previously made DCOs and experience to arrive at the commonly accepted position that the relevant planning authority should determine applications to discharge Requirements after having consulted with prescribed consultees. It should be noted that the relevant planning authority is not limited to those consultees and may, at its discretion, consult any other parties whom it believes could provide evidence or expert opinion relevant to the determination of a Requirement. In practice, the Applicant would consult with the consultees prescribed in a Requirement of the dDCO before submitting its application in order to ensure appropriate measures are captured and to improve the prospects of the submitted details achieving approval. This practice helps to reduce the burden on all parties after the application has been submitted. It would not be appropriate for the Applicant to be obliged to seek agreement from all consultees before submitting an application to discharge a Requirement because it may not be possible to get those parties to agree with each other, let alone with the Applicant. In those circumstances it is appropriate that the relevant planning authority (here SBC) determines the application as an independent authority, having regard to consultation responses it has received, and applying the necessary planning balance test on the evidence before it. In other words, the relevant planning authority effectively becomes the arbiter, as it does when approving planning conditions under the Town and Country Planning Act 1990.
41	Additionally, the Requirements appear to bury some of the potential controls on the development in secondary documents. In the approval of the London Array substation scheme it was felt appropriate to make it clear by straightforward planning conditions, matters such as permitted hours of construction, hours of piling, no waste burning on site and the position regarding lighting across the site. In the draft DCO these matters are potentially dealt with by further submission under Requirements, and this will not only make such matters less transparent, but it may lead to the Council coming under pressure to agree longer hours or greater impact from the development than was intended at decision stage. Notwithstanding the Council's overall concerns about the project as set out above, the Council would be grateful if a clearer approach were to be take to these important matters at decision stage.	A DCO is similar in nature to an outline planning permission in that it grants the principle of development, with the detail signed off subsequently via schemes and plans secured under the requirements. The dDCO follows the same approach to drafting as prescribed is several made DCOs, i.e. a series of "outline" documents and plans are certified by the Secretary of State as part of the DCO (if made). Those outline documents prescribe at a high level the necessary mitigation measures identified by the Applicant, through consultation and during Examination. Final versions of those outline documents will be submitted to the ExA at the end of the Examination and will reflect all amendments agreed during that Examination. Assuming the DCO is granted, certain Requirements prescribe that final or detailed documents and plans require approval and must accord with the certified outline documents. Therefore, SBC can rightly refuse to discharge an application to discharge a requirement which does not accord with the corresponding outline plan. This approach offers the flexibility to capture in those final documents new or amended mitigation measures that are deemed necessary based on the final approved design of the

		authorised development. This is typically considered advantageous by relevant planning authorities, the MMO, and those stakeholders engaged in the process. The London Array substation was granted planning permission under the Town and Country Planning Act 1990. The approach to drafting dDCO Requirements differs greatly, given that it is effectively an outline permission with details provided in schemes and plans at a later date. The Applicant is content that this reflects granted DCOs. Therefore, the approach taken to drafting Requirements does offer some flexibility, which is advantageous to all parties, but this is appropriately limited by reference to the ES. Accordingly, the Applicant disagrees that SBC would find itself under pressure to approve certain details as the parameters for those details are prescribed by the ES and would be subject to consultation with SNCBs and any other stakeholder that SBC deemed appropriate.
42	On behalf of the Council I ask that the Examining Authority take note of the Council's objection to this over large and poorly conceived development that will have a dramatic effect on local landscape, ecology, amenity and recommend that a Development Consent Order is not granted.	The Applicant disagrees with SBC's analysis. The Applicant is concerned that there is a lack of consistency between the points raised in this WR and: (a) those in the LIR; and (b) the views communicated by Council Officers throughout the extensive pre-application consultation undertaken, as reported by the Applicant in the Consultation Report [APP-022] and recently by SBC in the SBC LIR [REP1-005]. The Applicant notes that under section 105 of the PA08, greater weight should be afforded to the LIR than this WR. The Applicant will continue to discuss issues raised with SBC officers at regular meetings through the examination and will work to resolve matters of disagreement and report to the examination on an ongoing basis through the preparation of Statements of Common Ground.

2.5 REP2-061 Bryan Cave Leighton Paisner LLP on behalf of National Grid PLC

Table 2.5: The Applicant's Comments on Bryan Cave Leighton Paisner LLP on behalf of National Grid PLC Written Representation

Ref.	Statement	Applicant's Comment
Introduction		
1	National Grid Plc have made a relevant representation in this matter on 28th January 2019 in order to protect apparatus owned by National Grid Electricity Transmission PLC ("NGET"). National Grid Plc does not object in principle to the development proposed by the Promoter.	CHSPL and National Grid Electricity Transmission PLC (NGET) have entered into a Bilateral Connection Agreement (dated 5th November 2018) which confirms the Project can export up to 350 MW onto NGET's network via the Cleve Hill sub-station. The parties have also entered into a Construction Agreement (dated 5th November 2018) which confirms rights for CHSPL to undertake the sub-station connection works. Once the connection works are complete, an Interface Agreement will be entered into to confirm the rights for operational rights required for the connection to the sub-station.
2	National Grid does however, object to the Authorised Works being carried out in close proximity to their apparatus in the area unless and until suitable protective provisions and related agreements have been secured to their satisfaction, to which see further at paragraph 5. They also object to any compulsory acquisition powers for land or rights or other related powers to acquire land temporarily, override or otherwise interfere with easements or rights or stop up public or private rights of access being invoked which would affect their land interests, rights apparatus, or right to access and maintain their apparatus. This is unless and until suitable protective provisions and any necessary related amendments to the wording of the DCO have been agreed and included in the Order.	The Protective Provisions included in the dDCO ensure that NGET's apparatus is protected and that NG's land and rights cannot be compulsory acquired except by agreement. However, the Applicant and NG are engaged at agreeing appropriate amendments to the Protective Provisions to confirm the protection of NGET's infrastructure. In addition to the agreements detailed in paragraph 1, an agreed form of commercial agreement to secure the land rights required for the connection cable outside of the sub-station land (but within NG's land ownership) has been agreed between the parties, with NG confirming a draft agreement will be issued to CHSPL's advisors imminently. The Protective Provisions and the commercial agreement are expected to include provisions relating to the Applicant's exercise of its compulsory purchase powers.
3	NGET own and operate the electricity transmission network in England and Wales, with day-to-day responsibility for balancing supply and demand. NGET operate but do not own the Scottish networks. NGET is required to comply with the terms of its Electricity Transmission Licence in the delivery of its statutory responsibility. Under Section 9 of the Electricity Act 1989, NGET have a statutory duty to maintain 'an efficient, co-ordinated and economical' system of electricity transmission.	The agreements referenced in paragraph 1 have been/will be entered into in accordance with NGET's Electricity Transmission Licence. The Project does not compromise NGET's compliance with its statutory responsibilities.
NGET ASSETS		
4	National Grid Electricity Transmission PLC ("NGET") has high voltage electricity overhead transmission lines within close proximity to the authorised. Details of these	The Applicant has included these assets within the Book of Reference submitted with the dDCO [AS-007]. a) The Cleve Hill sub-station (and associated

Ref.	Statement	Applicant's Comment
	assets are as follows: (a) Cleve Hill 400Kv Electricity Sub Station (b) ZV (400kV) Overhead Line Route - Canterbury North to Kemsley, as shown on the plan at Appendix 1.	connection works) is subject to the agreements detailed in paragraph 1. b) There is no intention for the Project or rights sought in the dDCO to interfere with the Overhead Lines or the rights benefiting them.
5	The sub-station and overhead lines form an essential part of the electricity transmission network in England and Wales.	
6	In respect of all NGET infrastructure located within the DCO boundary, or in close proximity to the proposed project and associated works, NGET will require protective provisions to be put in place to ensure (i) that all NGET interests and rights including rights of access both to their sub-station and Overhead Power Lines are unaffected by the power of compulsory acquisition, grant and extinguishment of rights and temporary use powers and (ii) to ensure that appropriate protection for the retained apparatus is maintained during and after construction of the project. This includes compliance with all relevant standards on safety clearances EN 43 -8, Development near overhead lines and HSE Guidance Note GS6 Avoiding Danger from Overhead Electric Lines. In this instance the safe working under and around the overhead lines is of particular concern. Additionally NGET may require the Promoter to enter into crossing agreements in respect of crossings of their Apparatus. Where connection is made to NGET's sub-station National Grid will wish Legal.69649258.1/ADEA/2026502.000296 2 to approve the connection route within their operational sub-station boundary and ensure that no wider rights than are required to effect connection are taken which could impact on the operation of NGET's sub-station. NGET also require 24 hour access to all assets listed at 2.1 throughout the construction and operation of the Authorised Development and will liaise with the Promoter to ensure this is maintained.	As per paragraph 2, the Protective Provisions included in the dDCO provide protection for NGET's assets. In addition, the dDCO Protective Provisions confirm that access to NGET's apparatus is maintained, or an alternative means of access is provided. As discussed in response to paragraph 2, amendments to the Protective Provision included in the dDCO are being negotiated, with the Applicant seeking to address NG's specific concerns. As covered in response to paragraph 1, the connection to the sub-station and the relevant works/rights to connect to the sub-station are provided for in the signed Bilateral Connection and Construction agreements. The rights for the connection cable (outside of the sub-station curtilage) will be subject to the commercial agreement discussed in paragraph 2. The Applicant will enter into any crossing agreements as required by NG, for the protection of NGET's apparatus, although to date the necessity for crossing agreements has not been identified by NG. Access will be maintained for NGET, as required, and regulated through the agreements and Protected Provisions negotiated between the parties.
NGET - REGULATORY PROTECTION FRAMEWORK		
7	NGET have issued guidance in respect of standards and protocols for working near to Electricity Transmission equipment in the form of: Third Party Working near National Grid Electricity Transmission equipment - Technical Guidance Note 287. This document gives guidance and information to third parties working close to National Grid Electricity Transmission assets. This cross refers to statutory electrical safety clearances which are used as the basis for ENA (TA) 43-8, which must be observed to ensure safe distance is kept between exposed conductors and those working in the vicinity of electrical assets, and	The Applicant will construct and operate the Project in accordance with relevant Health and Safety Guidance, confirmed as required in bilateral agreements between the parties.

Ref.	Statement	Applicant's Comment
	Energy Network Associations Development near Overhead Lines ENA (TS) 43-8. This sets out the derivation and applicability of safe clearance distances in various circumstances including crossings of OHL and working in close proximity. Additionally HSE's guidance note 6 "Avoidance of Danger of Overhead Lines". Summarises advice to minimise risk to life/personal injury and provide guidance to those planning and engaging in construction activity in close proximity to Overhead Lines.	
8	National Grid requires specific protective provisions in place to provide for an appropriate level of control and assurance that industry standards will be complied with in connection with works to and in the vicinity of their electricity assets.	As per paragraph 2, the Applicant and NG are engaged in agreeing appropriate amendments to the Protective Provisions (included in the dDCO) to confirm the protection of NGET's infrastructure and NG's land rights in relation to the Scheduled Works in the dDCO, and to confirm works will be carried out in accordance with relevant industry requirements.
PROPERTY ISSUES		
9	NGET assert that maintaining appropriate property rights to support their assets is a fundamental safety issue. Insufficient property rights would have the following safety implications: Inability for qualified personnel to access apparatus for its maintenance, repair and inspection. Risk of strike to cable/overhead lines if development occurs within the easement zone which seeks to protect the cable/overhead lines from development. Risk of inappropriate development within the vicinity of the assets increasing the risk of damage to the asset and integrity of the system.	The Protective Provisions included in the dDCO ensure that NGET's apparatus is protected and that NGET's land and rights cannot be acquired except by agreement. The Applicant is not intending to extinguish any rights belonging to NGET. The Applicant is seeking to secure the land rights required for the connection cable (outside of the sub-station) through a commercial private treaty agreement. As set out in paragraph 2, it is anticipated the amended Protective Provisions and the commercial agreement will include provisions relating to the Applicant's exercise of its compulsory purchase powers.
PROTECTIVE PROVISIONS		
10	National Grid seeks to protect its statutory undertaking, and insists that in respect of connections and work in close proximity to their Apparatus as part of the authorised development the following procedures are complied with by the Applicant: (a) National Grid is in control of the plans, methodology and specification for works within 15 metres of any retained Apparatus; and (b) DCO works in the vicinity of NGET apparatus are not authorised or commenced unless protective provisions are in place preventing compulsory acquisition of National Grid's land or rights or the overriding or interference of the same and including appropriate surety and insurance provisions to back up the indemnity provisions to protect National Grid. Any acquisition of rights must be subject to NGET's existing interests and	The Protective Provisions included in the dDCO require the Applicant to provide NG with plans and method statements for works within 15 metres of NGET apparatus for written approval before works authorised in the DCO can commence. The Protective Provisions in the dDCO include confirmation that the Applicant will not compulsory acquire land or rights without NG's consent and provides for indemnity provisions. The Protective Provisions also provide protection for NGET's apparatus in respect of the Works in the dDCO. As per paragraph 2, the Applicant and NG are engaged in agreeing appropriate amendments to the Protective Provisions included in the dDCO to confirm the protection of NGET's infrastructure.

Ref.	Statement	Applicant's Comment
	rights and not contradict with or cut across such rights.	
11	National Grid maintain that without an agreement or qualification on the exercise of unfettered compulsory powers or connection to its apparatus the following consequences will arise: Failure to comply with industry safety standards, legal requirements and Health and Safety Executive standards create a health and safety risk; Any damage to apparatus has potentially serious hazardous consequences for individuals located in the vicinity of the pipeline/apparatus if it were to fail.	The Applicant maintains that the Protective Provisions included in the dDCO afford appropriate and adequate protection for NGET's apparatus and NG's land rights, and that there are the necessary controls within the Protective Provisions to ensure there is no breach of legal requirements or Health and Safety Executive standards. However, as per paragraph 2, the Applicant and NG are engaged in agreeing appropriate amendments to the Protective Provisions (included in the dDCO) to provide further confirmation of the protection of NGET's infrastructure and NG's land rights, and to confirm works will be carried out in accordance with relevant industry, legal and Health and Safety requirements.
12	The proposed Order does not yet contain fully agreed protective provisions expressed to be for the protection of National Grid to National Grid's satisfaction, making it currently deficient from National Grid's perspective.	As per paragraph 2, NG and the Applicant are in negotiations to agree amendments to the Protective Provisions included in the dDCO.
13	National Grid contend that it is essential that these provisions are addressed to their satisfaction to ensure adequate protection for their Assets and that protective provisions on their standard terms are provided. Negotiations between the parties in respect of the form of the Protective Provision to be included within the Order are well advanced but not concluded yet. Should it not be possible to reach agreement with the promoter National Grid reserve the right to attend a Compulsory Acquisition Hearing or Issue Specific Hearing to address the required format of the Protective Provisions and any necessary amendments to the draft Development Consent Order. If this is necessary National Grid reserve the right to provide further written information in advance in support of any detailed issues remaining in dispute between the parties at that stage.	The parties are advanced in the negotiation of the amended Protective Provisions (as per paragraph 2), and the Applicant anticipates that negotiations will be finalised in advance of the close of the Examination.

2.6 REP2-062 Charles Russell Speechlys LLP on behalf of London Array Limited

Table 2.6: The Applicant's Comments on Charles Speechlys - London Array Ltd Written Representation

Ref.	Statement	Applicant's Comment
BACKGROUND		
1	These representations are made by London Array Limited (LAL) on behalf of themselves and Orsted London Array II Limited (Orsted), E.ON Climate & Renewables UK London Array Limited, Masdar Energy UK Limited and Boreas (Investment) Limited (the Participants).	These comments are noted.
2	The Participants together own and operate the offshore London Array wind farm. They, and LAL, have the benefit of interests in land affected by the proposed Cleve Hill Solar Park and the associated draft development consent order (DCO) being promoted by Cleve Hill Solar Park Limited (CHSPL).	
THE LONDON ARRAY PROJECT		
3	The London Array wind farm is located around 20km from the coast and consists of 175 wind turbines. It has been in operation generating renewable energy since October 2012 and provides enough power for nearly half a million UK homes a year (two thirds of the homes in Kent).	These comments are noted.
4	The turbines are linked to offshore substations which are connected to the shore by submarine cables. On landing, the cables run underground south to Cleve Hill and inland to two onshore substations.	
5	It is vital to the ongoing function of the wind farm that no damage is done to the cables and substations associated with the wind farm and that access is available to that infrastructure at all times for maintenance.	The Applicant recognises the national importance of the Participants' infrastructure. The Applicant considers that the Project and the Participants' infrastructure can co-exist and that the construction, operation and maintenance of the Project will not result in any damage being caused to the cables or substations and that access will be maintained. The Applicant has included protective provisions in Part 1 of Schedule 7 to the dDCO for the benefit of Electricity Act licence holders. The Participants will have the benefit of these provisions. The Applicant is also in discussions with the Participants and their advisors in respect the interface with the Project and protection of their apparatus. Heads of Terms have been exchanged between the parties and the parties are progressing to the drafting of agreements (set out in paragraph 9) that will regulate the interface between the proposed Scheme and the London Array wind farm, including addressing the protection of the Participants' apparatus and addressing any operational concerns, including access provisions. The Applicant anticipates that the agreements will be finalised and entered into by close of the Examination.
6	In line with UK legislation, the wind farm transmission assets (from offshore substation	The Applicant has included protective provisions in Part 1 of Schedule 7 to the dDCO for the benefit of Electricity Act

Ref.	Statement	Applicant's Comment
	to onshore substation with associated cables) are leased and operated by an independent offshore transmission owner, Blue Transmission London Array Limited (BTLAL). BTLAL lease one of the substations and other infrastructure from the Participants	licence holders. BTAL will have the benefit of these provisions. The Applicant is also in discussions with BTAL and their advisors in respect the interface with the Project, protection of their apparatus and the grant of the necessary land rights.
7	National Grid Electricity Transmission plc (NG) owns and operates the onshore electricity transmission network in England and has a lease over the second onshore substation, where electricity from the wind farm is transmitted to the grid.	The Applicant has entered into a Connection Agreement with National Grid, which confirmed the terms and basis of the connection of the Project into the National Electricity Transmission Network. Protective Provisions for the protection of National Grid's apparatus were included in Part 2 of Schedule 7 to the dDCO and negotiations regarding the terms of the Protective Provisions are ongoing. The parties' respective advisors have engaged to agree the land rights required for the installation of apparatus necessary for the connection of the Project to National Grid's sub-station.
8	The Participants' land interests and infrastructure and the operation of the London Array wind farm could be materially and adversely affected by the construction and/or operation of the solar farm and by the exercise by CHSPL of the powers contained in the proposed DCO. The continued operation of the wind farm and its financial viability relies on complex agreements with multiple parties including NG and BTLAL and other landowners.	The Applicant considers that the Project and the Participants' infrastructure can co-exist. As set out in detail in paragraph 9, the Applicant is in the process of drafting legal agreements to manage the interface between the Project and the Participants' apparatus, in addition to the Protective Provisions in the dDCO, and to ensure any perceived risks to the Participants' apparatus is mitigated to the satisfaction of the Participants. The Applicant has engaged with all landowners and lessees with an interest in land where acquisition of land or rights are sought in the dDCO. The Applicant does not consider that the Project will adversely affect any of the complex agreements that the Participants have entered into with National Grid, BTLAL and other landowners. As set out in paragraphs 7 (for National Grid) and paragraph 6 (BTLAL), the Applicant is working with the parties to reach agreements to ensure that the interface with the Project and existing occupiers' apparatus is appropriately managed, during both construction and operation of the Project. In the event that such agreements are not completed, the Applicant considers that the protective provisions in the dDCO provide adequate protection for the Participants' land interests and apparatus.
9	The Participants support the principle of renewable energy and are prepared to enter into an agreement with CHSPL in order to grant appropriate rights which are compatible with the existing agreements and to release restrictive covenants as necessary to facilitate the use of the land for solar power.	The Applicant notes that the Participants have not raised any in principle objections to the Project. CHSPL and the Participants' have entered into detailed correspondence in relation to the agreements required over LAL's land interests. These discussions relate to the grant of an option to provide for the grant of: (a) access easements; (b) a lease of the cable route; (c) a lease of land as a habitat management area; and (d) proportionate release of restrictions benefitting LAL's land interests. The parties last met for detailed discussions on these matters on 20 June

Ref.	Statement	Applicant's Comment
		2019 and there has been correspondence between the parties since that meeting. Discussions are ongoing and the Applicant is hopeful that agreement can be reached prior to the close of the Examination.
10	The careful structure, operation and financial viability of the existing land arrangements and agreements should not be jeopardised by the blunt tool of broad compulsory purchase powers. The Participants therefore object strongly to the inclusion of their land interests within the Book of Reference and ask that they be removed from the DCO.	The Applicant does not consider that it is necessary or appropriate to remove the Participants' interests from the Book of Reference. For the reasons set out in paragraphs 6.4 and 7.10-7.13 of the Statement of Reasons [APP-019], the Applicant needs to be able to interfere with existing rights to the extent necessary to deliver the Project without impediment. However, paragraph 4 of Part 1 of Schedule 7 prevents the compulsory acquisition of any apparatus belonging to the Participants without agreement.
CABLE CORRIDOR		
11	The Participants have acquired freehold and leasehold interests for the purposes of the onshore cabling running through Cleve Hill and connecting to the substations.	These interests have been identified in the Book of Reference and the Participants were consulted on the Project proposals and notified of the Application as per the requirements of S.42 and S.56 of the Planning Act 2008 in respect of their land interests.
12	Plot 3/05 - A freehold interest is held by the Participants in sub-soil at depths below 0.7m below ground, subject to a BTLAL lease granted by the Participants.	The Applicant is in discussions over obtaining private rights, and does not intend to acquire any apparatus belonging to the Participants and the powers in the dDCO are restricted by paragraph 4 of the protective provisions in Part 1 of Schedule 7 to the dDCO. In order to carry out the works required to plot 3/05 to deliver the Project, it may be necessary to acquire part of the subsoil that is owned by the Participants. However, any works would be subject to the procedure set out in paragraph 7 of the protective provisions.
13	CHSPL seek to acquire all this land largely for Work No. 8 (to create and maintain a habitat management area, including earth works, access and drainage) and for Work No. 6 (access). They also seek to override the restrictive covenants which control the use of this land.	As set out in Article 16 of the dDCO, the Applicant can only acquire land if it is required for the Project. Pursuant to Article 19 of the dDCO, the Applicant can only interfere with or override any restrictive covenants to the extent that their continuance would be inconsistent with the exercise of the powers under Articles 16 and 18. This means that restrictive covenants can only be overridden if necessary to deliver the Project. As mentioned above, in order to carry out the works required to plot 3/05 to deliver the Project, it may be necessary to acquire part of the subsoil that is owned by the Participants. However, any works in proximity to apparatus would be subject to the procedure set out in paragraph 7 of the protective provisions.
14	It is not necessary for construction and operation of the solar farm for this sub-soil interest to be acquired. Such acquisition will	The Applicant does not consider that the powers sought in

Ref.	Statement	Applicant's Comment
	adversely affect the Participants' ability to operate the wind farm. Further, damage could be caused to the cables running within the sub-soil due to the operation of heavy machinery or heavy vehicles over the cables or by works to the ground. Accordingly, appropriate restrictions on the use of this land which the Participants can rely upon and enforce must be maintained.	the dDCO will adversely affect the Participants' ability to operate the wind farm. As stated above, the protective provisions contained in Part 1 of Schedule 7 of the dDCO prevent any works from taking place that could cause damage to the cables. Paragraph 7(2) of the protective provisions enables requirements to be imposed in order to ensure the protection of apparatus and for securing access to such apparatus.
15	Plots 3/01, 3/02 and 3/03 (the Foreshore) - The Participants have the benefit of a lease of rights dated 16 August 2010 (subject to the BTLAL sub-lease). This lease of rights enables LAL to install, inspect, repair, use, replace etc supply cables and associated rights.	These interests have been identified in the Book of Reference and the Participants were consulted on the Project proposals and notified of the Application as per the requirements of S.42 and S.56 of the Planning Act 2008 in respect of their land interests.
16	CHSPL seek to acquire rights over this area for the purposes of Work No. 9 i.e. work to maintain the flood defence. In this area, the draft DCO also imposes restrictions which prevents any entity from building structures or carrying out activities which may obstruct the performance of the rights. It is essential that the Participants' rights as described in paragraph 3.5 can be exercised at all times.	As set out in paragraph 9.2.6 of the Statement of Reasons [APP-019], the Applicant is seeking to compulsorily acquire new rights so that it can continue to maintain the existing flood defence in the same manner as the Environment Agency currently maintains the flood defence. The Applicant does not consider therefore that the powers sought in the dDCO will adversely affect the Participants' ability to exercise their rights as the works to be undertaken would be identical to those undertaken currently by the Environment Agency. As stated above, the protective provisions contained in Part 1 of Schedule 7 of the dDCO prevent any works from taking place that could cause damage to the cables. Paragraph 7(2) of the protective provisions enables requirements to be imposed in order to ensure the protection of apparatus and for securing access to such apparatus.
SUBSTATION AREA		
17	The Participants own the freehold interest in a number of plots of land in this area: Plots 3/06, 3/07A and 3/07B – BTLAL occupy these plots pursuant to a lease dated 18 September 2013 (plot 3/07A comprises the site of the BTLAL substation); Plot 3/07 – this comprises the site of the NG substation; and 4.1.3 Plot 3/08 and 3/08A.	These interests have been identified in the Book of Reference and the Participants were consulted on the Project proposals and notified of the Application as per the requirements of S.42 and S.56 of the Planning Act 2008 in respect of their land interests.
18	CHSPL are seeking rights over this area for Work No. 5 (cable systems), 6 (access), 7 (alter and maintain existing access) and 8 (habitat management area).	The rights being sought over these plots are set out in the Book of Reference and Schedule 5 of the dDCO.
19	It is deeply inappropriate for CHSPL to seek to acquire broad rights over this area through a DCO and compulsory acquisition. Works within such a sensitive area, with complex infrastructure requirements and constraints, should and must be done pursuant to a suitably detailed agreement with all necessary parties, including the Participants, BTLAL and NG.	The Applicant considers that the Project and the Participants' infrastructure can co-exist. Discussions are ongoing to enter into a voluntary agreement with the Participants, BTLAL and National Grid in respect of the substation area. Should these discussions fail, it may be necessary to exercise compulsory purchase rights. As stated above, the rights being sought are the minimum required to deliver the Project without impediment. For the reasons set

Ref.	Statement	Applicant's Comment
		out in Section 7 of the Statement of Reasons, the Applicant considers that the rights are proportionate and necessary. The protective provisions contained in Part 1 of Schedule 7 of the dDCO prevent any works from taking place that could cause damage to the cables. Paragraph 7(2) of the protective provisions enables requirements to be imposed in order to ensure the protection of apparatus and for securing access to such apparatus.
20	As above, suitable access must be maintained at all times in a condition fit for purpose and the Participants must have sufficient legal rights to enforce this. Any change to access arrangements must be agreed with the Participants in advance.	CHSPL is aware of the Participants continued access requirements and provisions to address those requirements (both during construction and during operation) have been included within the agreements being negotiated with the Participants (paragraph 9). In the absence of an agreement, paragraph 7(2) of the protective provisions enables requirements to be imposed for securing access.
SOLAR PARK		
21	Land interests held by the Participants have the benefit of other rights and restrictive covenants (including rights or covenants over Plots 1/04, 1/05, 1/07, 1/08, 2/04, 3/04, 3/09, 4/02, 4/03, 4/07, 5/01, 5/02 and 5/03). Save for the relaxation of any restrictive covenants to the extent necessary to allow construction and operation of the solar farm for its lifetime, there is no need for any such rights and restrictive covenants to be interfered with or overridden.	See the response to paragraph 13 above.
THE ACCESS		
22	The seeking of powers to temporarily stop up the Participants' main access route to the substation is inappropriate. A viable access route must be provided at all times to the infrastructure associated with the wind farm for the purposes of maintenance and any works to the access roads must be by agreement.	The Applicant will ensure that the existing access to apparatus is maintained or a suitable alternative access is provided. The Applicant is discussing the access arrangements with the Participants, National Grid and BTLAL. However, the Applicant considers that the powers applied for in the dDCO to temporarily stop up the access road are necessary and proportionate to the deliver the Project.
BOOK OF REFERENCE		
23	There are numerous references in the Book of Reference to Orsted having the benefit of rights pursuant to an agreement dated 16 August 2010. Confirmation has been requested from CHSPL as to what this relates to.	The freehold of title K956906 included in the Book of Reference (plots 3/05, 3/06, 3/06b, 3/07, 3/07A, 3/07B, 3/08 3/08A) is owned by a joint venture company 'London Array Limited,' made up of four companies all individually named on the title. Those four companies are 'Dong (now Orsted) Energy London Array II Limited,' 'E.On Climate & Renewables London Array II Limited,' and 'Masdar Energy UK Limited' and 'Boreas (Investment) Limited'. In the Book of Reference London Array Limited is incorrectly referenced as 'Orsted London Array II Limited' (as a Category 2 party) in respect of a deed dated 16 August 2010. The Book of Reference has been updated to ensure

Ref.	Statement	Applicant's Comment
		the party has been correctly identified as per the deed, as 'London Array Limited'. The deed is in respect of a lease of rights dated 16 August 2010 made between Kent Wildlife Trust and London Array Limited for a term of 50 years (included as plot 3/02 in the Book of Reference (Title number K413346)). The lease of rights benefits adjacent land titles K956906 and TT8365 (included as plots 1/04, 1/05, 2/04, 3/02, 3/03, 3/04, 3/09, 4/02, 4/03, 4/07, 5/01 and 5/02 in the Book of Reference) and as such the rights are recorded against those titles in the Book of Reference.
JUSTIFICATION FOR COMPULSORY ACQUISITION		
24	Under Section 122 of the Planning Act 2008, a development consent order may only authorise compulsory acquisition if the Secretary of State is satisfied that: (a) the land is required for the development to which the consent relates, or is required to facilitate, or is incidental to, the development, or is replacement land given in exchange; and (b) there is a compelling case in the public interest for the compulsory acquisition.	For the reasons set out in Section 7 of the Statement of Reasons [APP-019], the Applicant considers that the tests set out in s122 of the Planning Act 2008 have been satisfied. Amendments to the Climate Change Act 2008 (which came into force on 27th June 2019), to reflect the 'net zero' carbon target for 2050 in response the Climate Change Committee's advice to UK governments, further support the compelling case in the public interest for the compulsory acquisition of land and rights necessary to deliver the Project.
25	The Participants do not consider that the compulsory acquisition of the land and rights identified above is required for the solar farm development nor necessary or proportionate. In particular, the acquisition of the Participant's interest in plot 3/05 has not been justified and is not necessary to deliver or operate the solar farm, contrary to the statutory requirement and Guidance.	For the reasons set out in Section 7 of the Statement of Reasons [APP-019], the Applicant considers that the land and rights sought is necessary and proportionate. The Applicant has made and continues to make significant efforts to ensure all the land and rights required for the Project are secured by way of private treaty agreements. As set out in detail in paragraph 9, the Applicant is engaging with the Participants to reach agreements over the land in which the Participants hold an interest or rights. In the absence of any agreement, the Applicant considers that the protective provisions included in Part 1 of Schedule 7 to the dDCO provide sufficient protection to prevent any serious detriment to any apparatus.
26	Further, the Participants do not consider that there is a compelling case in the public interest for the compulsory acquisition. The wind farm generates renewable energy for the local area and the future generation of that energy should not be put at risk.	The compelling case in the public interest for the Project is set out in Section 7 of the Statement of Reasons [APP-019], the Needs Statement [APP-253] and Addendum to the Needs Statement [AS-008]. As set out above, the Applicant considers that the Project and the Participants' infrastructure can co-exist.
27	The Guidance indicates that an applicant for a DCO must be able to demonstrate to the satisfaction of the Secretary of State that all reasonable alternatives to compulsory acquisition (including modifications to the scheme) have been explored. This is not the case. The Participants are ready, willing and able to enter into an agreement to facilitate the construction and operation of the solar	The Applicant refers to paragraph 7.16 of the Statement of Reasons [APP-019] which sets out the Applicant's consideration of alternatives in accordance with the Guidance. The Applicant engaged with the Participants (in person at their offices and via conference calls and email) on multiple occasions during Pre-Application stage. The Applicant has made it clear in its engagement the Participants that it is

Ref.	Statement	Applicant's Comment
	farm, whilst ensuring the continued operation of the wind farm. In addition, agreements are required with BTLAL and NG as to the interface with the substations and other infrastructure.	keen to reach a voluntary agreement with the Participants. The draft Protective Provisions were issued to the Participants for comments on 9th October 2018 (none were received). As set out in paragraph 9, the Applicant remains committed to reaching an agreement with the Participants regarding the rights sought and confirming the protection of the Participants' infrastructure.
28	Negotiations have now commenced on such agreements. The Participants have agreed with CHSPL that a joint approach should be made to the Examination for the parties to be given time to finalise those negotiations. The Participants wish to reserve their right to submit more detailed representations to the Examination on the changes required to the draft DCO should those negotiations not result in an agreement.	An update on the status of negotiations was submitted to the Examining Authority on 21st June 2019, and as confirmed in the email, both parties believe the request for additional time to work constructively together will enable agreements to be completed as per paragraph 9.

2.7 REP2-065 CPRE Kent - WR on Ecology and Biodiversity

Table 2.7: The Applicant's Comments on CPRE KENT Written Representation (Ecology and Biodiversity)

Ref.	Statement	Applicant's Comment
ECOLOGY AND BIODIVERSITY		
Summary		
1	It is quite clear from currently available publications and research that there needs to be more research on the effects of solar farms per se in regard to nature, biodiversity and in particular, direct effects on fauna, such as birds and invertebrates, especially aquatic insects, and by altering the environment. With this in mind, and the fact that we are presently losing species at an alarming rate globally, placing a large-scale solar farm, with unproven technology seriously lacking in research, with an orientation in which the effects on the flora and fauna are largely unknown, next to and in such an environmentally sensitive site such as Graveney Marshes, makes it impossible to mitigate successfully against, and make an informed decision. The project conflicts with NE's recommendations, the EU's policy and that of the UK Government's 25-year EP, it also conflicts with the guidance and advice from industry specialists and the Department for Communities and Local Government Planning practice guidance for renewable and low carbon energy.	Solar PV is a mature technology, as of April 2019[3], the UK had 4,387.4 MW of installed capacity of ground mounted solar PV developments of 5 to 25 MWp installed capacity and 1,539.5 MWp of installed capacity of developments of over 25 MWp. The Development is situated on intensively managed arable land which will be converted to grassland habitat as set out in the outline LBMP [APP-203], a revised version of which has been submitted at Deadline 3. The Development is expected to result in biodiversity net gain as set out in the Biodiversity Metric Calculation document submitted at Deadline 2 [RE2-045]. A written representation on policy and procedure was provided by the Applicant at Deadline 2 [REP2-026]. More information on the need for the Development in the context of Government policy is set out in the Statement of Need [APP-253] submitted with the Application, it's addendum [AS-008] and the Applicant's response to the Statement of Need submitted by the Graveney Rural Environment Action Team (see Deadline 3 document reference 11.4.10).
2	Some of CHS's surveys are dated, not as robust as they should be and at times it is questionable if they even reach industry best practice. CHS omitted one protected species from being surveyed all together. This calls into question the robustness of their findings and in turn any conclusions arrived at, and any ancillary mitigation. Therefore, the surveys do not provide enough accurate information for any informed decisions to be made. We are especially concerned about the level of mitigation for the brent geese not being enough, the combining of mitigation of the golden plover and lapwing with the brent geese, the management plan for brent geese not being suitable for management plans for golden plover and lapwing, the accuracy of the bird days data, the accuracy of the bat survey, the accuracy of the reptile survey, the lack of consideration/research given to aquatic insects and polarization, the culverting of waterways and the abstraction of water from the waterbodies on site. Our detailed comments follow.	The Applicant's responses are provided in detail below.
3	Furthermore, we note with some concern that Hive Energy (linked to CHS Ltd) now appear	The draft DCO submitted at Deadline 2 [REP2-003] and the updated draft DCO submitted at Deadline 3 include

[3] https://www.gov.uk/government/statistics/solar-photovoltaics-deployment

Ref.	Statement	Applicant's Comment
	to assert that the solar farm will remain 'in perpetuity' in stark contrast to the decommissioning statement and further comments on de-commissioning that are made in the subsequent surveys (see Hive Energy's website).	Requirement 16 which has been drafted in consultation with the Environment Agency and seeks to time limit the Development if it can be demonstrated that managed realignment can be delivered at Cleve Hill.
Environmental Statement Volume 1 Chapter 8 Ecology		
4	The EA Ecology report contradicts itself in a number of places for example Page 2, 8.1.2 Scope of Assessment acknowledges that there will be habitat loss/change, disturbance and criminal damage, yet at page 6 under action states 'no direct impacts are predicted, and indirect impacts are proposed to be mitigated where required.' Page 8, summary of response CPRE Kent. CHS state 'There will be gaps between the solar panel strings and 'corridors' of connecting natural habitats in areas of the site that are not currently represented by this habitat'	The Applicant is confident that Chapter 8 - Ecology of the ES [APP-038] presents a robust and complete baseline against which to assess the impacts of the Development. Answers to first written questions 1.1.1 and 1.1.4 by Natural England, KCC, SBC, CCC and KWT are supportive of this position [AS-023]. Where updates to surveys have been required, such as the updated phase 1 habitat survey undertaken in 2018 and the eDNA testing for great crested newt also undertaken in 2018, the approach has been discussed and agreed with Natural England. The Development will result in a land-use change from arable to grassland, including area of grassland with solar panels, i.e., larger areas of connecting grassland habitats will be created as a result of the Development.
5	Whilst the solar panels are mounted on struts which may be removed, CHS fail to take into consideration the pouring of concrete for the battery housing, the burying of electrical cabling and the use of earth and clay on site to create the bund to surround the battery storage area. They also fail to take into consideration the culverts planned and mentioned on Page 10 by the Kent Wildlife Trust (KWT). After the proposed 40 years of being in place removing these culverts could cause more damage than being left in place depending on how embedded they become.	Decommissioning of the Development will be subject to a decommissioning and restoration plan, and outline version of this document was submitted with the Application [APP-206].
6	CHS also state, 'There will be extensive open strips of grazing land suitable for grazing livestock that will be available between the arrays and to the margins of the solar panel layout.' We understand that the sheep will be fenced off from going between the panels. Furthermore, we would not describe 2.5 metre gaps as extensive.	Sheep will not be fenced off from going between the panels. As demonstrated through the area described in in Chapter 5 - Development Description of the ES [APP-035] less than half of the total arable area of the site will be beneath solar panels. This statement referred to the wider availability of grassland habitats across the site, not just the separation between tables in each field, as shown in the outline LBMP [APP-203].
7	Page 8, summary of response KCC. CHS describe the crops as monocrop, yet this is the very same crop that the brent geese graze upon. CHS also comment that the 5m to 8m strip to be left on either side of the ditches is an improvement on the current 2m strip either side of the ditch. However, if the sheep were to be grazed on the area then poaching and erosion is likely to occur along ditch edges. Furthermore, the 2m strip is unmown and tussock grass which is ideal for invertebrates, reptiles and other flora and	The outline LBMP [APP-203] and the updated version of that document to be submitted at Deadline 3 address these points.

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	fauna, heavily grazed areas do not encourage wildflowers, lepidoptera (butterflies) and Linnaeus (bees) with no barriers and no shade.	
8	Page 7, Natural England's comments Page 4 (NE) contradict the Environment Agency's comments (EA) NE state 'In addition, the presence of ditches within the development site offers the opportunity to enhance the water vole population of the site.'	The Applicant understands that the EA and Natural England are in agreement that mitigation but not enhancement for water vole should be implemented in cognisance of the EA's longer term aspiration for managed realignment at Cleve Hill. A letter of no impediment for water vole licence has been received from Natural England and has been submitted at Deadline 3 (document reference 11.4.9).
9	The EA state 'Given that the area will become intertidal habitat and so unsuitable for water voles, we do not want any enhancement work, specifically for the benefit of water voles, to be delivered by the developer that will increase use of the site by this species.'	
10	Page 7, Graveney with Goodnestone PC express concern for the loss of opportunity to enhance the site for habitat creation and landscape were the MEAS to go ahead as planned. We concur that the MEAS will be a lost opportunity and the solar farm will negatively impact on the landscape and ecology of the site.	A Statement of Common Ground has been agreed between the Applicant and the Environment Agency in May 2019 [AS-017] which reflects the current status of discussions.
11	CHS state that the panels are to be placed away from aquatic habitats. As the site is surrounded by aquatic habitats, namely the sea and interjected with ditches which crisscross across the site, all water courses are likely to be negatively affected either indirectly or directly	Chapter 8 - Ecology of the ES [APP-038] sets out the expected beneficial effects on water quality as a result of the Development at section 8.5.1.1.
12	Page 10. KWT. We concur with the KWT that the placing of culverts can cause habitat fragmentation and inhibit the free movement of aquatic insects and mammal movement utilizing the ditch network and therefore should be avoided.	As set out in paragraph 157 of Chapter 8 - Ecology of the ES [APP-038], the 'mammal friendly' culvert designs will ensure that the aquatic ditch habitat connectivity will likely increase within the Development where existing culverts are upgraded.
13	Page 10, KWT. We concur with the KWT that 50% of species of bats on one site in one area is significant and should be regarded as such when addressing the importance of this site for biodiversity and status.	The importance/sensitivity of this feature is addressed within the Ecology ES Chapter [APP-038], section 8.3.4. Bats forage within the site principally along the ditch network, and this feature meets criterion BA4 for selecting LWSs. The ditch network within the ecology core study area meets the criteria for selecting LWSs and is assessed as if it were an LWS. LWSs are attributed local importance.
14	Page 11, Swale Friends of the Earth (SFoE), state that they agree with the PEIR in regard to change of land use and therefore no more use of agricultural chemicals. However, agricultural chemicals may be absent were the solar farm to go ahead, but SFoE and CHS fail to consider the threat to the health of the aquatic insect population, which is highly likely to face a different risk that could affect their viability. Insect biomass is falling by 2.5 per cent per year (Sanchez-Bayo, Wyckhuys 2019)2. This ground-breaking paper cites four aquatic taxa as 'imperiled' having lost a large proportion of species. Dragonflies	The Ecology chapter [APP-038] assesses a significant beneficial effect for invertebrates as a result of water quality improvements at section 8.5.4.1. The Applicant's response to first written question 1.1.7 [REP2-006] also addresses this concern.

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	(Anisoptera) and damselflies (Zygoptera) depend on water bodies for larval development and both are present on site. The International Union for Conservation Nature (IUCN) says that out of 118 aquatic species of endangered insects, 106 are Odonata (dragonflies and damselflies) with 10% being threatened with extinction. Freshwater insects have fixed life cycles with one brood of offspring annually and are therefore, sensitive to habitat change with flow alterations, habitat fragmentation and pollution being among the main threats. Odonata lay their eggs in water as does the damsel fly (Saucium) – very little data concerning population exists on this species. It is well documented that aquatic insects are affected by mistaking solar arrays for waterbodies and trying to lay eggs on the panels. (Explained in more detail later). Furthermore, flying insects are affected by light and as there are to be significant security lighting surrounding the site, it is likely these groups of insects will also be negatively affected.	
15	Page 11, Swale Green Party. CHS state that species on site are 'principally' along the field margins and drainage ditches. Brent geese graze upon the crops grown, the lapwing and golden plover utilize the crop area as cover for laying eggs and the Marsh harrier hunts over wide, open areas such as farmland. All are SPA species.	Ornithological impacts are addressed in Chapter 9 - Ornithology of the ES [APP-039].
16	Page 11, The Faversham Society mention the significance of invertebrates on site. CHS fail to take into consideration the negative impact construction dust will have on watercourses, (explained in more detail later). The report also fails to take into consideration the negative effect security lighting will have on winged insects and they fail to consider the negative effect the panels will have on aquatic insects, which will be also be explained in more detail.	These issues are addressed in Chapter 8 - Ecology of the ES [APP-038] for example at paragraphs 144 and 166.
17	Page 14. The Extended Phase 1 Habitat Survey (2015) is now four years old. 8.2.3.3, 23. CHS state 'It was concluded within the Updated Extended Phase 1 Habitat survey report that the status of protected or priority species is likely to remain broadly unchanged, because factors including habitat types have remained unchanged since the previous surveys were undertaken….and there is no need to update all protected or priority species surveys for the purpose of this ES.'	The phase 1 habitat survey was updated in 2018, as reported in section 8.2.3.3 of Chapter 8 - Ecology of the ES [APP-038] to confirm that habitats had not substantively altered since the 2015 survey.
18	CHS failed to consider hazel dormice (Muscardinus avellanarius) in either the original Extended Phase 1 Habitat Survey or the Updated Extended Phase 1 Habitat Survey, yet there is clear evidence that hazel	The Applicant requested at Issue Specific Hearing 4 on Biodiversity and Nature Conservation (see document reference 11.1.6 for the summary of that hearing) that further detail of this record is provided to the Examination and will respond to that information when received.

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	dormice are present on site, which would have been established had CHS considered dormice when carrying out their Phase 1 Habitat Surveys. (see Appendix 1: photograph of a dormouse nest present on the Local Wildlife Site (LWS) OS ref. TR026636). This nest has been recorded with PTES and NE and is now part of the National Dormouse scheme. It is likely dormice will have inhabited areas in and around the site, such as the ditch network and scrub.	
19	Dormice are afforded full protection under Schedule 5 of the Wildlife and Countryside Act 1981, as amended. Protection to the species is also afforded by Schedule 2 of the Conservation (Natural Habitats &c) Regulations, 1994, making the hazel dormouse a European Protected Species. These two pieces of legislation operate in unison, however, there are some minor differences in scope and wording.	
20	Under the provisions of Section 9 of the Wildlife & Countryside Act, it is an offence to: • Intentionally kill, injure or take a dormouse; • Possess or control any live or dead specimen or anything derived from a dormouse (unless it can be shown to have been legally acquired); • Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a dormouse; • Intentionally or recklessly disturb a dormouse while it is occupying a structure or place which it uses for that purpose.	
21	Schedule 2 of the Conservation (Natural Habitats, &c) Regulations, 1994 makes it an offence to: • Deliberately capture or kill a dormouse; • Deliberately disturb a dormouse; • Damage or destroy a breeding site or resting place of a dormouse; • Keep transport, sell or exchange, or offer for sale or exchange a live or dead dormouse or any part of a dormouse.	
22	Dormice are a Priority Species under the UK Biodiversity Action Plan (UK BAP) and has been adopted as a Species of Principal Importance in England under section 41 of the NERC Act 2006 (section 42 in Wales).	
23	The hazel dormouse is a nocturnal and generally arboreal rodent that follows an omnivorous diet such as; flowers, fruits, invertebrates, pollen and nuts. Dormice can be found in deciduous woodlands, hedgerows and scrub, but will also adopt other habitats including gardens, conifer plantations and they have even been found on roadside verges and central reservations. Dormice are	

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	active between April and late October, spending the winter/autumn seasons in hibernation down on and in the ground, where they are particularly vulnerable to heavy plant machinery. Distributed primarily in southern England and Wales, the dormouse is absent from Scotland, Northern Ireland and the Republic of Ireland. They are slow breeders and poor dispersers.	
24	The dormouse has the protection of law because its numbers and habitat have declined by at least 50% over the course of the last century and continue to do so. This is primarily due to the loss, destruction and fragmentation of habitat as a result of logging, urbanisation and intensive agricultural practices. Dormice have declined as a species by a third since 2000 and 50 per cent since the mid 1990s.	
Amphibian Survey		
25	The Amphibian Survey 2015 is now four years old. ES Vol. 4 Technical Appendix A8.2a, Amphibian Survey 6. Discussion, CHS state 'In the dry of the summer months the ditches dry out and some contain very little water.' ES Vol. 4 Technical Appendix 5.4, Outline Construction Environmental Management Plan 3.3 Vehicle washing and 4.4, 73, and 74. Dust Suppression and control, CHS suggest extracting water from drainage water and local water courses or ground water despite being aware that the ditches can run low or even dry out during times of no rainfall. This is highly likely to put the ditch network under even more stress during dry weather bouts to the point where the water could be exhausted. Any ground water aquifers feeding these ditches could also be exhausted. Any amphibians, mammals and aquatic insects are likely to be negatively impacted by the extraction of water from their habitat.	Section 3.3 of the Outline CEMP [APP-205] does not refer to abstraction. Any abstraction would be controlled through licencing requirements, section 4.4 states: "Where required, water may be extracted from local watercourses or groundwater. In these instances, the Contractor will liaise with the EA beforehand to agree abstraction locations, rates and licencing requirements."
Amphibian Survey, Revision A Great Crested Newt Habitat and eDNA survey		
26	This survey is four years old. Several of the main factors for the decline of GCN as listed in GCN Conservation Handbook 2001 published by Froglife are; • The deliberate filling in or destruction of ponds • Chemical pollution and nutrification of breeding sites • Loss of terrestrial habitat • Habitat fragmentation • Habitat management which renders sites unsuitable for GCN • • Deterioration of ponds through neglect or misuse	The Applicant is content that great crested newt impacts have been fully addressed in Chapter 8 - Ecology of the ES [APP-038]. Natural England has issued a letter of no impediment in respect of great crested newt which has been submitted at Deadline 3 (document reference 11.4.9). Answers to first written questions 1.1.1 and 1.1.4 by Natural England, KCC, SBC, CCC and KWT are supportive of this position [AS-023].
27	Adult GCN are active in the water from January to December with the peak times being March to September. During these times GCN are also extremely active on land and egg laying usually occurs between April	

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	and May. Between June and August GCN are in their larval stage with metamorphosis occurring mid-August to mid-September. This staggered activity means that if construction of the solar farm commenced at any time, it would be impossible not to negatively affect the newts at some stage in their cycle. The type of habitat around the pond bordering the site will have an influence on the movement of the newts. Newts tend to rest in crevices and shaded areas and will share mammal burrows or adopt abandoned ones. The continuous movement of lorries etc and the consequential dust disturbed on dry days may bury some newts, prevent them from immigrating or emigrating between ponds in the area and is highly likely to result in the fatalities of any newts attempting to cross the construction site either to or from waterbodies depending on the time of day.	
28	The potential pollution from oil drips onto the earth from vehicles and subsequent stirring of contaminated dust across waterbodies and surrounding vegetation is likely to have an accumulative polluting effect on the water and surrounding vegetation. Some dust particles are likely to float reducing light levels within the water and thereby reducing photosynthesis, making it difficult for aquatic plants and animals to obtain oxygen. Furthermore, in heavy rain there is likely to be run off from the construction site towards ponds and water bodies in areas depending on the camber of the site during construction, unless suitable drainage channels were constructed. However, such drainage channels could in themselves create a toxic barrier around waterbodies for the GCN and further fragment the habitat.	
29	GCN lay one egg on a leaf at a time around pond edges. If any construction was to take place during the egg laying season the dust and dirt that is likely to blow (especially in such an open landscape) and cover the surrounding vegetation could result in the destruction of the embryo. It is an offence under the Wildlife and Countryside Act 1981 and the Conservation (Natural Habitats & CROW Act 2000) 1994 Regulations which make it illegal to; • Deliberately disturb GCN or intentionally or recklessly disturb them in a place used for shelter or protection • Damage or destroy a breeding site or resting place • Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.	
30	The activity, pollution and noise of	

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	construction in such close proximity to any waterbody utilized by GCN would make it impossible to not contravene the above regulations. Furthermore, the movement of lorries on site could also result in the destruction of GCN that have a range from any breeding pond of up to 500m.	
Preliminary Aquatic and Terrestrial Invertebrate Surveys		
31	The Preliminary Invertebrate Survey Report 2015 is now four years old. Summary; The report states; 'Due to the presence of suitable habitats, a series of invertebrate surveys of the ditch habitats be undertaken when species are most likely to be active, namely May to September.'	The Applicant is content that invertebrate impacts have been fully addressed in Chapter 8 - Ecology of the ES [APP-038]. A significant beneficial effect for invertebrates during operation has been identified as set out in section 8.5.4.1. Answers to first written questions 1.1.1 and 1.1.4 by Natural England, KCC, SBC, CCC and KWT are supportive of this position [AS-023].
32	Yet the actual days surveyed were not May to September as industry standards recommend as best practice; the report indicates in the summary that surveys were carried out only during August to September. Therefore, only two out of five months of surveys were completed.	
33	What is equally concerning is that AECOM Ltd feel this to be acceptable and state '…this is not considered to be a major constraint to this scheme, as an extensive species list was established from the later season visits…' If an extensive species list was established from only two months then had the whole survey season been undertaken, as best practice dictates, the species list would likely be even more comprehensive, important due to the number of '…unusual and uncommon species…'	
34	Of the invertebrates found during the very limited survey times, there were at least five nationally scarce water beetle and two other notable aquatic species, one water boatman and another water beetle. All of these species are polarotactic insects and lay eggs in water, with some species laying eggs on the water surface. Were the proposed solar farm to go ahead then it could have negative implications for the area to sustain minimum viable populations of aquatic insects due to the polarization effect and the insects mistaking the solar panels for water bodies.	
35	The smooth surface of water (Jeal et al 2019)3 horizontally polarizes reflected sun and night light. This reflection is evolutionary and provides a vital cue to over 300 species of aquatic insects of the presence of a water body.	
36	This man-made polarized pollution (Horvath et al 2009)4, can be so harmful that it creates ecological traps, where insects have been found to mate above and oviposit on artificial surfaces. Not only can this cause reproductive failure (Visser et al 2018)5, but it places the	

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	insects at increased predation from insectivorous raptors and insect gleaning bats (which have been established to be present on site) that use the area for foraging. When taking the sheer size of this proposed solar farm into consideration, it is feasible it could cause a catastrophic crash in aquatic insect population, which in turn, would negatively affect prey species that rely on these aquatic species for survival.	
37	Page 6. The survey concludes 'that based on the low number of invertebrates species found, the site appeared to have a low biodiversity value.'	
38	Having only surveyed two out of the five months, it's difficult to understand how they could have arrived at that conclusion with only a partial survey season having been completed, yet the report quotes earlier '…this is not considered to be a major constraint to this scheme, as an extensive species list was established from the later season visits…' This statement seems to contradict the statement on page 6. Either there was a low number of invertebrates or there was an extensive species list, demonstrating a high degree of biodiversity. The survey acknowledges several scarce and unusual insects and several scarce and unusual aquatic insects, but there are other rare insects present on site not mentioned within the report. Tom Harrison, entomologist, recorded with the Kent and Medway Biological Records Centre (KMBRC) – Hister quadrimaculatus; a very rare carrion beetle and Cleve Hill is one of its strongholds and Diachromus germanus; a species of ground beetle which became extinct in Britain but has recently recolonised in the last 15 years, with only four modern records known. It colonizes the edge of ploughed fields and is threatened by conversion of arable into solar farm where arable would be replaced by mown grass.	
Bat Survey		
39	The Bat Survey Report 4 Methodology, 4.2, the survey states that it 'was undertaken by two experienced AECOM ecologists' However, the report fails to detail their qualifications and experience as is usual with surveying, especially with licenced species. Page 9. 5.1, the desk study revealed there were nine bat species recorded on site. There are 18 bat species in the UK so nine is significant and amounts to 50 per cent of UK species present on one site.	The Applicant is content that impacts on bats have been fully addressed in Chapter 8 - Ecology of the ES [APP-038]. A minor beneficial effect for bats during operation has been identified as set out in section 8.5.7.1. Answers to first written questions 1.1.1 and 1.1.4 by Natural England, KCC, SBC, CCC and KWT are supportive of this position [AS-023].
40	Page 19. 6 Discussion and recommendations. The survey notes that bat activity was limited within the fields. Fig. 1 (Appendix 2) shows that the bat detectors were all placed around the perimeter of the site. Although the walked	

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	transects ran across the fields along ditches, the most accurate way of measuring activity these days is by static bat detectors, which is why they are employed.	
Reptile Survey		
41	The Reptile Survey Report is now four years old. Page 1. Summary. The report states 'It should be noted that, where it is predictable that reptiles are likely to be killed or injured by an activity (such as site clearance or any development related works) this could legally constitute 'intentional killing or injuring', even if that was not the intention of the activity'.	The Applicant is content that impacts on reptile have been fully addressed in Chapter 8 - Ecology of the ES [APP-038]. A minor beneficial effect for reptiles during operation has been assessed as set out in section 8.5.8.1. Answers to first written questions 1.1.1 and 1.1.4 by Natural England, KCC, SBC, CCC and KWT are supportive of this position [AS-023]. Mitigation and enhancement for reptiles is set out in the outline LBMP [APP-203] and the outline CEMP [APP-205]. Updated versions of these documents have been provided at Deadline 3 (LBMP document reference 6.4.5.2, revision B; CEMP document reference 6.4.5.4, revision B).
42	CPRE Kent concurs with this statement and would like to know how is this to be policed/monitored were the solar farm to go ahead and how a conflict of interest is to be avoided?	
43	There were 413 artificial refugia placed at the site. However, when regarding Fig. 1 (see Appendix 3) it seems the boundary along the southern and western edge of the site was omitted and no refugia were placed. We would like to know the reasons as to why the surveyor saw fit to not place refugia along these areas, especially considering they border suitable habitat.	
44	When considering the results of the survey it is important to also consider the points made in Froglife Advice Sheet 106, namely the following; • 'reptiles are relatively challenging animals to find as they tend to be secretive, camouflaged, occur in comparatively low numbers on a given site, and may be inactive for long periods during winter or hot, dry summers. • 'There has been a lack of easily available and workable guidance on how to survey reptiles. • …'sometimes, even determining the presence of a species can be arduous, let alone obtaining some idea of population size.	
45	Page 4. 4, Methodology. Froglife Advice Sheet 10 goes on to mention the preferred habitat types, which the Reptile Survey says was identified in collaboration with the farm. However, Froglife Advice Sheet 10 goes on to warn of the bias that is likely to occur when only placing refugia on identified suitable habitat, which it refers to as 'hot spots' and that these areas are best used for establishing presence or absence rather than population estimates. The advice sheet also recommends placing the refugia or tins 'evenly over the habitat to examine the distribution of reptiles on a given site.' With this survey the refugia were placed only along the ditch network and sea wall area and not	

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	over the whole site (see Appendix 3). The advice sheet goes on to recommend that for general survey purposes, between five and ten refugia should be placed per hectare and for more detailed surveys this figure should be increased. This site is around 360 hectares, that equates to 1,800 refugia using the lower recommended figure of five, far more than the 413 refugia actually placed. The advice sheet also notes that as it's difficult to prove absence, that the more visits made the more confident the surveyor can be of the assessment of the site. However, the advice sheet also states that to convert survey counts into an indication of relative population is difficult to do for reptiles due to the challenges involved with surveying them and due to their ecology not being fully understood.	
46	Page 4. 4.1 Constraints: The report states that despite communicating with the farm 50 felts were destroyed. This incident, despite being regarded by AECOM as 'not considered to be a major constraint' is likely to have affected the overall results and further diminishes the number of refugia from 413 to now just 363 refugia.	
Water vole Survey		
47	The Water Vole Survey Report is now four years old. Page 4. Constraints; the report states that ditch 6 was not surveyed due to strimming taking place at the time. When considering Fig. 1 (see Appendix 3) a map of the ditch network over the site, ditch 6 feeds all ditches from 7 to 21, making ditch 6 one of the key ditches present on site in terms of connectivity. As strimming occurred on one day, a return visit to the site at a later date to complete the survey would have provided a more complete survey, especially considering the significant position of ditch 6 and its connectivity to the rest of the site to the west.	The Applicant is content that water vole impacts have been fully addressed in Chapter 8 - Ecology of the ES [APP-038]. Natural England has issued a letter of no impediment in respect of water voles which has been submitted at Deadline 3 (document reference 11.4.9). Answers to first written questions 1.1.1 and 1.1.4 by Natural England, KCC, SBC, CCC and KWT are supportive of this position [AS-023]. The upgraded and new culverts proposed have been taken into account in the ecology assessment. As set out in paragraph 157 of Chapter 8 - Ecology of the ES [APP-038], the 'mammal friendly' culvert designs will ensure that the aquatic ditch habitat connectivity will likely increase within the Development where existing culverts are upgraded, and preserved where new culverts are proposed.
48	OCEMP Technical Appendix A5.4. Page 28: The inclusion of culverts could fragment the habitat and has the potential to pollute the water course by the pouring of concrete and associated works disturbing the water voles during construction and increasing the risk of flooding the burrows during heavy rainfall. The.GOV.UK site sates the following;	
49	*Avoidance and mitigation methods* You should address the potential impacts you've identified on water voles with your mitigation plans. Aim to avoid negative effects by: • avoiding works to areas where there are water voles • avoiding habitat fragmentation and isolation by ensuring connectivity of habitat • limiting damage to water vole habitat'	

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50	Adding in culverts to the ditch network meets none of the above avoidances. On the contrary the culverts serve the developer and there is no evidence of consideration having been afforded the water vole, preserving its habitat and connectivity. Furthermore, the.GOV.UK site goes on to state;	
51	*If the tide affects your watercourse Culverts* The risk management authorities are unlikely to give you permission to build a culvert - an underground structure that a watercourse can flow through. Culverts can increase flood risk and damage the environment.'	
52	The EA's policy on culverts7 is quite clear. They state: 8.6.1 General policy regarding culverts Environment Agency policy is that no watercourse should be culverted unless there is an overriding need to do so. This is because: • the ecology of the watercourse is likely to be degraded by culverting; • culverting introduces an increased risk of blockage (with consequent increase in flood risk); • it can complicate maintenance because access into the culvert is restricted (in some cases being classified as a confined space and requiring trained operatives and specialist equipment). A blockage in a culvert can be very difficult to remove and likely to result in a severe flood risk. For these reasons the provision of a screen at the entrance to the culvert is often considered. Such a screen eliminates the risk of a blockage inside a culvert but introduces a significant maintenance obligation (to ensure that the screen is kept clean) which far exceeds the typical maintenance requirements of an open watercourse.'	
53	A screen added would also slow down water flow, increase the chances of flooding and prevent the free movement of water voles and other fauna. The EA also list the negative effects culverts can have on the environment, some of which are listed below.	
54	*8.6.2 Impacts of culverting* The culverting of watercourses can have many different impacts on the water environment including ecology, channel form, flow regime and chemistry. • Ecology: culverts can be impassable to riverine fauna and can create barriers to the movement of fish • Culverts result in the loss of natural in-stream and bankside through direct removal and loss of daylight • Morphology: Culverted sections may create or exacerbate downstream or upstream bank and bed erosion or promote sediment deposition, as a result of altered water velocities and disruption	

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	to the natural transport of sediment	
55	The BRE National solar Centre publication on planning guidance for the development of largescale ground mounted solar PV systems states: Culverting existing watercourses/drainage ditches should be avoided. Where culverting for access is unavoidable, it should be demonstrated that no reasonable alternatives exist…' There is no evidence that we can see that CHS has explored any other method other than culverting the ditches.	
Ornithology Technical Appendix		
56	Page 27. 43; the report states that 6 surveys were carried out and admits the site was so large that some visit were split over two days. However, the Common Bird Census (CBC, now superseded by the BBS) recommend that 8-10 visits should be carried out. Page 29. 49, Table A9.17. Although a pair of marsh harriers were seen on site it was decided they were not breeding. However, several local residents have observed a pair of marsh harriers carrying out nesting behaviour and feeding chick behaviour in a ditch on site, but not had not subsequently recorded this with the KMBRC. Therefore, it is possible a pair of marsh harriers were breeding on site. Marsh Harriers use both dry and wet habitats. (Raptors: a field guide for surveys and monitoring). The nest sites are generally freshwater or brackish reed beds and other wetlands or tall crops adjacent to wetlands, as with Graveney Marshes.	Paragraph 43 refers to specific breeding raptor surveys undertaken in 2016 within the wider area out to 2 km from the Development site, rather than general breeding bird surveys undertaken within the breeding bird survey area within up to 500 m from the Development site. The general breeding bird survey was carried out during four complete survey visits in each season between 2014-2016. There is no statutory guidance on breeding bird survey effort for development sites. Four survey visits is an industry best practice for large scale developments and complies with Scottish Natural Heritage's guidance on breeding bird surveys for wind farm developments. The four survey visits make use of the CBC mapping method for recording bird locations and behaviour, but it is not the intention of these surveys to follow the full CBC method requiring 8-10 survey visits, which has, or had, a different purpose for monitoring bird population changes at a sample of sites across the country in order to detect trends of change. The interpretation of the survey results in 2016 was that although territorial behaviour of marsh harrier was observed, they had not bred in the immediate vicinity of the Development site. The Applicant is aware that marsh harriers may nest in various locations around the site in some years (paragraph 351 of ES Chapter 9: Ornithology [APP-039]) and has assessed the effects on breeding marsh harriers on that basis.
57	Page 38. 94 and 96; the sentences are incomplete and so it's difficult to know what the report is referring to. Page 40. 106. The report states that it was' …necessary to remove double counts (when the same flock of birds was recorded in two different fields on the same survey).' This demonstrates the foraging range of the brent geese is far wider than the intended set aside for mitigation.	The Applicant confirms that paragraphs 94 and 96 are complete. Removal of double counts was necessary to derive an accurate measure of the number of birds using the site during each survey visit. The purpose of the AR HMA is to provide enhanced foraging resources, available for a longer period of time, in a smaller area than the birds currently find on the larger arable area where the development will be installed. It therefore takes into account the wider foraging range across different fields.
58	The report also refers to section 9.8. When referring back to table 9.8 (Page 17) lapwing count, it was noted that bird scarers were in use when four of the seasonal bird counts took place, namely 2008/09, 2009/10, 2010/11, 2011/12, the same for the counts of golden plover and for brent geese. The use of	There may be confusion between references to section 9.8 and table 9.8. Notwithstanding, Table A9.8 presents desk study information provided by KWT on the peak number of lapwings recorded by the warden during each month between winter 2008/09 and 2016/17. Similar data are presented for brent goose and golden plover in Tables A9.6 and A9.7 respectively. The Applicant agrees that bird scarers

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	bird scarers at the time are likely to have had a negative effect on the count. Therefore, how can these years be taken into consideration when the desired effect of bird scarers is to displace birds? This calls into question the validity and accuracy of the peak mean count for these three species of bird and in turn the robustness of the number of bird days and subsequent mitigation. In a nutshell, the bird count for these three bird species could be grossly under stated especially as CHS wish to use the same mitigation area for all three species even though the proposed mitigated area 'falls short of the requirement for lapwing...'	might have reduced the numbers of birds on site for the count at the time – that would be the purpose of the bird scarers. However, the numbers of birds presented in these tables have not been used in the calculations of the baseline peak-mean counts. They also demonstrate that bird scaring ceased in winter 2011/12, whereas the baseline surveys for the development on which the peak-mean counts have been analysed were undertaken between winter 2013/14 and winter 2017/18. The baseline surveys have been carried out during a representative period of the typical arable rotation and activities and therefore provide a robust and precautionary measure of the use of the site by these three species.
59	For instance; the peak mean count for brent geese including the seasons with bird scarers is 468 birds, the peak mean count without the seasons with bird scarers, namely 2012/13, 2013/14, 2014/15, 2015/16, 2016/17 is 645.	
60	Page 42. 114. The report indicates that there will be no direct competition between the brent geese, golden plover and lapwing. Whilst the golden plover and lapwing can and do coexist there needs to be enough land area to support both species and therefore not cause them to be in competition with one another. Furthermore, it is worth noting that the mitigation has been calculated on an average figure, bird numbers can and do go up and down depending on a number of variables, so considering the brent geese have numbered in the past to around 3,000, would this mitigation area realistically be enough to sustain the brent geese, lapwing and golden plover without negatively affecting the value of the SPA, SSSI and Ramsar areas?	Golden plover and lapwings naturally compete for the same resources and this has been the basis on which the capacity of the mitigation grassland in the AR HMA has been analysed. The mitigation required has been based on a precautionary measure of the baseline use of the site across four winters. The assessment for the Development has been made on the basis of only using the highest (peak) of any counts made in each month of the baseline surveys and averaging these peak monthly counts. The result of use of the peak-mean for the CHSP assessment is likely to result in an overestimation of the use of the site and hence there is likely to be a degree of over-provision of the area required to mitigate for loss of foraging area to the Development. For example, the AR HMA would be sufficiently large to support peak numbers of 3,000 brent geese for part of the winter, but based on the capacity factors used in the assessment, would not support 3,000 brent geese for the entire winter; however, that is not its purpose, as the baseline measure also does not comprise consistent counts of 3,000 geese throughout the winter.
61	114. The report admits that 'golden plover and lapwing generally exhibit preference for feeding in grassland with short sward height, but also use open arable habitats such as open ploughed land and young winter cereals, preferring large open fields providing good visibility for predators.' (One presumes they mean good visibility to spot predators and not good visibility for predators to spot them).	The Applicant can confirm that this means good visibility for plovers to spot predators.
62	As CHS intend to cover the majority of arable fields in 4m (12') high solar panels and then enclose the solar panels with 2m (6') high deer fencing effectively creating a linear area, is likely to negatively affect the golden plover and lapwing by permanently removing suitable open habitat from their preferred range. The fencing off of the solar panels and the proposed 8m buffer up to the ditches will create a closed in linear effect, far from the open farmland setting preferred by the golden	The assessment has been made on the assumption that golden plover and lapwing will be displaced from the area developed for solar panel arrays, including any of the spaces in between the arrays. Paragraph 115 sets out a list of possible mitigation measures for waterbird refuge areas as defined by the literature review. Paragraph 119 makes it clear that there are currently no deliberate scaring activities in practice and commits to maintaining an undisturbed (no scaring) area. In practice, with the Development, there would be no requirement for

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	plover. Page 43. 115. lists 'removal of bird scaring' as mitigation. 119. states that the current landowner does not adopt any bird scaring activities. Therefore, how can it be 'removed' for mitigation if it does not exist in the first place?	deliberate bird scaring around the AR HMA, as there will be no adjacent crops that require protection from grazing by geese.
63	Page 44. 121. 122. 123. 124. The report extensively covers the justification for the size of mitigation. However, whilst allegedly managing the proposed grassland in favour of the brent geese, this management is not necessarily favourable for either the golden plover or the lapwing whose diet consists of beetles, earthworms and plant materials such as berries, seeds and grasses, (some taken by probing 1-2cm down), moth caterpillar, fly larvae, molluscs, land snails, amphipods, crustaceans, and earthworms, are also a particularly important component of the lapwing diet. (European Management Plan 2009-2011 EUMP)8,9. The golden plover is also attracted to winter cereals, stubbles, fallows, harvestfields and to closed-grazed pastures. This does not fit with the proposed management plan intended for brent geese, for instance clover being sewn. Furthermore, according to the EUMP (lapwing) fertilizer grassland can reduce the value for lapwing. It creates higher nutrient levels which in turn increase vegetation growth leading to more 'homogenous' grasses, unsuitable for lapwing nesting and foraging early in the season. This does not fit with CHS plans to use manure for fertilization of the grazing for brent geese. CHS mention grazing sheep on the proposed mitigation land, the EUMP states that increased stocking densities increases the occurrence of trampled nests. Furthermore, high stocking densities can interrupt the incubation timetable risking an increase in nest predation. Furthermore, agricultural machinery has been cited as yet another further risk to the destruction of nests. This does not fit with CHS plans to mow the proposed mitigation area.	As advised by Natural England during pre-application consultation, the management of the AR HMA is focussed on the provision of sufficient resources for brent geese. The aim is therefore to provide a nutrient-rich short sward grassland favoured by this species. However, short-sward grassland is also known to be a habitat used, often preferentially, by golden plovers and lapwings – this was described in the literature review in Section 9.6.2.2 of Appendix A9.1: Ornithology Technical Appendix [APP-223] and Section 6.1.2.5 of the RIAA [APP-026]. The type of grassland preferred is short-sward (<10 cm), permanent and long-established; such grassland would typically have a close sward and contain clovers, which provides the suitable micro-climate within which the birds' invertebrate prey is available to them above, at and near the soil surface. It is proposed to fertilise the sward using farmyard manure, additionally providing suitable conditions for the birds' invertebrate prey. Application of manure increases the probability of field occupancy by golden plover and lapwing (Gillings, 2007; Tucker, 1992). It is therefore the Applicant's view that the proposed management of the AR HMA to provide short-sward, fertilised grassland provides suitable winter conditions for foraging golden plover and lapwing as well as Brent goose. The Applicant is aware that such management may conflict with the suitability of the sward for breeding waders. The purpose of the AR HMA is primarily aimed at provision of foraging resources for wintering plovers and brent goose. However, ongoing discussions with the HMSG are being held to deliver the optimal management prescriptions that might also benefit breeding waders and other birds (e.g. Vickery *et al.* 1997 *Managing coastal grazing marshes for breeding waders and overwintering geese: is there a conflict*. For clarity, mowing of the sward would be undertaken in late summer or early autumn when nesting would have finished, therefore no mechanical nest destruction would occur.
64	BRE's Planning guidance for the development of large-scale ground mounted solar PV systems10 stipulates (within the section on Ecology) that the material consideration of impacts on ground nesting birds, bats, dormice, reptiles and [redacted] should be considered.	The cited research is in relation to roads, rather than solar farms. The two types of human infrastructure are very different, one being busy with noisy moving traffic, the other being static, with very little activity; therefore correlations between the two should be drawn with caution. There will be no additional overhead power lines as a result of the Development, and the existing 11 kV overhead line is proposed to be undergrounded. Notwithstanding this, the assessment presented in ES Chapter 9: Ornithology [APP-039] concluded that lapwings would be displaced from nesting in the area developed for solar arrays, but would find consistently available nesting habitat each season within the AR HMA and LGM HMA.
65	The EUMP cites infrastructure development as a threat. Although it does not specifically mention solar farms and the ancillary infrastructure, this would be too specific, it does mention that roads are avoided by lapwings. It seems that lapwings are particularly sensitive to roads as nests could be lower than expected up to 2000m from a road, with the number of breeding pairs also	

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	negatively affected. The proposed construction of the solar farm is likely to have a significant negative impact on the lapwings breeding efficacy. Furthermore, lapwings have been recorded as colliding with power lines. The cumulative effect of these threats could seriously compromise the lapwings continuing use of Graveney Marshes as a preferred location for breeding and feeding which could in turn negatively impact the integrity of the adjacent SPA, SSSI and Ramsar areas.	
66	The EUMP (golden plover) report lists the wintering habitat should be managed in accordance to observed scientific evidence favouring winter survival. Specifically, nature friendly agriculture is promoted to preserve and encourage earthworms and other invertebrates, biodiversity, conservation and appropriate management of permanent pasture.	As described above, the AR HMA will provide suitable foraging conditions for wintering golden plovers.
67	Page 47. 132. The report states that '56,023 lapwing bird-days will therefore require 56 ha and 28,802 golden plover bird-days will require 18.5 ha of functionally linked land... These areas are not additional to each other.' It seems here that CHS are reluctant to afford mitigation land for each species separately and would prefer to 'lump' them all together possibly as a cost saving exercise. It is prudent to highlight counts used at face value may under-represent the importance of the site and may give misleading results. (Musgrove et al 2007) Species distribution is not the same across a site and certain areas of the Marshes, for instance, may be particularly important for one species and not others. One can never be sure how many birds were hiding in reeds, for example, and so cannot be sure if the counts included all birds present.	The areas are not additional to each other, because they were not additional to each other in the baseline; i.e. in the baseline scenario, the golden plovers and lapwings were occupying the same area. It is therefore appropriate to deliver mitigation for the two species within the same area. The reference to Musgrove *et al.* 2007) is misleading as it refers to counts of waterbirds throughout an entire estuary (and its hinterland). The Applicant is confident that the counts of golden plovers and lapwings in the arable fields during the baseline surveys were accurate; their preference for short-sward vegetation and flocking behaviour is testament to the ease of counting them in such habitat. These species are not known to favour hiding in reedy habitat at the field margins.
68	The methodologies adopted for the bird counts and subsequent peak mean bird days, could have a different outcome if a different method of counting was adopted. For instance, Musgrove et al (2007) states; '… (some birds may use adjacent non-wetland habitat), and as a statutorily designated site for nature conservation (which may be constrained by the need to follow boundaries easily demarcated in planning and legal terms). It should be recognised that the boundary of a site for counting may even differ between different water bird surveys, particularly where different methodologies are employed.'	As discussed above, the reference to Musgrove *et al.* 2007) is misleading as it refers to counts of waterbirds throughout an entire estuary and is often defined by count sectors used by the Wetland Bird Survey (WeBS) core counts. Birds such as golden plover and lapwing may be under-represented by WeBS core counts, as they often use nearby non-wetland agricultural habitat outside of the WeBS count sectors. The baseline surveys for the Development comprised counts of birds using the Development site and adjacent intertidal zone. For golden plover, lapwing and brent goose, these were accurate counts in each field or count sector, which were easily and completely visible to the surveyor and therefore the peak-mean counts for each species are accurate.
69	Natural England (NE) in their letter dated 26 January 2017, recommend that construction take place outside of the wintering period. However, that would then clash with the bird nesting season, in particular the lapwing,	Construction will take place throughout the year. However, seasonal restrictions on certain locations of construction activity have been set out in the outline SPA Construction Noise Management Plan (SPA CNMP) [APP-243] to minimise or avoid disturbance to breeding and wintering birds. Further

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	especially vulnerable being a ground nesting bird. Furthermore, the marsh harrier's nests are located in dense, marshy vegetation or crops. Raptors: a field guide for surveys and monitoring, comment that desertion is very likely when marsh harriers are incubating or when there are chicks. Marsh harriers find nesting sites as early as January and their defence territory, in East Anglia for example, can range from 569 ha to 1,407 ha during nesting and up to 7km for hunting. The females are slightly less. The offer by CHS of 8m either side of the ditches is clearly less than adequate when taking the large foraging area required by the marsh harrier into consideration. Plus, the activity that will ensue during the construction stage is likely to have a significant negative impact on this SPA species.	measures to protect nesting birds, as well as additional measures to protect nesting marsh harriers, are set out in the outline Breeding Bird Protection Plan (BBPP) (Appendix B of the Outline Construction Environment Management Plan) [APP-205].
Further evidence		
70	The Swale Designated sites NE. Light pollution	The scientific and grey literature available concludes that the bird collision risk from solar panels is very low, and that there is likely to be more of a collision risk presented by infrastructure associated with solar developments, such as overhead power lines. However, there will be no additional overhead power lines as a result of the Development and the existing 11 kV overhead line will be undergrounded.
71	The Swale SPA, dark-bellied brent goose and dunlin assessment on threats11 cites the introduction of light as a perceived threat. The pressure description comments as follows 'Direct inputs of light rom anthropogenic activities. …attraction to light sources can result in birds directly colliding with structures…'	
72	For both SPA species the attraction to light is cited as a threat. The risk of collision, disorientation, exhaustion, and predation are a few of the negative effects of light pollution from security lighting or maybe even reflection at night of the moon on the panels. No research has been done to date on the effect of night-time illumination of solar panels, so this could be potentially catastrophic with the proposed solar farm intending to cover such a vast area, in close proximity to waterbodies, the Swale SPA, Ramsar, SSSI and MCZ.	
73	The Environmental Statement. Chapter 5, development description, point 141 states 'Visible lighting, which will be manually controlled and switch on only when activated by passive infra-red (PIR) sensors for security/emergency purposes, will be deployed around the electrical compound and at the transformers within the fields of the solar PV arrays.' The BRE Planning guidance for the development of large scale ground mounted solar PV systems12 states, developers should minimise the use of security lighting – and any lighting should use passive infra-red (PIR) technology and installed minimising glare, light pollution and impacts on biodiversity, particularly bats, they advise that lighting is not used unless absolutely necessary. CHS fail to supply a	The potential effects of lighting on birds has been assessed in ES Chapter 9: Ornithology [APP-039] and the Report to Inform an Appropriate Assessment (RIAA) [APP-026] in combination with noise and visual disturbance during the operation of the Development. The effect will be of negligible magnitude and no likely significant effects will occur. The Applicant provided further information on the PIR triggers in the answer to first written question 1.1.36 [REP2-006], bats are not expected to trigger the lighting. Lighting within the solar park area will be located at the transformer locations as set out in Table 5.7 of Chapter 5 - Development Description of the ES [APP-035]. Further detail on control of lighting in relation to ecological receptors is set out in the outline LBMP [APP-203] and the outline CEMP [APP-205]. Updated versions of these

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	map detailing the position of all the lighting. They fail to consider the effects of lighting on winged insect behaviour such as moths which are attracted to light, and in turn the effect that will have on predators such as bats. Bats can also be negatively affected by the presence of light (Stone et al 2009)13. Furthermore is it likely that bats may trigger the lights to come on?	documents have been provided at Deadline 3 (LBMP document reference 6.4.5.2, revision B; CEMP document reference 6.4.5.4, revision B).
Noise pollution		
74	Maria Kravchenko & Igor Nosov 2011 state 'wild animals are very sensitive to noise because their survival totally depends on the ability to focus on the sounds.' They go on to say 'Since motocross as a sport is a non-natural phenomenon and is organised by people, the pollution resulting from it can be classified as man-made. Consequently, nature does not have an adequate capability to absorb the emissions in a way that will not disturb the balance in the ecosystems.' Whilst this development is not a motocross it will, during construction, inevitably have vehicle movement on site and personnel, and during operation there will be noise from inverters, corona noise from overhead powerlines and loud noise from the switch. This cumulative effect is highly likely to cause disturbance to sensitive fauna including both farmland birds, mammals and water birds. NE's Landscape Character Assessment identified 159 National Character areas in England, providing a national level database.	Disturbance to birds has been fully assessed in ES Chapter 9: Ornithology [APP-039] and the Report to Inform an Appropriate Assessment (RIAA) [APP-026].
NCA Profile: 81 Greater Thames Estuary (NE473)		
75	is as follows: 'The Greater Thames Estuary National Character Area (NCA) is predominantly a remote and tranquil landscape of shallow creeks, drowned estuaries, low lying islands, mudflats and broad tracts of tidal salt marsh and reclaimed grazing marsh that lies between the North Sea and the rising ground inland.' Were this solar farm to go ahead then this tranquillity that NE describes will be lost with a likely negative effect on the fauna.	Effects on avian and non-avian ecology have been assessed in ES Chapter 8 - Ecology [APP-038] and Chapter 9 - Ornithology [APP-039].
Visual Disturbance		
76	The Swale SPA, dark-bellied brent goose and dunlin assessment on threats, cites visual disturbance as a perceived threat. For both species visual disturbance can greatly disturb taxa in a number of ways, such as human activity, personnel movements, taking flight as a consequence of visual stimuli, loss of roosting and feeding habitat. The paper notes that brent geese numbers doubled in nondisturbed areas, which one would expect.	Disturbance to birds has been fully assessed in ES Chapter 9: Ornithology [APP-039] and the Report to Inform an Appropriate Assessment (RIAA) [APP-026].
Government Policy		
77	The publication: A Green Future: Our 25 Year Plan to Improve the Environment states that	More information on the need for the Development in the context of Government policy is set out in the Statement of

Ref.	Statement	Applicant's Comment
	the Government intends to 'set gold standards in protecting and growing natural capital…. We will take into account, the often hidden additional benefits in every aspect of the environment for national wellbeing, health and economic prosperity, with scientific and economic evidence to the fore.'	Need [APP-253] submitted with the Application, it's addendum [AS-008] and the Applicant's response to the Statement of Need submitted by the Graveney Rural Environment Action Team (see Deadline 3 submission document reference 11.4.10).
78	Building a large-scale solar farm, battery storage area and ancillary infrastructure adjacent to internationally designated areas and on established functionally linked land, does not fit with the Government's 25 Year Environment Plan. The available evidence clearly demonstrates that the solar farm should not be built within such a sensitive biodiversity opportunity area, environmentally sensitive area and a high landscape area. However, the EA's MEASS project for a managed retreat does fulfil these criteria. Natural Capital Committee requires 'solid foundations: comprehensive, reliable data…' No such data currently exists, as research is in its infancy in regard to traditional solar farms and nonexistent in regard to solar farms of this scale, in this location type and of this orientation, with the use of battery storage.	A Statement of Common Ground has been agreed between the Applicant and the Environment Agency in May 2019 [AS-017] which reflects the current status of discussions with regard to the MEASS.
79	The EA's plans for Graveney Marshes completely fit with Point 5. Of the Governments 25 Year Plan: Reducing risks from flooding and coastal erosion; i. Expanding the use of natural flood management solutions. This is exactly what the EA plans for this area and what Graveney Marshes should naturally be, a salt marsh.	
80	Chapter 2; Recovering nature and enhancing the beauty of landscapes. 1. Protecting and recovering nature i. Publishing a strategy for nature ii. Developing a Nature Recovery Network The proposed solar farm does not fit with either of the above criteria, whereas the EA's plans do. 2. Respecting nature in how we use water i. Reforming our approach to water abstraction CHS stated their intention to consider water extraction from the ditch network and surrounding waterbodies. This does not fit with the Government's policy above. Chapter 6; Protecting and improving our global environment 1. Providing international leadership and leading by example i. Tackling climate change ii. Protecting and improving international biodiversity	The updated version of the outline LBMP [APP-203] submitted at Deadline 3 provides further detail of water control measures to be used on site to provide benefits in water levels. Beneficial effects on water quality are predicted in Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground conditions of the ES [APP-040] due to the cessation of intensive agricultural activities onsite (e.g., paragraph 129).
81	The proposed solar farm does not fit with the above criteria due to the effect on protected	

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	species and biodiversity existing on site now and the rising sea levels, coastal squeeze and loss of internationally important habitat. Graveney Marshes is the EAs preferred choice for managed retreat.	
Other reports and publications		
82	The implementation of the development of large-scale solar farms as a sustainable and environmentally friendly alternative to usual utility sources, could increase environmental degradation locally and regionally (Lovich and Ennen 2011)14. The overall number of peerreviewed research on renewable energy per se has increased since 1991. However only 7.6 per cent of all research papers covered environmental impacts and only 4 per cent included discussions of ecological consequences and fewer than 1 per cent contained information pertaining to environmental risks and no information is available on the effects of solar energy development on wildlife. Since Lovich and Ennen wrote their paper, there has been some research on solar farms and their effect on wildlife which are cited in this written representation. Furthermore, all research reviewed for this written representation, up to 2011 and since 2011, state that more research and study is urgently required.	The Applicant is content that the ecology impacts of the Development have been fully addressed in Chapter 8 - Ecology of the ES [APP-038]. Answers to first written questions 1.1.1 and 1.1.4 by Natural England, KCC, SBC, CCC and KWT are supportive of this position [AS-023].
83	Hotker et al (2005)15 state in their publication; 'Impacts on biodiversity of exploitation of renewable energy sources: the example of birds and bats'; 'the focus is on wind energy as there is only little information on the impact on birds and bats of other sources of renewable energy.' They go on to say that there is a need for more research into renewable energy, which is especially applicable for solar farms. They specifically mention the negative effect on breeding and migrating birds and other flora and fauna and that any effect is unknown. They comment that there is no data available on the disturbance, displacement or on collision mortality, which is especially concerning, due to water birds mistaking solar cells for water surfaces at night. They reiterate this by stating 'Studies analysing the extent of impacts on solar parks on bird populations (and on other taxa) are urgently needed…The populations must be observed at least over two years before and at least two years after the installation of the solar power plant. In addition, a control site should be set up which is similar to the solar power plant, but without solar cells...the area should also be searched for collision victims.' They also recommend that before and after studies of breeding and	As stated in this comment, the paper cited focusses predominantly on wind energy, and pre-dates the deployment of large-scale ground mounted solar PV development in the UK. It is therefore considered to be of limited relevance. Solar PV is a mature technology, as of April 2019[4], the UK had 4,387.4 MW of installed capacity of ground mounted solar PV developments of 5 to 25 MWp installed capacity and 1,539.5 MWp of installed capacity of developments of over 25 MWp. The Applicant is not aware of evidence from these installations, including many near water, or from floating solar installations, which points to an ornithological collision risk issue. Ornithological surveys have been undertaken as reported in Chapter 9 - Ornithology of the ES [APP-039], and post-construction ornithological monitoring is proposed as set out in the updated version of the outline LBMP [APP-203] submitted at Deadline 3 (document reference 6.4.5.2, revision B).

[4] https://www.gov.uk/government/statistics/solar-photovoltaics-deployment

Ref.	Statement	Applicant's Comment
	nonbreeding bird populations be carried out. CHS have carried out no such research.	
84	NE's commissioned publication 'Evidence review of the impact of solar farms on birds, bats and general ecology (NEER012)16' 2017, concludes 'When considering site selection for utility scale solar developments it is generally agreed that protected areas should be avoided. This is reflected in the scientific literature where modelling approaches include many factors such as economic considerations and visual impact but also often avoid protected areas such as SPAs. This is echoed by organisations such as NE and the RSPB that recommend that solar PV developments should not be built on or near protected areas. As sensitive species and habitats are not necessarily restricted to the geographical boundaries of protected areas.' They go on to say how 'imperative' that research is undertaken into the potential interactions between solar PV arrays and biodiversity, especially sensitive habitats and species. The publication stipulates the importance of further research into the placing of panels in close proximity to protected areas and functionally linked land in order informed decisions can be made and to understand the impacts of solar farms on ecologically functionally connected land and other habitats.	Monitoring proposals are set out briefly in the outline LBMP, which will be updated at Deadline 3 (document reference 6.4.5.2, revision B) and Deadline 4 to include further detail in response to consultee submissions during the Examination.
85	Another commissioned report by NE (Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – a review of authoritative decisions)17 is used as a referencing bar to aid decisions on case work. The publication states clearly that once functionally linked land has been identified and established (Graveney Marshes has been both identified and established as functionally linked) it must be afforded the same material considerations as if it were the designated area, such as a SPA, for example. The publication states that where effects are likely to have a major effect and there is little or no data to be sure there would be no harmful and negative effect on the integrity of a site, regarding population of site designated protected species, authorisation has been denied.	The assessment presented in ES Chapter 9: Ornithology [APP-039] and the Report to Inform an Appropriate Assessment (RIAA) [APP-026] identified the Development site as functionally linked to The Swale SPA. The Applicant has presented the best available evidence regarding the potential effects of the Development on birds associated with The Swale and has proposed mitigation on a precautionary basis to enable the conclusion that there would be no adverse effect on the integrity of the protected site.
86	The publication makes reference to the importance of case law to the decision making process and warns that too lenient an interpretation in considering potential harm to designated areas and the likely subsequent deterioration of protected habitats and species, could pave the way for a legal challenge through domestic or European Courts for failure to comply with The Habitats	

Ref.	Statement	Applicant's Comment
	Regulations.	
87	Several case studies refused development because of being functionally linked. These include SPA functionally linked areas refused due to displacement, potential loss of roosting area outside of an SPA and the development site considered to be prime winter feeding grounds for dark bellied brent geese from a nearby SPA, which found - an adverse effect on integrity (AEOI) existed.	
88	The Department for Communities and Local Government's publication Planning practice guidance for renewable and low carbon energy states at point 11. 'The expectation should always be that an application should only be approved if the impact is (or can be made) acceptable'	
89	With a solar farm on such a vast scale as this, with unproven technology, directly adjacent to internationally designated areas, on a site itself designated as environmentally sensitive, a biodiversity opportunity area, of high landscape value and functionally linked and with lack of scientific evidence on the effects on the surrounding internationally protected flora and fauna, we fail to see how can be made to be or is acceptable on any level. Point 15 states '…, it is important to be clear that: • The need for renewable or low carbon energy does not automatically override environmental protections • Cumulative impacts require particular attention, especially the increasing impact that wind turbines and large-scale solar farms can have on landscape and local amenity as the number of…. solar arrays in an area increases • Local topography is an important factor in assessing whether wind turbines and large-scale solar farms could have a damaging effect on landscape and recognise that the impact be as great in predominately flat landscapes as in hilly or mountainous areas • Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting	These issues are addressed in detail in the ES submitted with the DCO Application. The Applicant submitted a written representation in respect of Policy and Procedure at Deadline 2 [REP2-026] which is also relevant to these comments.
90	Point 16 states 'Distance plays a part, but so does the local context including factors such as topography, the local environment and near-by land uses. Point 25 States…'factors to bear in mind include: • The effect on a protected area such as an Area of Outstanding Natural Beauty or other designated areas • The colour and appearance of the modules, particularly if not a standard design.	These factors have been considered in Chapter 7 - LVIA [APP-037] of the ES.

Ref.	Statement	Applicant's Comment
91	Point 26 states 'The deployment of large-scale solar farms can have a negative impact on the rural environment…However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively.	
92	Point 27 states concerning factors locally: • 'The effect on landscape of glint and glare…and on neighbouring uses and aircraft safety • Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting…. careful consideration should be given to the impact of large-scale solar farms on such assets. …a large-scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset.'	Glint and Glare impacts are assessed in Chapter 17 - Miscellaneous Issues of the ES [APP-047]. A clarification note on glint and glare has also been provided at Deadline 3 (document reference 11.4.2). Chapter 12 - Cultural Heritage and Archaeology of the ES [APP-042] assesses the impacts of the Development on heritage assets and historic landscape.
93	All the way through this planning guidance it warns of the negative effect and cumulative negative effect of not considering protected areas, the topography of the land and the heritage. Heritage can often be the landscape rather than buildings, though in this case it's both, and landscape type is important to fauna when considering predation, nesting sites and feeding/roosting sites.	
94	BRE Planning guidance for the development of large-scale ground mounted solar PV systems is industry 'best practice guidance' document supported by the EU and BRE National Solar Centre and founded by 24 independent solar energy providers. They all recommend that ground mounted solar PV projects, over 50kWp, should use brown field sites, contaminated land, industrial land or extremely poor farmland of grade 3B or below. Graveney Marshes is grade 3 and 2. They go on stating land selected should aim to avoid affecting the visual aspect of landscape and maintain the natural beauty. The publication talks about soil stripping and says the soil removed due to construction of compounds, access roads, cable trenching etc. should be retained and replaced once works have concluded. We understand that soil on site is to be excavated and used for the bund encircling the battery storage, thus removing valuable topsoil and altering the environment considerably.	The Development site is Grade 3b arable land as set out in the Agricultural Land Classification report submitted with the Application [APP-244]. Soil removed due to access roads, cable trenching etc. will be retained and replaced or redistributed once works have concluded. Soil and other material for the construction of the bund is expected to be predominantly sourced from the ground within the electrical compound area.
95	Chapter 5 of the Environmental Statement, Development description point 136. States 'The fence will incorporate mammal gates at regular (every 50m (164')) intervals to avoid the fence acting as a barrier to the movement of mammals through the development site. The BRE Planning guidance for the	The Applicant considers this requirement to have been addressed by the fence design referred to in Chapter 5 - Development Description of the ES [APP-035].

Ref.	Statement	Applicant's Comment
	development of large-scale ground mounted solar PV systems recommend '…so as to minimise landscape and visual impact on the rural scene, to minimise the use and height of security fencing, and that a gap is left around the whole perimeter of the fencing to allow the immigration and emigration of small mammals and reptiles, and large mammal gaps should be installed ensuring continued access by large mammals such as foxes and [redacted].'	
96	CHS, whilst allowing for mammal traps within the perimeter deer fencing, fail to acknowledge the need for smaller mammals to be able migrate back and forth across the site as recommended by BRE Planning guidance for the development of large-scale ground mounted solar PV systems. Furthermore, we feel 50m intervals for larger mammals to be too infrequent and thus the fencing will serve only to further fragment the habitat and reduce connectivity.	No mammal traps are proposed within the perimeter deer fencing. The Applicant has committed to installing mammal gates in the perimeter fencing through measures in the Outline LBMP [APP-203] and the updated version of that document submitted at Deadline 3. The design of the fence, i.e., the use of stock proof fencing as shown in Plate 5.10 of Chapter 5 - Development Description of the ES [APP-035] will allow smaller mammals to move freely.

2.8 REP2-066 CPRE Kent - WR on Flooding

Table 2.8: The Applicant's Comments on CPRE KENT Written Representation (Flooding)

Ref.	Statement	Applicant's Comment
FLOODING		
Description of flooding from modelling		
1	The Flood Risk Assessment and the Coastal Flood Modelling reports describe the results of flood analysis in terms of 'flood depths' (see for example Table 1 of Section 3.1.1 of the Environmental Statement Technical Appendix A 10.1 or Table 3-2: Breach Parameters, of the Coastal Flood Modelling Report).	Flood levels have been used in the Flood Risk Assessment, Appendix 1 [APP-227] to derive flood depths onsite, in order to inform the site design.
2	Flood impact is described with respect to ground levels which vary throughout the site. Industry best practice for describing flood impact is generally 'flood elevation' with respect to an Ordnance Datum. This provides an objective description of a flood to a national framework and can therefore be used throughout the UK.	
3	It is disappointing that the developer has used an unprofessional and unscientific approach to the description of flood impact which cannot be supported by other objective evidence. No reference is made to historically extreme flood events, such as in 1953 or 1978. Evidence to describe the impact of the 1953 event is readily available – as shown in the attached photograph of the Nagden defence in "The East Coast Floods" by Dorothy Summers, 1978 and again in our submission of journalistic pieces of the day such as these from the Herne Bay Press Ltd (Appendix 1).	The Flood Risk Assessment [APP-227] references extreme flood events in 1953, 1978 and 2013 in paragraphs 8 and 71. A SoCG has been agreed with the EA which confirms the acceptability of the FRA [AS-017].
4	It is understandable that analysis of the impact of a flood event needs to be described in relation to its impact on the site, however, in terms of comparing flood events between sites and historical data, reference should be made to 'flood elevation' with respect to Ordnance Datum. This is a significant failing of the Flood Risk Assessment and Flood Modelling reports because no attempt can be made to compare the impact of the modelled flooding with that of historic recorded flooding. Such comparison provides a means of benchmarking the accuracy of flood modelling. Without this means of comparison the reports cannot be validated, and any results should be viewed with extreme caution and are basically unscientific.	The authors of the Flood Modelling Report, JBA Consulting, undertook the flood modelling that forms the basis of the report on behalf of the Environment Agency in 2015 as set out in Section 1.1 of the Report (Appendix 1 to the FRA [APP-227]). The Applicant is confident that the modelling undertaken is accurate.
Meteorological Conditions		
5	The Coastal Flood Modelling report does not describe the fundamental meteorological conditions which would have existed to generate the worst sea-state conditions. For example, Section 2.1 of the report does not elucidate upon such parameters as extreme water levels and wind speed or direction, surge magnitude and wave action. Again, there appears to be a lack of objectivity in the	The methodology used in the Flood Modelling Report (Appendix 1 to the FRA [APP-227]) is set out in section 2.1 which references DEFRA guidance on use of extreme water levels and wind speeds in flood modelling. The Applicant is confident that the modelling undertaken is accurate.

Ref.	Statement	Applicant's Comment
	report which brings into question the reliability and unscientific nature of the results.	
Breach Conditions		
6	No supporting evidence has been provided to demonstrate how the breach parameters were identified in Section 3.2 of the Flood Modelling Report.	Section 3.2.1 of the Flood Modelling Report (Appendix 1 to the FRA [APP-227]) states that the breach parameters were taken from the EA Modelling and Forecasting Technical Guidance Note 2017. The breach parameters were agreed with the EA as set out in section 3.1 of the FRA.
7	The engineering assumptions made are not supported with evidence for validation. This evidence would be expected to be based on original historical conditions such as records, photographs or papers from post flood conferences.	
Implications of the Environment Agency's draft National Flood and Coastal Erosion Risk Management Strategy for England		
8	The proposed development is contrary to policy for residual risk of flooding contained within Environment Agency's draft National Flood and Coastal Erosion Risk Management Strategy for England. For instance: 1. The EA National Strategic Objective 1.1, states there is a proposal to "raise the National Standard of flood resilience from 1 in 200 year to 1 in 1000 year" (for Faversham) - this means the national strategy increases the need to use Graveney as a flood storage area in accordance with the Environment Agency's MEASS. 2. The EA National Strategic Objective 1.2, states "making decisions on land use which reflect current and future flood risk means that development must be directed away from areas at risk, using natural flood management such as realignment" (at Graveney as proposed in the Environment Agency's MEASS) - this supports the Environment Agency's proposal to realign.	A Statement of Common Ground has been agreed between the Applicant and the Environment Agency in May 2019 [AS-017] which reflects the current status of discussions. The MEASS proposal is not to "use Graveney as a flood storage area". Managed realignment is proposed to manage coastal squeeze in the strategy area and create an area of intertidal habitats to fulfil habitat regulations objectives.
Environment Agency Medway Estuary and Swale Strategy (MEASS)		
9	Not only is the proposed development contrary to Government policy (see above). Any delay in implementing the proposal to realign defences as a result of this development, will increase the flood risk to Faversham town, by virtue of the timescale of sea level rise.	The Applicant disagrees with this statement. A Statement of Common Ground has been agreed between the Applicant and the Environment Agency in May 2019 [AS-017] which reflects the current status of discussions.
Representations from the Environment Agency		
10	CPRE Kent is concerned that the Environment Agency has "no concerns in terms of flood risk" as stated in Chapter 10 of the Environmental Statement (page 10-12). This statement appears contrary to the latest policies and draft objectives for the Agency as explained above.	The EA are the regulatory body with responsibility for managing flood risk. A Statement of Common Ground has been agreed between the Applicant and the Environment Agency in May 2019 [AS-017] which reflects the current status of discussions.
11	The same applies to the Environment Agency's considerations for the Medway Estuary and Swale Strategy (MEASS), insofar as that the proposed solar park will have a life of 40 years. This is well into the era for	The MEASS proposals will not be affected if the new wording of Requirement 16 in the updated dDCO submitted at Deadline 3 (document reference 3.1, revision C) are accepted by the Secretary of State. This wording provides for decommissioning of the Development if managed realignment

Ref.	Statement	Applicant's Comment
	MEASS and means a significant delay in providing reduced flood risk to Faversham.	is taken forward by the EA.
Legal issues/financial risk to the Government		
12	Currently, the maintenance of the sea defences at Graveney are carried out under permissive powers within Section 165(2) of the Water Resources Act. These powers are not transferable to private developers. This means that the Environment Agency will still be the only Authority empowered to carry out works in the event of damage to the sea defences. Accordingly, Cleve Hill Solar will not necessarily be liable for the cost of repairs – resulting in a drain on public finances. It would be possible for the Environment Agency to enter into a Commuted Lump Sum Agreement with the applicant in order to continue maintenance, but this again involves risk to public finances.	A factual account of continuing flood defence management onsite is set out in the Statement of Common Ground which has been agreed between the Applicant and the Environment Agency in May 2019 [AS-017].

2.9 REP2-067 CPRE Kent - WR on Hydrology

Table 2.9: The Applicant's Comments on CPRE KENT Written Representation (Hydrology and Soil Microclimate)

Ref.	Statement	Applicant's Comment
HYDROLOGY AND SOIL MICROCLIMATE		
Introduction		
1	Photo-voltaic (PV) power generation, as proposed at Cleve Hill, is recognised as a practicable landbased renewable option, but its adoption has the potential to change the ground-level microclimate to an extent that can affect the fundamental plant-soil processes that govern the carbon-capture dynamics of the development site. This can lead to an overall reduction in carbon-sequestration capacity to set against the advantages gained by increased local power generation.	The grassland habitats and wider landscaping proposed as part of the Outline LBMP [APP-203] are likely to form at least an equivalent carbon sequestration function to the existing arable habitats onsite. This is considered to be a conservative assumption, as the cessation of agricultural activity onsite will have overarching decarbonisation benefits through the direct and indirect use of fossil fuels to produce agricultural chemicals and to manage arable land.
2	Soil constitutes the largest single store of terrestrial organic carbon: containing more than vegetation and the atmosphere combined. Biological plant-soil processes regulate much of the terrestrial cycle and thus govern soil carbon storage, and release of greenhouse gas emissions of CO_2, CH_4, and N_2O. There is a risk that large areas of productive arable farmland and grazing, with its natural capacity for carbon capture, will be lost in order to secure a disproportionately small gain in net power output.	
3	There are few references to studies dedicated to the impact of solar technology on wetland hydrology. Those that are quoted (below) deal, for the most part, with site-preparation and installation works, and are therefore confined to the early years of the life of a scheme. These, however, also serve to highlight some issues of special concern, including soil compaction by heavy plant and, in the case of Cleve Hill, under-lain as it is by alluvium and clay, the panning and waterlogging of the soil profile with its implications for long-term soil quality and biodiversity throughout the 480ha of productive farmland.	The Development is proposed on drained arable land which does not have wetland hydrology. The existing intensive arable cultivation has impacts which will be mitigated by the period of "rest" which would be allowed by the presence of the solar array. For example, a pan often develops on arable land just below plough depth due to compaction and repeated reworking of the soil. A continuous period without compaction, chemical inputs or ploughing should allow a more natural soil profile to develop over time, benefitting soil quality and biodiversity.
4	There will also be long-term implications, with building development in Kent already forecast to cover significant areas of land over the next 25 years. As the panels will be a long-term feature in the landscape, they will result in a loss of a valuable agricultural resource.	As set out in the Agricultural Land Classification report submitted with the Application [APP-244], the arable land is grade 3b, not best and most versatile land.
5	The following sections feature summaries of two studies relating to the impact of PV solar power development on wetland sites, and in particular, the implications for the UK commitment to the control of global warming.	The Applicant notes this comment.
Solar in Wetlands: Vermont Department of Environmental Conservation		
6	This paper (referred below) addresses the impact of siting of solar panels on wetlands and wet meadows. It outlines a project led by	This paper is of limited relevance to the Development, which is not sited on a wetland, or wet meadow, however the Applicant notes that the recommendations and best

Ref.	Statement	Applicant's Comment
	the Vermont Department of Environmental Conservation, focusing on the possible consequences of the loss of these natural assets in sustaining carbon sequestration.	management practices set out in the paper [REP2-068] are largely addressed by the Development.
7	In response to rising concerns about the seemingly rapid expansion of solar technology on greenfield sites, the Department was tasked with deciding whether, or not, the development of PV on wetlands or wet meadows should be promoted. The findings are relevant in the assessment of the Cleve Hill proposal, where the perceived benefit in the form of 'green' solar energy could be off-set, at least in part by a loss of carbon-control capacity.	
8	There are studies in hand with regard to on the impact of solar fields, but many outstanding questions remain with regard to their installation and maintenance; as well as particular concern that solar projects will continue to have their impact on wetland eco-systems, long after decommissioning.	
Wind farm and solar park effects on plant-soil carbon cycling: uncertain impacts of changes in ground-level micro climate		
9	In this study the authors emphasise that while land-based solar generation is rapidly expanding, our understanding of the operational impact on bio-carbon cycling is limited. Photo-voltaic panels can significantly change local ground-level climates to a degree that can affect the fundamental plantsoil processes that govern carbon dynamics. It is therefore essential that the exact nature and extent of these changes in microclimate is understood, in order to evaluate the balance of costs and gains in renewable energy.	This paper [REP2-069] does not describe the likely CO_2 sequestration changes as a result of changing arable agricultural land-use to a solar development with grassland land-use and is therefore considered to be of limited relevance to the Development. The grassland habitats and wider landscaping proposed as part of the Outline LBMP [APP-203] are likely to form at least an equivalent carbon sequestration function to the existing arable habitats onsite, taking into account the area of land beneath solar panels, and the conclusions of the Microclimate and Vegetation Desk Study submitted with the Application [APP-204], which was co-authored by one of the authors of this paper [REP2-069]. This is considered to be a conservative assumption, as the cessation of arable agricultural activity onsite will have overarching decarbonisation benefits through the existing direct and indirect use of fossil fuels to produce agricultural chemicals and to intensively manage arable land. It is likely that the land-use change, independent of the solar park and energy storage proposals, could result in beneficial effects overall in respect of carbon sequestration, reduction and offsetting due to the land use and landscaping scheme proposed. A lifecycle analysis of the carbon cost of the Development infrastructure is set out in Chapter 15 - Climate Change of the ES [APP-045].
10	With the prospect of a substantial global increase in solar generation, there is as yet limited knowledge on the corresponding changes in micro-climates and their influence on the processes that govern plant-soil carbon cycling and storage.	
11	These factors under-pin food and timber production, water purification and nutrient retention. Ground-mounted PV arrays also have the potential to affect albedo - cause shading, intercept precipitation and influence wind speed and turbulence at ground level – as explained at Appendix 1 to this representation (Direct Insolation Measures for Cleve Hill).	
12	Soil moisture and water table depth also have a strong influence, with productivity and decomposition to CO_2 increasing with soil moisture, albeit with an upper threshold, above which, rates decrease – reflecting the response of different plant species to variations in soil moisture. Soil carbon	

Ref.	Statement	Applicant's Comment
	sequestration may also increase or decrease, with decreases more likely in regions of relativity low solar radiation.	
13	With regard to indirect effects on soil carbon cycling the conclusion is that over a period of 20-25 years we should expect changes in vegetation, and hence, a corresponding change in carbon cycling and sequestration. There is evidence that the influence of plant functional type on carbon cycling can be greater than climatic effects. Different albedos and transpiration rates are associated with different plant types and this may affect soil moisture, which is a strong carbon cycle control component.	
14	Changes in the soil microbial community can also be significant as components of terrestrial carbon cycles in the uptake of atmospheric CO_2 and CH_4, and the release of these gases through respiration and methane output. The soil microbial community is also influenced by changes in the plant community (and vice-versa). As a general case, increased CO_2 brings increased soil carbon. Numerous studies have examined the inter-action of temperature and soil moisture, which are the two variables governing productivity and decomposition. For example, warmer and drier conditions have been associated with increased respiration relative to production across a range of biomes. Other factors cited include: • nutrient status of the soil (NKP) • soil carbon sequestration under elevated CO_2 • trees more responsive than herbaceous species to increases in CO_2 concentration • micro-climate influence on carbon sequestration may also be tempered by plant acclimatisation	
15	There is also a need to determine the long-term operational impact of solar power generation on plant and soil carbon. The authors' advocate investigation of solar panel options on the following lines: • field assessment of the effects of solar park installations on the local climate (with potential for remote sensing); • field experiments in carbon-relevant hosting ecosystems to examine the effects of solar power – influenced microclimates on plant-soil carbon cycling in-situ; • controlled environmental studies examining the interactive effects of diurnal seasonal and annual microclimatic controls on plant-soil carbon cycling; and • • modelling that uses mechanistic understanding from field and laboratory	

Ref.	Statement	Applicant's Comment
	studies to upscale and forecast effects of land-based solar power generation on carbon cycling and greenhouse gas emissions.	
16	CPRE Kent notes that the authors' proposed further field study addresses the increasingly urgent need for a comprehensive assessment of the hydrological implications of the solar panel array at Cleve Hill. The programme should cover a period of at least three years in order to secure an approximation to the long-term average annual water balance for the site.	
Summary and conclusions		
17	There are concerns that the proposed solar PV panel array could change the vegetation and other natural characteristics of the Cleve Hill soil profile, to a degree that could significantly reduce its capacity for carbon-capture. This, coupled with the loss of 480ha of increasingly scarce grazing and productive arable land, would need to be set-against the relatively small gain in power generation that could, in any event, be secured from other, less environmentally vulnerable sources. The proposed field study should set out how much natural capacity for carbon-capture will be lost at Cleve Hill. This will no doubt, attract comment from the Committee on Climate Change3, who state: "The UK should set and vigorously pursue an ambitious target to reduce greenhouse gas emissions to 'net zero' … within 30 years", insofar as it could be seen to be at odds with the UK commitment to compliance with the provisions for control of global warming under the Paris Accord.	The Applicant has set out above that it is highly unlikely that the change in land-use proposed (excluding the solar park) will result in a significant change to the carbon sequestration potential of the land. The Development site area where the solar park is proposed currently consists predominantly (95%) of Grade 3b arable land. No grazing land will be lost as a result of the Development. The grassland habitats proposed within the Development site are proposed to be managed by controlled grazing, i.e., grazing land will be created. The Applicant disagrees that the Development represents a relatively small gain in power generation that could come from elsewhere. The Development is expected to generate enough renewable electricity to power the equivalent of 91,000 homes (see paragraph 1.4 of the Consultation Report [APP-022]). The Development is addressing the Government's Net Zero 2050 objective through the large-scale generation of renewable electricity. More information on the need for the Development in the context of Government policy is set out in the Statement of Need [APP-253] submitted with the Application, it's addendum [AS-008] and the Applicant's response to the Statement of Need submitted by the Graveney Rural Environment Action Team (Deadline 3 document reference 11.4.10).

2.10 REP2-070 Environment Agency

Table 2.10: The Applicant's Comments on the Environment Agency Written Representation

Ref.	Statement	Applicant's Comment
Application for a Development Consent Order for Cleve Hill Solar Park		
Consultation		
1	We are continuing to discuss the proposal with CHSP and have agreed a Statement of Common Ground on 22 May 2019. Our current discussions are primarily around the wording of Requirement 15.	This is agreed by the Applicant.
Written Representation		
2	Medway Estuary and Swale Coastal Flood and Erosion Strategy (MEASS) As explained in our Relevant Representation, the application does not fully explain the strategic value of the land on which the proposal is made to the Environment Agency.	The Applicant acknowledges the strategic importance of the Cleve Hill site to the EA. The Applicant looks forward to the publication of the adopted MEASS and continuing discussions with the EA.
3	The Medway Estuary and Swale Coastal Flood and Erosion Strategy (MEASS) sets out the Flood and Coastal Erosion Risk Management (FCERM) Strategy for the Tidal Medway Estuary, mainland Swale and the Isle of Sheppey. The aim of the Strategy is to protect people, properties, designated habitats and agricultural land. We have developed the strategy in partnership with Natural England and local authorities and through public consultation. The Strategy has been finalised and will be published shortly.	
4	Under European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora (also known as the 'Habitats Directive'), and the resulting Conservation of Habitats and Species Regulations 2010 (as amended), a Habitats Regulations Assessment is required where a plan or project may give rise to significant effects on European designated sites, known as Natura 2000 sites.	
5	The Habitats Regulations Assessment for the MEASS concluded that we need to create 535ha of intertidal habitat over the 100-year life of the strategy in order to allow the strategy to go ahead with providing flood protection to some 17,000 homes in the MEASS area. The normal method for creating intertidal habitat is by carrying out managed realignment, which entails building set-back defences inland of their current position, removing sections of the existing coastal defence, and allowing inundation of the site through successive tides.	
6	Our analysis of sites through MEASS, as well as predecessor strategies, highlights Cleve Hill as one of the top-ranking sites for managed realignment in the area, expected to yield around 200ha of intertidal habitat towards our requirements. It is one of eight sites which have been considered as suitable for creating intertidal habitat, all of which are needed to meet our 535ha obligation.	

Ref.	Statement	Applicant's Comment
7	We are discussing with the applicant how we can seek a 40-year time limit to the application to allow for planned managed realignment at the site within MEASS. The applicant has proposed a revised wording of requirement 15 and we are currently reviewing this.	The Applicant has included draft wording for requirement 16 (previously requirement 15) in the Deadline 2 update to the draft DCO [REP2-004]. The Applicant has discussed this with the EA on 3 July 2019 and will seek to agree the wording and incorporate in the next iteration of the draft DCO to be submitted ahead of Deadline 3 (document reference 3.1, revision C). This matter was also discussed at the ISH on the draft DCO (see Deadline 3 document reference 6.1.5 for a written summary).
3.1 DRAFT DEVELOPMENT CONSENT ORDER REVISION A (NOVEMBER 2018)		
8	Requirement 8 (Surface and foul water drainage) We suggest Kent County Council, as the Lead Local Flood Authority and the Lower Medway Internal Drainage Board (IDB) are consulted on this requirement rather than us as we no longer lead on surface water and have no drainage interests in this area.	This suggested change is noted and was included in the draft DCO submitted at Deadline 2 [REP2-004]. The Applicant is in dialogue with KCC and the Lower Medway IDB with regard to drainage interests in the area and expects to agree a Statement of Common Ground with both parties before Deadline 4.
9	Requirement 10 (Construction Environmental Management Plan) We agree with this requirement as outlined.	This is agreed by the Applicant.
10	Requirement 15 (Decommissioning) We are currently discussing the details around the wording for requirement 15.	The Applicant has included draft wording for requirement 16 (previously requirement 15) in the Deadline 2 update to the draft DCO [REP2-004]. The Applicant has discussed this with the EA on 3 July 2019 and will seek to agree the wording in advance of Deadline 3. This matter was also discussed at the ISH on the draft DCO (see Deadline 3 document reference 6.1.5 for a written summary).
11	Part 6 (Operations) We have discussed the future maintenance of the existing flood defences on the Order Land (Work No. 9) with the Applicant and agreed that in the event that the Authorised Project is implemented that this responsibility would fall to the Applicant. We support the proposals for achieving this as outlined in the Consultation Report and Chapter 5 of the Environmental Statement.	This is agreed by the Applicant.
12	5.1 Consultation Report This document states that we have indicated that managed realignment could take place around 50 to 100 years in the future. This figure is inaccurate. We are currently planning managed realignment for some point between the years 2039 and 2069.	This statement was based on previous correspondence with the EA set out in the Statement of Common Ground agreed in May 2019 (Appendix A to AS-017), however the Applicant acknowledges that discussions have progressed since June 2018 and acknowledges that the EA is planning managed realignment for some point between 2039 and 2069.
Environmental Statement		
Flood Risk Assessment (appendix 6.4.10.1)		
13	We are satisfied with the breach flood modelling undertaken to inform the Flood Risk Assessment and consider the flood mitigation measures included in the design of the site as suitable	This is agreed by the Applicant.
14	The proposed site area is located within Flood	The Applicant accepts the EA's position on this matter and an

Ref.	Statement	Applicant's Comment
	Zone 3, and the FRA makes reference to the proposed solar park use as 'Essential Infrastructure' i.e. 'Essential utility infrastructure which has to be located in a flood risk area for operational reasons'. The Secretary of State should be satisfied that there is sufficient justification to locate the development within an area of high flood risk.	agreed position is set out at EA-9 of the Statement of Common Ground agreed in May 2019 [AS-017].
15	There are existing flood defences protecting the development site to a 1 in 1000 year standard of protection, therefore it is important to note, as has been included within the DCO application, that if development is granted permission at this site we would expect the occupier to undertake maintenance of the existing flood defences that protect the site. The submitted FRA and breach flood modelling only account for climate change to 2070, therefore if development is proposed for a longer period, further climate change allowance to 2115 would be required.	The Applicant has included draft wording for requirement 16 (previously requirement 15) in the Deadline 2 update to the draft DCO [REP2-004]. The Applicant has made some further amendments to this wording following comments from SBC at the DCO Issue Specific Hearing on 18 July 2019, and this is included in the updated draft DCO submitted at deadline 3 (document reference 3.1, revision C). The Applicant discussed the principle and previous wording with the EA on 3 July 2019 and will seek to agree the updated wording in advance of Deadline 4. As the EA intends to undertake managed realignment between 2039 and 2069, the Development is not expected to operate beyond 2070 and therefore the modelling taking account of climate change to 2070 is appropriate.
Outline Landscape and Biodiversity Management Plan (appendix 6.4.5.2)		
16	As this site will become intertidal habitat in the medium/long term we are satisfied with plans set out in the LBMP that there will be no specific plans to enhance the areas for water voles beyond that proposed to support the licence application to Natural England	This is agreed by the Applicant.
7.5 Consents and Licences required under other legislation		
17	We note that the applicant has identified that they may require our consent for specific flood risk, abstraction and impounding activities. This should include any dewatering activities. The applicant should contact us to discuss	The Applicant intends to draft a further Statement of Common Ground to include consents and permits required. This advice will be taken into account in the drafting of that document, expected to be submitted ahead of Deadline 4.
Advice for the applicant		
18	We would like to offer the Applicant the following advice with regards to the management of waste on site. The CLAIRE Definition of Waste: Development Industry Code of Practice (version 2) provides operators with a framework for determining whether or not excavated material arising from site during remediation and/or land development works are waste or have ceased to be waste. Under the Code of Practice: • excavated materials that are recovered via a treatment operation can be reused on-site providing they are treated to a standard such that they fit for purpose and unlikely to cause pollution • treated materials can be transferred between sites as part of a hub and cluster project • some naturally occurring clean material can be transferred directly between sites. Developers should ensure that all contaminated materials are adequately	The Outline CEMP, Appendix A - Site Waste Management Plan will be updated ahead of Deadline 3 to include reference to the CL:AIRE Code of Practice (see document reference 6.4.5.4, revision B). Whilst the Phase 1 site investigation report [APP-229] identified that all onsite potential contamination risks are Low or Very Low, a Materials Management Plan will be implemented to control the import and reuse of materials associated with the construction of the electrical compound, including flood protection bund.

Ref.	Statement	Applicant's Comment
	characterised both chemically and physically, and that the permitting status of any proposed on site operations are clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays. The Environment Agency recommends that developers should refer to: • the Position statement on the Definition of Waste: Development Industry Code of Practice and; • the Environmental regulations page on GOV.UK Any re-use of excavated materials not undertaken formally using the CLAIRE DoWCoP would require an environmental permit for deposit, unless materials are solely aggregates from virgin sources, or from a fully compliant Quality Protocol aggregates supplier. Any deposit of materials outside of these scenarios could be subject to enforcement actions and/or landfill tax liabilities. Any waste removed from site must be accompanied by the appropriate duty of care paperwork and transported by an authorised waste carrier to an appropriately authorised facility. Any waste treated or re-used on site will require appropriate authorisation in the form of an environmental permit or exemption. The applicant should contact our East Kent Waste Team to discuss their plans on 0208 47 47 450 or via email at KSLEastKentWasteTeam@environment-agency.gov.uk.	
	We may need to add to or amend the matters set out in this Written Representation as further information is provided throughout the examination. I hope that these comments are helpful in setting out details to be considered during the examination.	The Applicant welcomes ongoing engagement with the EA.

2.11 REP2-074 Faversham & Oare Heritage Harbour Group

Table 2.11: The Applicant's Comments on Faversham & Oare Heritage Harbour Group Written Representation

Ref.	Statement	Applicant's Comment
Application by Cleve Hill Solar Park Limited for an Order Granting Development Consent for the Cleve Hill Solar Park Project		
1	My original objection to the Cleve Hill Solar Park proposal, as below, was made on an individual basis. As acknowledged by you on 13 June, in response to advice to you by Sue Akhurst on 12 June, I am writing now as Vice Chairman of the Faversham and Oare Heritage Harbour Group. I confirm that I wish to speak at the Issue Specific Hearing 3 on Landscape and Visual Amenity Matters, with particular area of emphasis on the visual impact from the sea and the Swale Estuary. I wish to illustrate the sort of impact that the proposed Cleve Hill Solar Park will have on the land and seascape, with consequent cultural and economic (touristic) effects. Please would you let me know whether or not there will be any facilities for slide projection at the hearing? Slides *Sample Illustrations of the existing land and seascapes (photo panoramas)* *Preliminary Overlays of the impact of the proposed development*	The slides enclosed with this WR were discussed at Issue Specific Hearing 3 on Landscape and Visual Amenity. The Applicant considers that the slides do not accurately depict visibility of the Development from the photograph locations. ES Figure 7.3A [APP-054] demonstrates that a very small proportion of the solar panels will be visible from a limited area of the sea. Viewpoint 15 [APP-100 and APP-078], taken on the north side of the Swale from a height of 3 m AOD give an indication of likely visibility of the Development from the Swale. The Applicant has provided cross-sections at Deadline 3 (document reference 11.4.7) to demonstrate this further.
2	Faversham and Oare Creeks have been nominated as one of the first two Heritage Harbours in the UK, to be designated by National Historic Ships and the Maritime Heritage Fund, as part of a national network of such maritime centres. As part of this process, the Group is already starting to work with other organisations in the vicinity along the North Kent coast.	Tourism impacts are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. The maritime history of the area is referred to under paragraph 90. Public perception of renewable energy Development is discussed in section 13.2.4.4. A negligible effect on tourism in Swale is predicted during construction (section 13.5.1.3) and operation (section 13.5.2.1) of the Development.
3	One of the principal features of the Heritage Harbour concept will include – indeed already does include – the cultural and visual attractiveness of Faversham and of its environs and surrounding villages, for visiting vessels to the Heritage Harbour havens, as well as for tourism generally – one can envisage very few if any such visitors wishing to view an industrialised landscape which the proposed development would present.	
4	These land and seascapes, of the mainland and of the Isle of Sheppey, have remained largely unchanged for centuries. Visitors by sea hundreds of years ago would recognise most of the landscape features they would see today. These are of essentially rural and agricultural nature and semi-wild marshland. Of course there have been some visual	These comments are noted.

Ref.	Statement	Applicant's Comment
	changes, principal amongst which are the unsightly, albeit utilitarian, electricity pylons which traverse the panoramas and the Cleve Hill substation. But it is not at all like the lower Medway and parts of the West Swale, nearby, which present a largely industrialised and unattractive aspect from the water, as well as from the land.	
5	The impact of the proposed solar park would be to industrialise a major area of what is at present unspoilt land, already well-used by wildlife and its observers. This would be not just a visual impact but a functional one too, with significant effects on a much wider area than its footprint alone.	The effects of the Development on habitats, birds and other wildlife are assessed in Chapter 8 - Ecology [APP-038], and Chapter 9 - Ornithology [APP-039] of the ES. Recreational impacts are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. The recreational and wildlife offer of the area is referred to under paragraph 90. Landscape and visual impacts are assessed in Chapter 7 - LVIA of the ES [APP-037]. Section 7.6.2.2 assesses visual amenity effects during operation on recreation and public amenity receptors. The assessment is supported by figures [APP-054] and visualisations [APP-063 to APP-196].
6	Adoption of solar power is an entirely worthy cause, although its advantages compared with other alternatives, such as wind and tide generated power remain to be proven, particularly when taking into account the embedded energy costs of manufacture and installation. But this proposed development is the wrong solution in the wrong place and should not proceed.	The drivers for the Development relative to other forms of low carbon energy generation such as onshore and offshore wind farms are considered in Chapter 4 (section 4.4.4) and are also set out in the Statement of Need [APP-253] submitted with the Application, it's addendum [AS-008] and the Applicant's response (Deadline 3 document reference 11.4.10) to the Statement of Need submitted by the Graveney Rural Environment Action Team [AS-035].

2.12 REP2-080 Faversham and Swale East Branch Labour Party

Table 2.12: The Applicant's Comments on Faversham and Swale East Branch Labour Party Written Representation

Ref.	Statement	Applicant's Comment
Response to Environmental Statement Chapter 6.1.13 Socio-Economic effects and tourism		
Anne Salmon BA MCD MRTPI comments:		
1	The site proposed for the solar power station with nearly 900000 solar panels and its associated roads, fencing, new culverts to some of the drainage ditches and battery storage in a bunded enclosure would occupy the greater part of the present open marshland between Graveney, Nagden and the sea wall between Faversham and Seasalter.	These comments are noted.
2	This site is located at the eastern end of the Borough of Swale, east of Faversham and adjacent and including a very small part of the marshland at the western end of the council area of the City of Canterbury at Seasalter on the road to Whitstable. It is on the north coast of East Kent. Therefore, it is not appropriate to consider the impacts of the scheme and associated works on either the whole of Kent, the whole of Swale District which also includes Sittingbourne and Sheppey or the whole of the council which covers Canterbury, Whitstable and Herne Bay and associated rural areas. If the whole districts or the county is the scale at which the impact on tourism or employment is considered, it is not surprising that the conclusion is that the impact will be defined as negligible.	Chapter 13 - Socio-Economics, Tourism, Recreation and Land-Use of the ES [APP-043] includes consideration of specific tourism receptors as set out under paragraph 90, and consideration of the effects on these receptors is discussed in section 13.5.1.3 for the construction phase, and section 13.5.2.1 for the operational phase. Lack of availability of data on the tourism economy at a local level relative to at district level also influenced the choice of study area. In light of the importance of the visitor economy to the area and the strategic aspirations for the sector, tourism was attributed high sensitivity in the assessment for Swale, Canterbury and Kent (section 13.5.2.1).
3	The appropriate scale to address the impact of the development on visitors is to look at the towns of Faversham and Whitstable and their environs. Swale Borough Council and other organisations promoting Faversham as a place to visit have majored on the town's historic buildings and townscape, its reputation for food and drink, its festivals which are mentioned in passing in the Socio-Economic and Tourism chapter and on walks in the countryside including the marshes around the town. Whitstable is a popular visiting place for weekenders and day trippers from London and this includes restaurants such as The Sportsman at Seasalter which has a national reputation for good food.	
4	Part of the attraction of Faversham and Whitstable is the open, unspoilt marshland close to the towns and between them which is accessible because of footpaths but quiet and remote because visitors can get away from roads and built-up areas. The footpaths around the site where the solar installation and battery storage is proposed comprise the Saxon Shore Way, expected to become the England Coast Path and other paths including ZR 485 which crosses the site from Nagden to	Tourism and recreational impacts are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. The recreational and wildlife offer of the area is referred to under paragraph 90. Public perception of renewable energy Development is discussed in section 13.2.4.4.

Ref.	Statement	Applicant's Comment
	the sea wall at Castle Coote. One of the most popular reasons to use these paths is to watch birds on the intertidal mudflats, but also to watch raptors and winter flocks of waders and Brent geese flying over the sea wall to land on the fields. Replacement of this large area by a small area at the east end would not have the same attraction for the birds or watchers of them.	
5	The surveys carried out by the developer in support of their view that the paths are not well-used and the impact on their use would be minor were taken on two days in July and two in August, not all at weekends and one in wet weather. A better measure of how the footpaths are used would have been to follow the advice that had been offered by Kent County Council and use a mechanical counter and use it to measure use all year. The sea wall and paths across the site are used by local people and visitors to walk through and round the site to enjoy views and to watch wildlife, particularly birds. Therefore, filling most of the arable fields on the marshes with densely-packed panels at 3-4 metres high with only narrow gaps for the ditches would create a much less attractive vista and this cannot reasonably be described as merely a subjective view. The coast path, ZR 484 is part of a long-distance path, the England Coast Path, but most users are not using it just to walk through the area on route to the next bit of the path. Because the path runs around a long section of marsh between Seasalter and Faversham and then comes right into Faversham itself before going on around more coastal marshland, the distance covered from Whitstable makes this part of the path almost a destination in itself.	The method, location and timing of 'Non-Motorised User' (NMU) counts were discussed and agreed with public rights of way officers from KCC. All surveys were undertaken using video equipment by a specialist survey company (recommended by KCC). The surveys were taken on multiple days both before and during the school summer holidays and are considered to be accurate reflection of PRoW usage. It is acknowledged that KCC would like to see permanent counters installed along a number of PRoW to monitor the long term impact of the solar park on path use, however, this would require intrusive works and landowner agreement to install the equipment and associated infrastructure and it was not considered necessary given that alternative counting methods were considered adequate and subsequently agreed by KCC. Across the majority of the Development site including along the route of ZR485, the minimum separation distance between ditches and solar panels is 15 m, leading to a minimum gap of 30 m between PV arrays in these areas. The Applicant doesn't agree that this is a narrow gap.
6	For more local users, especially in winter, the route from Nagden to Castle Coote (ZR 485) is just as important as it is a significant short cut to views of the sea/estuary. As described in the Socio-Economic and Tourism chapter, footpath ZR 485 will be changed from a path across the open marshes with views of arable fields and the sea wall to one which is fenced by 2-metre high metal fences with security cameras, passing across the roadway through the site with gates on either side of the path and traversing the whole site with only views through the legs of the panels, with panels above the users heads stretching as far as the eye can see. Even this impact is only described to have a 'moderate' impact. This would be mitigated by the path being changed to grass. At present, the path is a semi-surfaced track which can be muddy in winter. A grass surface after winter rain would quickly become impassable as well as unpleasant because of its enclosure, so that	These comments are noted. Recreational impacts are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043] and public perception of renewable energy Development is discussed in section 13.2.4.4.

Ref.	Statement	Applicant's Comment
	this is not really a benefit. The path would be off-putting and unpleasant and deter use	
7	Visitors to The Sportsman or users of the beach huts on the nearby beach at Seasalter would be deterred from walking along the sea wall as their view inland would be of a large installation akin to a great expanse of factory roof and are likely to decide that there are more attractive places to spend their money. Visitors to Faversham who venture onto the footpaths around the creek, all of which will be advertised as part of the England Coast path and are already promoted as part of the Saxon Shore Way will also experience a large industrial-looking installation across a vast area of marshland and views to a tall bund with a battery compound inside.	
8	For the first two or three years of the project, during the construction phase, users of the road between Faversham and Whitstable via Graveney will frequently follow or meet lorries delivering materials and equipment to the site or returning from it. These users include cars going to the beach and beach huts, The Sportsman, historic Graveney church and the caravan sites at Seasalter. This is also likely to deter them from using the road and not be beneficial to the local economy at Seasalter. This route is also part of the National Cycle Route, and the addition of frequent heavy vehicles would make this part of the route less desirable to visit and use. This is not discussed in the Socio-Economic and Tourism chapter which only refers to views of the solar panels from the cycle route which are described as having a negligible impact on uses of the cycle route	The construction phase will last up to 2 years if undertaken in one phase, or a total of 2 years and 6 months if undertaken in two phases. Access and traffic impacts are assessed in Chapter 14 - Access and Traffic of the ES [APP-044]. The beach chalets, the Sportsman and caravan sites at Seasalter are not on the construction traffic route, and are also accessible from the east. Measures proposed to manage construction traffic are described within the outline CTMP, Technical Appendix A14.1 of the ES [APP-045]. Measures include restrictions on HGV movements to avoid school opening / closing time and a construction vehicle speed limit of 20 mph past the school. No significant effects on highway safety for any receptor are anticipated as a result of the Development, however mitigation measures are included in the outline CTMP (Deadline 3 document reference 6.4.14.1, revision B), which sets out measures to control construction traffic as described above.
9	As the developer has not yet identified contractors who will carry out the work to transport the materials and equipment to the site and to carry out the construction, it is not clear whether this would generate any local employment or spin-off spending. However, if any of the contractors or their employees do spend money in the towns, it would have a minimal impact and is certainly no compensation for the loss of a presently quiet and undeveloped part of the north Kent coast between two attractive towns.	The draft DCO submitted at deadline 2 [REP2-003] includes Requirement 15, local skills supply chain and employment which requires that a skills, supply chain and employment plan is submitted ahead of construction. This plan will identify opportunities for individuals and businesses to access employment and supply chain opportunities associated with the construction, operation and maintenance of the Development.
10	If the developers were to look at the impact of the scheme on socio-economic and tourism aspects at a much more local scale, it is likely that the levels of impact would be more significant than those defined in the Socio-Economic and Tourism chapter. Together with the impacts on biodiversity, cultural heritage and landscape which are all reasons why	The Applicant has presented clear methodologies and assessments in the ES submitted with the Application, and is confident that the conclusions of the assessments are appropriate.

Ref.	Statement	Applicant's Comment
	people visit the area, the impact of the development is much more than the mostly negligible or minor levels identified by the developer.	

2.13 REP2-082 Faversham Creek Trust and Convener of Faversham & Oare Heritage Harbour Group

Table 2.13: The Applicant's Comments on Faversham Creek Trust Written Representation

Ref.	Statement	Applicant's Comment
Application by Cleve Hill Solar Park Limited for an Order Granting Development Consent for the Cleve Hill Solar Park Project		
1	I am writing as Chairman of Faversham Creek Trust (FCT) and Convener of Faversham & Oare Heritage Harbour Group (FOHHG) to object strongly to the proposed development at Cleve Hill, on the grounds of adverse Landscape & Visual Impact. I have requested to speak at ISH3.	Landscape impacts are assessed in Chapter 7 - LVIA of the ES [APP-037]. The assessment is supported by figures [APP-054] and visualisations [APP-063 to APP-196].
2	Since FCT was set up in 2011 we have worked tirelessly to fulfil our ambition – 'Regenerating Faversham's Maritime Heritage'. Part of this work is to preserve the rural and maritime environment of Faversham, to promote sailing, rowing and all kinds of leisure use of our coastline and Creeks on the water and on the land. We have established working relationships with other organisations along the North Kent Coast, including the Whitstable Maritime Trust, Kentish Sail Association, Queenborough Harbour Trust, Medway & Swale Boating Association, Northfleet Harbour Trust and the Thames Barge Match Committee. We are founder members of FOHHG, which shares our objectives. Our aim, with these and other groups, is to create a cohesive plan for the North Kent Coast as a place to visit and tour, with harbours and moorings for visitors arriving by boat and maritime attractions for tourists and local people to enjoy. We have even got a proposed name for the area – the Oyster Coast. This development would ruin people's enjoyment of this coastline from both land and sea.	Tourism impacts are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. The maritime history of the area is referred to under paragraph 90. A negligible effect on tourism in Swale is predicted during construction (section 13.5.1.3) and operation (section 13.5.2.1) of the Development.
3	This land is part of an area designated as a Marine Protected Area and an SPA with marine components. It is part of an area with various designations including Ramsar, SSSI and SPA. It is an internationally important estuarine habitat. Wetlands like this are among the most threatened landscapes and habitats in the world. Insects are in decline worldwide – this area provides habitat for many different species of insects as well as for birds, bats and other small mammals. It is a flood plain, designated as such by local authorities planning for high tide events and rising sea levels, as a sacrificial area to protect local towns. Wetland areas like this are known for their ability to capture and store carbon dioxide.	The effects of the Development on habitats, birds and other wildlife are assessed in Chapter 8 - Ecology [APP-038], and Chapter 9 - Ornithology [APP-039] of the ES. The likely significant effects of the Development on internationally designated sites are also addressed in the Report to Inform an Appropriate Assessment submitted with the Application [APP-026]. This statement incorrectly characterises the Development site as functional floodplain (Flood Zone 3b). It is not a sacrificial area to protect local towns. The Development site is within Flood Zone 3a, in an area benefitting from flood defences. The Flood Risk Assessment submitted with the Application provides further detail on flooding [APP-227]. The carbon sequestration potential of managed realignment on the Development site has been considered in a WR submitted at Deadline 3 (document reference 11.4.5). The Development is proposed on arable land and will not

Ref.	Statement	Applicant's Comment
		impact the carbon sequestration potential of adjacent wetlands.
4	This coastline is enjoyed by many people, both by land and sea. They value the largely unspoilt rural nature (apart from the intrusive pylons) of the coast from the fringes of Whitstable to the Isle of Grain, compared with the heavily industrialised riverside and shoreline beyond. It is a very popular area for sailing, both by people who own their own boats and by people who hire boats by the day for tours or fishing. The Saxon Shore Way – a historic route, and part of Natural England's Coastal Path – is walked by many people, and this part of it is especially popular. They come to enjoy the uninterrupted open space with tranquil views and abundant wildlife. We should set an example to the world for protecting such sensitive and fragile environments, not despoiling them. There are other definitions of sustainability and ways to be environmentally responsible besides green energy.	Tourism and recreational impacts are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. The recreational, maritime history and wildlife offer of the area is referred to under paragraph 90.
5	The proposed 'Solar Park' is not a park by any definition of the word – see the Oxford Concise Dictionary, which includes 'a large area of land kept in its natural state for public recreational use'. On behalf of FCT and FOHHG, I ask that the area be kept as a park in the proper sense, open land available for all of us to enjoy for recreation both by land and by sea.	These comments are noted.
6	While we support sustainable energy, there are other places much better suited to solar panels than this one, whether roofs of houses or redevelopment of former power stations at Richborough and the Isle of Grain.	A description of the site selection process (section 4.2), and an analysis of alternative brownfield sites (section 4.4.5) is provided in Chapter 4 - Site Selection, Development Design and Consideration of Alternatives of the ES [APP-034]. The drivers for the scale of the Development relative to other forms of solar PV development such as roof mounted systems are also considered in Chapter 4 (section 4.4.4.3) and are also set out in the Statement of Need [APP-253] submitted with the Application, it's addendum [AS-008] and the Applicant's response to the Statement of Need submitted by the Graveney Rural Environment Action Team (Deadline 3 submission document reference 11.4.10).

2.14 REP2-085 Graveney Rural Action Environment Team (GREAT) - WR on National Policy Statement

Table 2.14: The Applicant's Comments on GREAT Written Representation (National Policy Statement)

Ref.	Statement	Applicant's Comment
1	In response to the question about National Planning policies not covering this proposed development, we would like to make the following points: 1. There is no mention about the construction of solar plants in EN01, EN03 or EN05 and this should be a focus of any examination especially the configuration, height, size, impact on the landscape, people, heritage and flora and fauna. In the case of this proposal we put it that it is an untested construction and technology and therefore raises questions as to whether it should even be considered. We are aware of the small solar park in Holland which has an east-west configuration but there very clearly is no comparison to the size, height and location of this development. 2. In the absence of National Planning policies, the following are relevant to this particular situation and should therefore be considered in the decision making process	The Applicant submitted a written representation in respect of Policy and Procedure at Deadline 2 [REP2-026] which addresses these comments.
2	Kent County Council 'Large Scale Solar Arrays': https://democracy.kent.gov.uk/documents/s48772/KCC%20Solar%20Policy%20Position%20Statement%20August%202014%20FINAL.pdf Swale Borough Council 'The Development of Large Scale (>50kW) Solar Arrays' https://archive.swale.gov.uk/assets/Planning-General/Planning-Policy/Evidence-Base/VERSION-3-SWALE-LARGE-SCALE-SOLAR-PVPDF-July-2014.pdf Gov.uk 'Renewable and low carbon energy guidance': https://www.gov.uk/guidance/renewable-and-low-carbon-energy Hive Energy 'What we're looking for': http://www.hiveenergy.co.uk/our-uk-solar-parks/working-with-you/ground-mounted-solar-pv/	
3	GREAT will be participating in all issue specific hearings and open floor sessions.	

2.15 REP2-087 Historic England

Table 2.15: The Applicant's Comments on Historic England Written Representation

Ref.	Statement	Applicant's Comment
INTRODUCTION		
1	The Historic Buildings and Monuments Commission for England (Historic England), known as Historic England, is the Government's statutory adviser in relation to the historic environment in England. It was set up by the National Heritage Act 1983, and the National Heritage Act (2002) gave Historic England responsibility for maritime archaeology in the English area of the UK Territorial Sea. Historic England is a Non-Departmental Public body sponsored by the Department for Digital Culture, Media and Sport (DCMS). Our remit in the historic environment intersects with the policy responsibilities of a number of other government departments – particularly the Ministry of Housing, Communities and Local Government, with their responsibilities for land use planning matters.	These comments are noted.
2	In previous correspondence in relation to this project application, via our Planning Inspectorate Registration and Relevant Representation Form (dated 28 January 2019) we summarised Historic England's view on matters concerning designated Heritage Assets and non–designated Heritage Assets (specifically archaeological remains). This letter therefore expands on these matters	
Comments in relation to - Designated Heritage Assets		
3	The following advice relates to impacts to designated heritage assets and we hope it will be helpful to highlight below our position on the impacts as assessed within the Environmental Statement (ES) and the limited areas of disagreement where we consider the level of harm is higher than suggested therein.	These comments are noted and reflect the status of discussions provided in the Statement of Common Ground between the Applicant and Historic England which was submitted at Deadline 2 [REP2-031].
4	In all cases for designated heritage considered here, the effects are indirect, i.e. the change proposed is within the setting of the heritage assets. Setting is the surrounds in which a heritage asset is experienced and we are concerned with how change might affect the ability to understand the significance that assets derive from their setting. Historic England's focus in this representation is to advise on impacts to highly graded designated heritage assets (grade I and II* listed buildings and scheduled monuments), but we also comment, following a request during pre-application discussions, on a very limited number of grade II listed buildings most affected by the proposal, including Sparrow Court and Graveney Court.	
5	We expect that Swale Borough Council as the Local Authority will provide lead advice on	SBC has commented on listed buildings in its Written Representation, which the Applicant has responded to at

Ref.	Statement	Applicant's Comment
	the impact to all grade II listed buildings and conservation areas within their districts (in addition to their view on the impact to highly graded assets). Canterbury City Council might also provide advice about any issues for setting of designated heritage assets more removed from the application site. Kent County Council and the archaeologists of its Heritage Conservation team will be your lead advisor for effects to non-designated heritage, including unlisted buildings and structures in and around the development site, but focused on archaeological remains.	section 2.4 of this document, and its LIR, to which the Applicant responded to at Deadline 2 [REP2-033]. CCC commented on heritage matters in its LIR, the Applicant responded to this document at Deadline 2 [REP2-035]. KCC continues to engage with heritage and archaeology matters as set out in section 2.3 of this document.
6	In terms of our specific comments on the Environmental Statement (Volume 1, Chapter 11: Cultural Heritage and Archaeology) we note the list of Heritage Assets identified for assessment remains as it was when we provided advice on the Preliminary Environmental Impact Report (PEIR). We agree with table 11.2 Sensitivity of Cultural Heritage Features and the methodology in table 11.4 for assessing the potential effect of the proposal on the significance of individual assets. We also agree with the levels of in-direct effects at the operational stage for designated archaeological heritage (11.5.2). However, we do not agree with the assessment of effects for built designated heritage assets, All Saints Church (grade I), Sparrow Court (grade II), and Graveney Court (grade II) (11.5.2.3 paragraphs 156-171).	The status of agreement set out reflects the status of discussions provided in the Statement of Common Ground between the Applicant and Historic England which was submitted at Deadline 2 [REP2-031]. The Applicant will work towards an update of the SoCG for Deadline 4.
All Saints Church		
7	The Environmental Statement assesses the significance of the grade I listed All Saints church as high and we agree with this assessment. However, we assess the effect from the development to be greater than low. The church is the focal point of the hamlet of Graveney and stands on a high point in the landscape surrounded by agricultural fields and dispersed historic buildings. The origin of a settlement here may well be linked to the productive salt flats which once lay to its north. Archaeological evidence for which survives as the scheduled salt production mounds (salterns) close to the settlement though these ceased to produce salt in the 14th century and the land was then reclaimed for farming. This use continues today and the sense that All Saints church is sited in a rural landscape surrounded by dispersed historic buildings contributes to its significance and helps explain its origins as a modest rural parish church.	These comments are noted and reflect the status of discussions provided in the Statement of Common Ground between the Applicant and Historic England which was submitted at Deadline 2 [REP2-031]. The Applicant will work towards an update of the SoCG for Deadline 4.
8	The development would lie to the north and north-west of the church. It would not be visible in views as the church is approached from the south along Graveney Road. However, the development would be visible in views of the church as it is experienced in its	

Ref.	Statement	Applicant's Comment
	environs from the west and north and in glimpsed views out from the western boundary of the churchyard. In all these views large areas of solar panels and associated infrastructure would be an incongruous addition alien to the verdant undeveloped character of the area eroding the rural setting which makes a contribution to the significance of the building. We agree that the level of harm is reduced by removing solar panels from field Y (which lay to the north/north-west of the church) but we nonetheless continue to believe the overall magnitude of effect is higher than low (11.5.2.3, paragraph 160) and would be medium. Based on table 11.4, Significance of Predicted Effects, this would give rise to a moderate magnitude of effect.	
9	We agree with the Heritage Statement (document 7.7) which concludes that the level of harm (in NPPF terms) is less than substantial but we consider the range of harm within the less than substantial spectrum can be defined in a more nuanced way and we conclude that to the harm to significance for the grade I listed church would be moderate. This is important because NPS EN-1 requires that harm to designated heritage is justified and weighed against the public benefits of a proposal noting that "the greater the level of harm to the significance of the heritage asset the greater the justification will be needed for any loss." (NPS EN-1, 5.8.15) A moderate level of harm to the significance of All Saints church therefore requires a greater level of justification.	
Sparrow Court		
10	Sparrow Court is a 15th century timber framed building which lies to the south of the development and is one of the dispersed historic buildings which form part of the wider historic landscape around Graveney. Its relationship to surrounding agricultural fields can be appreciated in views from a footpath west of All Saints church. In these views (viewpoint 8) the proposed development to its north will erode its wider rural setting causing some harm to an understanding and appreciation of its historic origins as an isolated historic building in an expansive rural landscape. We accept that modern buildings can be seen in this existing view, something which reduces an understanding of its historic origins, but we consider these are reasonably well screened and that there is additional harm to significance on the basis that the development further erodes that setting. We assess the magnitude of effect is likely to be higher than low (11.5.2.3 Paragraph 169) and more likely to be medium which based on table 11.4 would result in a moderate	These comments are noted and reflect the status of discussions provided in the Statement of Common Ground between the Applicant and Historic England which was submitted at Deadline 2 [REP2-031].

Ref.	Statement	Applicant's Comment
	magnitude of effect. As per the requirements of NPS En-1, a greater level of harm to the significance of a designated asset requires a greater level of justification (5.8.15).	
11	We agree with the conclusion of the heritage statement which assesses the level of harm to be less than substantial in NPPF terms (p. 4, paragraph 28) but like All Saints Church we believe the range of harm in less than substantial can be expressed in a more nuanced way, ranging from low to the higher end of less than substantial harm, and suggest in this case that the harm is moderate.	
Graveney Court		
12	We agree with the Environmental Statement which concludes that Graveney Court is of high sensitivity (11.5.2.3 paragraph 162). Originally built in the 15th century by John Martyn, a judge of the Court of Common Pleas it is now part of a working farm. In long views from the west towards Graveney Court, it can be appreciated in its wider rural setting surrounded by agricultural fields which help explain its rural origins and its later use associated with farming. While it is the rear, less formal elevation which is visible in these views, we nonetheless consider this does not detract from an appreciation of the house and historic association with the surrounding agricultural fields. In our view an appreciation of Graveney Court in its rural setting would be harmed by the introduction of large areas of solar panels, especially when appreciated in long views from the west and in views out from the building which is sited on elevated land above the area of proposed development.	These comments are noted and reflect the status of discussions provided in the Statement of Common Ground between the Applicant and Historic England which was submitted at Deadline 2 [REP2-031].
13	We do not agree that the predicted effect, highlighted in the Environmental Statement, would be low (11.5.2.3 paragraph 164) and consider it more likely this would be medium. On this basis and with reference to table 11.4 in the Environmental Statement this would result in a moderate effect in EIA terms. We agree with the heritage statement which assesses that the impact would be less than substantial in EIA terms, but like Sparrow Court and All Saints Church we suggest the range of harm covered by the less than substantial terminology of the NPPF can be expressed in a more nuanced way and that the harm here is likely to be moderate within that range.	
14	The policy context for decision taking for a Development Consent Order is set out in Overarching National Policy Statement (EN-1), and for heritage in Section 5.8. For designated heritage this requires an applicant to show that harm to heritage significance has been avoided or minimised and that any	

Ref.	Statement	Applicant's Comment
	remaining harm has clear and convincing justification (5.8.12 and 5.8.14). In this case we are satisfied that the harm has been reduced by the removal of proposed solar panels from field Y. It will be for the Examining Authority to now decide if the remaining harm has clear and convincing justification and to weigh that harm against the public benefits in the manner set out in section 5.8.15.	
15	In reaching its decision the Examining Authority will also need to take into account the presumption in favour of the conservation of designated heritage with the more important the asset the greater that presumption needing to be (5.8.14). We also draw your attention to 5.8.18 which notes that "when considering applications for development affecting the setting of a designated heritage asset, the Examining Authority [IPC] should treat favourably applications that preserve those elements of a setting which make a positive contribution to, or better reveal the significance of a heritage asset". When considering applications which do not achieve this, the Examining Authority should weigh the harmful impacts to the significance of designated heritage against the public benefits of the development.	These comments are noted. The Applicant has provided a written representation on heritage policy [AS-027] which provides further guidance on relevant tests.
Comments in relation to Non –designated Heritage Assets – archaeology		
16	There are no scheduled monuments on the site. The site of the proposed development has archaeological potential for a range of non-designated assets of different periods and deposits/site types but they are unlikely to be of national significance, such that they might have a level of significance comparable to a scheduled monument. Therefore Historic England does not wish to engage with non-designated archaeological matters and we defer to Kent Council's Heritage Conservation Team	These comments are noted. The Applicant will continue to engage with KCC in respect of non-designated archaeology.
17	We note that the crash site of a WWII German aircraft lies within the development area, which is designated under the Protection of Military Remains Act 1986. Licences from the SoS for Defence are required for excavation under the 1986 Act. A licence for excavation might not be issued in some circumstances, in which case preservation in situ of the remains may be required. We raise this point for your information but Historic England would not normally expect to advise about the assessment of such licence applications.	
Summary		
18	In conclusion, Historic England highlights here three areas of disagreement between the applicant's assessment of impact and Historic England's assessment. Those assets where disagreement lies are the grade I church of	These comments are noted. The outline Written Scheme of Investigation [APP-233] has been updated to take account of Historic England's comments and has been submitted at Deadline 3 as revision B (see

Ref.	Statement	Applicant's Comment
	All Saints, Graveney and the grade II buildings Sparrow Court and Graveney Court. We also highlight one aspect of the WSI – the future strategy for any remains associated with the WWII German Aircraft – which in our view warrants further consideration.	document reference 6.4.11.4, revision B).

2.16 REP2-092 Kent Wildlife Trust

Table 2.16: The Applicant's Comments on Kent Wildlife Trust Written Representation

Ref.	Statement	Applicant's Comment
INTRODUCTION		
1	Kent Wildlife Trust objects to the Cleve Hill Solar Park application. Below we detail the issues we have identified that have led to this position.	The Applicant is aware KWT's position. A Statement of Common Ground has been submitted at Deadline 3 (document reference 11.2.2) which sets out the latest status of discussions. The Applicant will continue to engage with KWT to seek agreement on issues raised.
Consideration of Alternatives		
23	The avoid–mitigate–compensate hierarchy is a core tenet of sustainable development, including UK planning policy and legislation. More specifically, Regulation 18(3)(d) of the EIA Regulations requires a description of the 'reasonable alternatives' considered, and the first test of Article 6(4) of the Habitat Regulations is that there not be any 'alternative solutions' (to the overall objective of the plan or project). In this context the accuracy of the information provided should be considered, including whether or not the alternatives considered have been unduly limited by the details of the proposed scheme (rather than the overall objective).	A description of the site selection process (section 4.2), and an analysis of alternative sites (section 4.4) is provided in Chapter 4 - Site Selection, Development Design and Consideration of Alternatives of the ES [APP-034].
3	The Statement of Need "…concludes that circa 300 - 400 MW of unsubsidised low-carbon solar generation is needed in the UK, and that the Cleve Hill location is uniquely suited to the colocation of 300 - 400 MW of electricity storage alongside the solar generation asset." (APP-253, Summary). We note that proposals for a solar park for the generation, storage, and export of up to 500 megawatts have recently entered the pre-application stage of the NSIP process ('Sunnica Energy Farm', case ref EN010106), so it would appear that the Cleve Hill location is not as unique as the Applicant believes.	Paragraph 114 of Chapter 4 - Site Selection, Development Design and Consideration of Alternatives of the ES [APP-034] states: "As set out in the Statement of Need which accompanies the Application [APP-253] there is a clear and urgent need for greater renewable energy capacity and energy storage capability. Therefore if there is potential for renewable energy generation and energy storage to be accommodated on the alternative sites identified, this should be in addition to the Cleve Hill site, not instead of."
4	The Applicant has defined 'reasonable alternatives' as those within 5km of the Cleve Hill substation as this distance is considered to be "at, or beyond, the limit of viability for a transmission connection" (APP-034, Paragraph 23). The Scoping report for the Sunnica Energy Farm1 states that "The total length of the cable run for Grid Connection Route A would be approximately 6km, and 10km for Grid Connection Route B." While there are differences between the two schemes, this does raise the question as to what degree alternatives, as defined by the applicant, have been constrained by their design and engineering choices. While the EIA Regulations limit consideration of alternatives to those that are "…relevant to the proposed development and its specific characteristics…", we do not take this to refer	Section 1.3 of the Sequential Test Report [APP-201] submitted in support of Chapter 4 of the ES [APP-034] sets out in more detail the advice received from the Applicant's grid consultants which was used to inform the area of search for alternative solar PV development sites to connect to the Cleve Hill Substation. The Applicant is content that reasonable alternatives have been fully considered in Chapter 4 of the ES.

Ref.	Statement	Applicant's Comment
	to specific design and engineering choices.	
5	London Array Wind Farm did not use their remaining capacity at the Cleve Hill Substation due to uncertainties about the environmental impacts, particularly impacts on the population of an SPA species. https://www.londonarray.com/the-project-3/phase-2/ (accessed 18/6/19). We do not believe that the consideration of alternatives should be limited because of the unintended opportunities provided by the spare capacity at the Cleve Hill Substation. To do so could set a dangerous precedent, compromising the UK's ability to plan strategically for its energy needs, and potentially causing an offence under the Habitats Regulations.	The Applicant referenced the same weblink referred to by KWT in paragraph 25 of Chapter 4 - Site Selection, Development Design and Consideration of Alternatives of the ES [APP-034]. The article cited currently (30/07/19) states: "Combined with known technical challenges surrounding the Phase Two site – such as shallow water, longer cable routes and an exclusion zone for aggregates operations – these environmental uncertainties led London Array's shareholders to withdraw from Phase Two and concentrate on other projects in their individual portfolios." The reasons for London Array not proceeding were clearly technical as well as environmental, i.e., it was a combination of factors which led to the development not proceeding. The Applicant is content that reasonable alternatives have been fully considered in Chapter 4 of the ES.
6	Kent Wildlife Trust is not an expert in the legislation and policies that have a bearing on the consideration of alternatives, and is therefore unfortunately not in a position to further develop the points above. We only ask that the Inspector considers them in making his recommendation if he considers them relevant and valid.	Consideration of alternatives was discussed at Issue Specific Hearing 1 on Need. A written summary of the Applicant's oral submissions has been submitted at Deadline 3 (document reference 11.1.3).
Mitigation for Brent geese		
7	The Ornithology Technical Appendix (APP-223) sets out the case for achieving the required capacity for Brent geese in the mitigation area through a combination of cutting/grazing and fertilising (paragraphs 115-127). It is established that areas cut and not fertilised do not achieve as a high a capacity as those that are.	The capacity figure of 2,097 goose-days per hectare for fertilised grassland was taken from Vickery *et al.* (1994). The same study reports a capacity of 1,562 goose-days per hectare in unfertilised plots of grassland. Using these same figures results in the following calculation: AR HMA functional area: 50.1 ha AR HMA fertilised functional area: 43.6 ha AR HMA unfertilised functional area: 6.5 ha Capacity = (43.6 × 2,097) + (6.5 × 1,562) = 101,580 goose-days. This is very similar to the 101,940 goose-days as measured by the peak-mean metric in arable fields of the Development site. The Applicant considers that the goose-days/ha capacity figures used to propose the extent of mitigation land required (as derived from Vickery *et al.* (1994)) is precautionary and does not necessarily represent a maximum capacity of the grassland to support geese. The Vickery *et al.* (1994) study presents this finding as the measure of capacity that geese used under experimental prescriptions for the grassland sward in the study, rather than a grassland's maximum

Ref.	Statement	Applicant's Comment
8	In response to concerns regarding the impact of fertiliser use on water quality, the Applicant has stated that fertiliser will be "…restricted in spatial application in fields to avoid spreading near the field boundaries." (APP-039, p9-50). Current rules on spreading manure prevent doing so within 10 m of the ditches2. This has not been taken into account in the calculation of the Brent geese bird-days/ha that the site, on paper, may support. As the length of ditches within the mitigation area is significant, and for the avoidance of doubt, the Applicant should revise the calculations to take the differing management of the ditch buffers within the mitigation area into account.	capacity. Other sources of information and advice suggest that the required number of geese can be accommodated in smaller areas of grassland (*e.g.* the RSPB publication *Farming and Wildlife* (Andrews and Rebane, 1994) recommends 15-30 ha of alternative feeding area for every 1,000 geese; Summers and Critchley (1990) recommended 50 ha for every 1,000 geese. The peak-mean count of brent geese using the arable land within the Development site was approximately 850 birds, therefore there is confidence in its capacity to provide sufficient resources for brent geese. The Applicant will take forwards further discussion with the HMSG to set out more detail regarding the management and desired sward length of the grassland for geese to achieve the optimum capacity for wintering geese and plovers. Further details will be provided in an update to the outline LBMP [APP-203] ahead of Deadline 3 (1 August 2019). This will be the subject of ongoing discussions with the HMSG prior to Deadline 4.
Lapwing and golden plover		
9	The Ornithology Technical Appendix (APP-223) sets out the case for using 1,560 and 1000 birddays/ha as a measure of the capacity of the Brent goose mitigation area for golden plover and lapwing respectively (paragraphs 129-131). These figures come from a study of a 2,063 ha mixed arable area, and arise from a 'sum of the field areas weighted by their frequency of occupancy.3' As such they are a measure of the preferential use of certain fields within a wider arable landscape, and should be used with caution. A number of studies have suggested that these species feed opportunistically on a range of open habitats (arable and grassland types) within a landscape, probably determined by prey availability and field size (E.G. Mason & Macdonald (1999)4).	The primary food source for golden plovers and lapwings is earthworms found at and near the soil surface, supplemented by other invertebrates at and within the top approximately 3 cm of the soil. Short-sward grassland is known to be a habitat used, often preferentially, by golden plovers and lapwings – this was described in the literature review in Section 9.6.2.2 of Appendix A9.1: Ornithology Technical Appendix (APP-223) and Section 6.1.2.5 of the RIAA (APP-026). The type of grassland preferred is short-sward (<10 cm), permanent and long-established; such grassland would typically have a close sward, providing the suitable micro-climate within which the birds' invertebrate prey is available to them above, at and near the soil surface. The Applicant agrees with KWT's interpretation of the Gillings *et al*. (2007) study in relation to the bird-days measure. The Applicant also recognises that they represent a measure of preferential use of certain fields within a wider arable landscape and that golden plovers and lapwings feed opportunistically on a range of open habitats within a landscape. The Applicant is of the opinion that this is directly applicable to the mitigation provided by the AR HMA – it is designed with the aim of providing enhanced grassland resources for these species to forage within the wider north Kent landscape surrounding the Swale. The management of the fields in the AR HMA as short sward grassland, with application of manure fertiliser and improved water level control will provide suitable foraging conditions for golden plovers and lapwings throughout the winter period and resources will not be restricted by variable conditions of crop type and growth in the arable baseline scenario. The Applicant welcomes the review of evidence provided by KWT in relation to competition between golden plovers and lapwings. The reference to segregation of the two species by Fuller & Youngman (1979) appears to be hypothetical – it
10	Paragraph 133 of the Ornithology Technical Appendix (APP-223) concludes that there is a shortfall in provision for lapwing, but states "Lapwing and golden plover overlap to a large extent in their foraging requirements, feeding on similar invertebrate prey, and therefore assuming they are interchangeable, the AR HMA would support more lapwing-days if there are fewer golden plover-days to support." This assumes that there is competition between the two species, and the bird-day figures used as a starting point were limited by this competition. This does not appear to be supported by the literature.	
11	Fuller & Youngman (1979)5 state that "Both species frequently occurred in the same field when feeding and roosting, but the fact that	

Ref.	Statement	Applicant's Comment
	general field preferences were the same does not rule out the possibility of a more subtle habitat segregation, such as preference for different soil conditions. On occasions we observed that Golden Plovers tended to feed on the higher parts of fields occupied by the two species. Such differences may be linked to varying diet, which is perhaps the most probable means of ecological separation in winter."	was not the focus of the study, nor was any statistical analysis applied to test the theory; furthermore, the available habitat at the Development site is uniform in altitude, with no obvious differences between different parts of fields that would facilitate such separation. Gregory (1987) states that values of α (a measure of overlap in use of habitats) was very high, suggesting near total overlap between the two species in his study area. Thompson (1983), referred to by Gregory (1987), only speculated that interspecific competition may be reduced by foraging a different soil depths, but the theory is untested and not reported in any other studies of the foraging behaviour of the two species. Regarding Barnard & Thompson (1985), the lack of impact of golden plovers on the time budgeting and feeding efficiency of lapwing cannot be correlated with an absence of competition for resources and this potentially provides support for the Applicant's position; if both species feed in the same location on the same resources with unaffected foraging efficiency, then depletion of resources will occur more rapidly than if there was an effect of one species on the other. Hence if one species is under-utilising the available resources, then more will be available for the other species. That study went on to report that interspecific aggression appears to be related to prey depletion as the local density of birds increases, and increases in local density of birds within the flock results in a reduction in individual feeding efficiency. Barnard & Thompson (1985) also report that in established foraging flocks within fields, there tends to be a much lower density of lapwings in those parts of the flock containing golden plovers and vice versa, which indicates that there is direct competition for resources. Gillings (pers. comm.) advised that golden plovers and lapwings must compete to some extent, either by direct depletion, or by interference competition whereby another individual's activity forces worms to burrow lower into the soil. The evidence in these studies which have been used to inform the Applicant's position is supportive of the assumptions made in the assessment, specifically in relation to paragraph 133 of the Ornithology Technical Appendix [APP-223]. The Applicant recognises that there is a degree of uncertainty in this respect. This is one reason why a very precautionary approach has been taken to measuring the baseline use of the Development site by the wintering birds. The assessment for the Development has been made on the basis of only using the highest (peak) of any counts made in each month of the baseline surveys and averaging these peak monthly counts. This is in contrast for example to Gillings *et al.* (2007) where the bird-days capacity of the utilised study fields was calculated on the basis of the average across all survey visits in the season. Gillings *et al.* (2007) stated that peak counts may be affected by transient large flocks and use of the mean counts is ecologically more informative (Gillings (pers. comm.). The result of use of the peak-mean for the CHSP assessment is likely to result in an overestimation of the use of the site and hence there is likely to be a degree of over-provision of the area required to mitigate for loss of foraging are to the Development. This is
12	Gregory (1987)6 states that "…Thompson (1983) speculated from his results that Golden Plovers may peck for prey at shallower soil depths than Lapwings, so reducing inter-specific competition." In Barnard & Thompson (1985)7, it is stated that "In the absence of gulls, golden plovers have no significant effect on lapwing time budgeting and feeding efficiency." The above papers suggest that golden plover avoid direct competition with Lapwing, and therefore their presence makes little difference to the availability of food for lapwings. The exception to this is when lapwing are under pressure from black-headed gulls, who steal their food. While blackheaded gulls were recorded during the Cleve Hill bird surveys, it is not stated if they were acting in such a way.	
13	More evidence is needed to back up the assumption made in paragraph 133 of the Ornithology Technical Appendix, or additional mitigation for lapwing needs to be identified.	

Ref.	Statement	Applicant's Comment
		illustrated by the difference in two metrics for lapwing and golden plover: (i) the inter-annual mean of the intra-annual monthly peak-mean (using just the highest counts each month), and (ii) the interannual mean of the intra-annual monthly mean (using all counts each month); for lapwings (i) results in 56,023 bird-days (Oct-Mar) compared to (ii) 23,237 bird-days (which equates to 23.2 ha of land based on 1,000 bird-days per hectare), whilst for golden plover (i) results in 28,801 bird-days (Oct-Mar) compared to (ii) 7,877 bird-days (which equates to 5 ha based on 1,560 bird-days per ha).
Outline Landscape and Biodiversity Management Plan (APP-203)		
14	The Landscape and Biodiversity Management Plan (LBMP) sets out how the mitigation and enhancements for species and habitats will be achieved, and is therefore a key document. It needs to give confidence that the desired outcomes can be achieved, while giving enough flexibility to tweak the management in response to monitoring if necessary, and also provide enough certainty for the purposes of the Habitats Regulations. As the document currently stands, it lacks sufficient detail to give confidence that it can meet these aims.	An updated version of the Outline LBMP has been submitted at Deadline 3 (document reference 6.4.5.2, revision B).
15	In particular, we would like to know how the Applicant proposes to control grazing densities within the perimeter fencing. At present, the LBMP treats the area within the perimeter fences as single compartments, but as can be seen from Habitat Management Areas figure (Figure 9.3 within APP-056) these areas can be divided into the ditches and buffers that are proposed to mitigate impacts on marsh harriers, and grassland under solar panels. It can be expected that outcomes between these two areas for any given grazing density (for the combined area) will be different, owing to the different growing conditions between them and behaviour of grazing stock. Another consideration is the prevention of poaching of ditch banks. We therefore consider it necessary to be able to control the grazing density between these areas separately. The provisions for grazing within the LBMP also need to be robust enough to avoid being compromised by commercial grazing interests.	The outline LBMP submitted at Deadline 3 (document reference 6.4.5.2, revision B) has been updated to take account of these comments.
16	We would also like to see more information regarding control of water levels within the LBMP. To achieve some of the aims of the document with regard to ditches and associated habitats, water levels will need to be raised. It may also be necessary to differentially control water levels in different areas of the site. We have started to progress this issue with the Applicant via the Habitat Management Steering Group, and will be providing more specific recommendations to them, particularly where it has a direct influence on water levels within the Special	

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	Protection Area.	
17	We also have to consider how deliverable the LBMP is. Specifically, we would like reassurance that the manure required for the plan is likely to be available. As it is claimed that this 'dunging' will also benefit invertebrates (on which lapwing and golden plover feed), we assume the Applicant will be sourcing it from ivermectin-free cattle, owing to the negative effects of this on invertebrates8.	The Applicant has provided an updated version of the Outline LBMP including consideration of the additional detail requested on water levels, stocking densities and livestock controls at Deadline 3 (document reference 6.4.5.2, revision B). This will be the subject of ongoing discussions with the HMSG prior to Deadline 4.
Marsh harrier		
18	If successfully delivered by the LBMP, we do not dispute that the habitats created along the ditches will be of a type used by marsh harrier. What we are concerned about is the solar panels (plus fences in some places) creating a development 'corridor' that the marsh harriers do not use. We recognise that the corridor width varies across the site. We note that this issue has been picked up in ExQ1.1.11	The outline LBMP [APP-203] sets out the prescriptions for establishment of large areas of 'grazing marsh grassland' between the solar panel arrays deployed in each field and will be developed further to include objectives and prescriptions for enhancing the water environment, including establishment of new reedbed. There is no published evidence either way regarding the reaction of marsh harriers to solar arrays of this scale, or any other scale, in the landscape. The inter-array grasslands will be a minimum of 30 m wide (or more, allowing for the ditch width), extending up to 80 m wide in some places and will be unbroken for substantial lengths spanning the site. A marsh harrier was witnessed foraging along a narrow grassland strip adjacent to a solar array on the Isle of Sheppey; the Applicant accepts the difference in scale, but the observation demonstrates that they are not averse to the presence of solar panels. On the basis of the provision of large quantity of good foraging habitat over and above the baseline availability and the absence of evidence that marsh harriers would be displaced at landscape scale, the assessment in Chapter 9 – Ornithology of the ES [APP-039] concluded that harriers will continue to forage at the site and will benefit from utilising the substantially increased area of suitable foraging habitat. Therefore, whilst there may be variation in individual birds' responses to the presence of the solar arrays, there will not be a population level impact that undermines the conservation objectives and threatens the integrity of the SPA.
Managed Realignment		
19	We note that, in Annex B of the Rule 6 letter (PD-003), the Inspectorate states "…whilst the effects of the proposal on the achievement of sustainable development including the mitigation of, and adaption to, climate change are not listed as specific Principal Issues…the ExA will conduct all aspects of the Examination with these objectives in mind." Though we recognise that solar generated energy is renewable and can contribute to the mitigation of climate change (while also recognising that renewable and sustainable are not interchangeable terms), this should be balanced out with the Environment Agency (EA)'s plans for the area, which would also provide a positive contribution to the mitigation and adaptation to climate change. While the primary purpose	A written representation has been submitted at Deadline 3 (document reference 11.4.5) which provides a comparison of the potential carbon dioxide offset by the Development and the carbon dioxide sequestration potential of managed realignment at Cleve Hill.

Ref.	Statement	Applicant's Comment
	of the EA's plan is to meet the Country's obligations under the Habitats Regulations (AS-017), salt marsh, a significant area of which can be expected to be created as a result of Managed Realignment at Cleve Hill, is known to 'lock-up' large amounts of carbon in comparison to other habitats (E.G. Barbier et al. 2011).	
20	We note in the Statement of Common Ground between the Applicant and the Environment Agency that "…the Applicant would accept a suitably worded DCO requirement which would result in the end of the operational phase of the Development after 40 years of operation subject to the EA (or equivalent body at the time) demonstrating that the MR proposals remain capable of implementation on the Cleve Hill site at that time" (AS-017). In order to be meaningful, it is important that it is worded such that the solar park itself does not compromise the EA's (or equivalent's) ability to demonstrate Managed Realignment is capable of being implemented. It is also important that the EA (or equivalent) are not prevented from gathering the necessary information to do so.	The Applicant discussed the wording of Requirement 16 (previously 15) during the Issue Specific Hearing 2 on the draft DCO. Updated wording for this Requirement has been provided in the latest version of the draft DCO submitted at Deadline 3. The wording of Requirement 16 has been discussed with the EA and is subject to their final agreement.
Acquisition of Rights		
21	We have a number of concerns regarding the potential conflict between the potential exercise of the rights the Applicant is seeking over the Special Protection Area (our Nature Reserve) and our management of it. We also have a current right of access through the application site to our Nature Reserve. At the time of writing we are still in discussion with the Applicant with a view to addressing these concerns through Heads of Terms and Deeds of Easement. These discussions are still at an early stage and at present this issue does not form part of our objection.	The Applicant will continue to discuss these matters with KWT.

2.17 REP2-096 Natural England

Table 2.17: The Applicant's Comments on Natural England's Written Representation

Ref.	Statement	Applicant's Comment
INTRODUCTION		
Purpose and structure of these representations		
1	These Written Representations are submitted in pursuance of rule 10(1) of the Infrastructure Planning (Examination Procedure) Rules 2010 ('ExPR') in relation to an application under the Planning Act 2008 for a Development Consent Order ('DCO') for the construction and operation of a solar photovoltaic array, energy storage facility and associated infrastructure ('the Project') submitted by Cleve Hill Solar Park Ltd ('the Applicant') to the Secretary of State.	These comments are noted.
2	Natural England has already provided a summary of its principal concerns in its Relevant Representations, submitted to the Planning Inspectorate on 28 January 2019 [RR-827]. This document comprises an updated detailed statement of Natural England's advice, as it has developed in view of the common ground discussions that have taken place with the Applicant to date. In particular, this advice takes account of discussions through the Habitat Management Steering Group (HMSG), which is made up of the Applicant and their consultants, Natural England, the Environment Agency, Kent Wildlife Trust and the RSPB.	The Applicant has continued to discuss Natural England's principle concerns, and is expecting to agree and submit a Statement of Common Ground with Natural England ahead of Deadline 4.
3	These representations are structured as follows: b. Section 2 describes the statutory conservation designations, features and interests that may be affected by the Project and need to be considered. c. Section 3 comprises Natural England's submissions in respect of the nature conservation issues that concern it. d. Section 4 comprises Natural England's submissions in respect of its statutory landscape role. e. Section 5 describes Natural England's role and comments in relation to access and biodiversity enhancements Annex A is a dedicated section answering the Examining Authority's written questions which were asked on 7 June 2019, cross-referenced to the rest of this document.	These comments are noted. The responses to the Examining Authority's first written questions are not replicated in this document, the Applicant commented on Natural England's responses in an additional submission [AS-023] made in July 2019.
CONSERVATION DESIGNATIONS, FEATURES AND INTERESTS THAT COULD BE AFFECTED BY THE PROPOSED PROJECT		
4	The following is a brief summary of the interest features of the relevant designated areas of concern in this matter.	
International conservation designations		
5	The Swale Special Protection Area (SPA), which is designated for: • Wintering dark-bellied brent geese • Wintering dunlin	The Applicant welcomes confirmation of the designated features applicable to The Swale SPA.

Ref.	Statement	Applicant's Comment
	• Assemblage of wintering waterbirds (main component species: dark-bellied grent goose, European white fronted goose, shelduck, shoveler, wigeon, pintail, teal, little egret, oystercatcher, avocet, lapwing, golden plover, grey plover, curlew, bar-taile godwit, black-tailed godwit, knot, ruff, sanderling, dunlin, green sandpiper, greenshank.) • Assemblage of breeding birds of damp grassland (main component and characteristic species: mallard, shelduck, moorhen, coot, lapwing, redshank, reed warbler, reed bunting, other breeding ducks and waders, yellow wagtail, marsh harrier.)	
6	The Swale Wetland of International Importance under the Ramsar Convention (Ramsar site), which is designated under: • Criterion 2 – the site supports nationally scarce plants and at least seven red data book invertebrates • Criterion 5 – assemblage of wintering waterfowl of international importance	The Applicant welcomes confirmation of the designated features applicable to The Swale Ramsar Wetland site.
7	The Ramsar Information Sheet also identifies five bird species for possible future inclusion under criterion 6. These species are considered in Natural England's answer to question 1.1.21 (see Annex 1 to this representation).	The Applicant has provided a comment in agreement with Natural England's response to question 1.1.21 in the Applicant's Comments on Responses to ExQ1 [AS-023].
8	Natural England's view is that all other international conservation designations can be ruled out as being potentially affected.	The Applicant welcomes confirmation of this view, which is shared by the Applicant.
National conservation designations		
9	The Swale Site of Special Scientific Interest (SSSI), which is notified for: • Aggregations of breeding birds (avocet, bearded tit, gadwall, lapwing, marsh harrier, pochard, redshank and shoveler) • Aggregations of non-breeding birds (bearded tit, black-tailed godwit, brent goose, curlew, dunlin, gadwall, great-crested grebe, grey plover, hen harrier, knot, marsh harrier, oystercatcher, pintail, redshank, ringed plover, shelduck, shoveler, spotted redshank and teal.) • Assemblages of breeding birds of lowland damp grasslands and lowland fen • Invertebrate assemblages of saltmarsh and transitional brackish marsh, open water on disturbed sediments, and reed-fen and pools • Vascular plant assemblage • Habitats: brackish lakes, ditches, lowland fen, ponds, saltmarsh and standing waters.	The Applicant welcomes confirmation of the notified features applicable to The Swale SSSI.
10	The Swale Estuary Marine Conservation Zone (MCZ), which is designated for: • Estuarine rocky habitats • Intertidal coarse sediment	The Applicant welcomes confirmation of the designated features applicable to The Swale Estuary MCZ.

Ref.	Statement	Applicant's Comment
	• Intertidal mixed sediments • Intertidal sand and muddy sand • Low energy intertidal rock • Subtidal coarse sediment • Subtidal mixed sediments • Subtidal mud • Subtidal sand	
European and nationally Protected Species		
11	Great crested newts and water voles are present within the application site. Natural England is in discussion with the applicant regarding these species. Once we receive satisfactory draft licence applications, we will supply a Letter of No Impediment.	Letters of No Impediment in respect of great-crested newt and water vole were received from Natural England on Thursday 25 July 2019 and have been submitted to the examination at Deadline 3 (document reference 11.4.9).
Landscape designations		
12	Kent Downs Area of Outstanding Natural Beauty (AONB) The proposal is around 7.6km from the AONB, and so there will be distant views of the solar park from the AONB. The distinctive landform and dramatic views are one of the special qualities of the Kent Downs AONB. The Management Plan for the AONB includes Policy SD8: "Proposals which negatively impact on the distinctive landform, landscape character, special characteristics and qualities, the setting and views to and from the AONB will be opposed unless they can be satisfactorily mitigated."	The views from the AONB have been assessed in the LVIA [APP-037] at section 7.5 and are shown in viewpoint 21 [APP-063 to APP-196].
NATURAL ENGLAND'S NATURE CONSERVATION CONCERNS AND ADVICE		
The principal issues in relation to statutorily designated nature conservation sites		
13	Natural England identified the following main issues in its Relevant Representations: a. Noise and visual disturbance to birds during construction b. Dust and water quality impacts c. Loss of habitat These issues will be discussed in corresponding sections below along with any updates on the progress or resolution of issues.	The Applicant notes this summary, and responds to the detailed comments below.
Noise and visual disturbance during construction		
14	The birds for which The Swale SPA, Ramsar site and SSSI are designated are susceptible to noise and visual disturbance. Natural England's supplementary advice on the conservation objectives for the SPA1 states that: "Disturbance should be judged as significant if an action (alone or in combination with other effects) impacts on (water)birds in such a way as to be likely to cause impacts on populations of a species through either I. changed local distribution on a continuing basis; and/or II. changed local abundance on a sustained basis; and/or III. the reduction of ability of any significant group of birds to survive,	The Applicant welcomes the clarification from Natural England regarding the definition of disturbance as set out in the supplementary advice on conservation objectives for The Swale SPA.

Ref.	Statement	Applicant's Comment
	breed, or rear their young."	
Wintering birds on intertidal habitat		
15	Table 9.6 of the Environmental Statement (ES) Ornithology chapter [APP-039] summarises the SPA component species using the intertidal area to the north of the proposed solar park. This indicates that significant numbers of SPA (and SSSI) species use this area.	The Applicant agrees with Natural England's summary regarding use by birds of the intertidal habitats adjacent to the Development site.
16	Whilst Natural England does not agree with the use of noise thresholds to predict whether there will be adverse impacts (as impacts are site and species specific), we agree they are helpful in assessing potential for impacts. Figure 3 in the Report to Inform an Appropriate Assessment (RIAA) [APP-026] shows that the 70dBLAmax noise contour does not reach the intertidal area. However, the 55dBLAmax contour extends 320m from the source of the piling, and hence extends into the intertidal. Therefore, there is the potential for wintering birds to be impacted. This applies particularly to birds roosting at Castle Coote, as options for alternative high tide roosts are more limited than foraging areas, and birds are pushed closer to the source of disturbance by the high tide	The Applicant welcomes Natural England's comment that the precautionary noise thresholds used in the assessment have been useful in assessing the potential for impacts on wintering birds in the intertidal zone.
17	Disturbance mitigation measures are set out in the Outline SPA Construction Noise Management Plan (CNMP) [APP-243], which are welcomed. However, in our Relevant Representation [RR827] Natural England raised concerns that these were not sufficient to be certain that adverse impacts would be avoided at high tide. This issue has been discussed through the Habitat Management Steering Group (HMSG) and the group agreed that timing of piling works closest to Castle Coote should take place outside the core wintering period (November to February inclusive). The Applicant has indicated, through our common ground discussions, that an updated SPA CNMP will be submitted that will include timing restrictions on piling to avoid disturbance to birds using the high tide roost at Castle Coote. Subject to the detail contained in an updated SPA CNMP, Natural England confirms this is an acceptable approach to mitigating disturbance to wintering birds.	The Applicant confirms that an updated version of the SPA CNMP [APP-243] including the additional detail regarding sensitive timing of works near Castle Coote has been provided at Deadline 3 (document reference 6.4.12.10, revision B). The Applicant welcomes Natural England's confirmation that this approach to mitigating disturbance impacts to wintering birds is acceptable.
Breeding birds of grazing marsh and reedbed		
18	The grazing marsh and reedbed to the north and west of the solar farm site supports breeding birds which form components of the breeding bird assemblage of the SPA (and SSSI notified features, including bearded tit). These birds are susceptible to disturbance, which may affect their productivity, and so mitigation measures are necessary.	These comments are noted.
19	In our Relevant Representation [RR-827], Natural England raised concerns as to	The Applicant has updated the wording of the BBPP (Appendix B of the Outline CEMP) [APP-205] to provide clarity

Ref.	Statement	Applicant's Comment
	whether the mitigation measures set out in the Outline SPA CNMP [APP-243] and the Breeding Bird Protection Plan (BBPP) (Appendix B of the Outline Construction Environment Management Plan) [APP-205] gave sufficient certainty that impacts would be avoided. In particular, the BBPP states (paragraph 158) that 'where practicable' construction activities closest to The Swale will be avoided. Through our common ground discussions, the Applicant has confirmed that the intention of this statement was to avoid restricting activities that do not exceed the noise threshold, and has agreed to review the wording of the BBPP to provide greater certainty and clarity.	regarding this point. The updated document has been provided at Deadline 3 (document reference 6.4.5.2, revision B).
Breeding marsh harriers		
20	Marsh harriers are an important component of the SPA breeding bird assemblage. Therefore, Natural England welcomes the specific commitment to a 500m exclusion zone around any marsh harrier nest (paragraph 165 of the Breeding Bird Protection Plan) [APP-205], in order to avoid noise and visual disturbance.	The Applicant welcomes Natural England's agreement regarding the applied construction mitigation set out in the BBPP to protect nesting marsh harrier from disturbance.
Wintering brent geese, lapwings and golden plovers		
21	Surveys undertaken in support of the proposal indicate that large numbers of brent geese, lapwings and golden plovers use the arable land within the development site in the winter. Natural England agrees with the statement (in paragraph 163 of the RIAA) [APP-026] that these species will not be adversely impacted in the first winter of construction as there will be sufficient undeveloped area for them to continue to forage. However, there will be an impact in the second (and third) winter as the Arable Reversion Habitat Management Area (AR HMA) will be subject to construction disturbance. As this disturbance is temporary, Natural England's view is that construction disturbance and displacement, alone, is not likely to lead to an adverse effect on wintering geese and plovers. However, it will be necessary to create the AR HMA grassland as early in the construction timetable as possible, to ensure that the habitat is established and available as soon as construction finishes. Natural England recommends adding detail on the timing of the arable reversion to the Outline Landscape Biodiversity Management Plan (LBMP) [APP-203].	The Applicant welcomes Natural England's confirmation that displacement is not likely to lead to an adverse effect on wintering geese and plovers. Additional details regarding the timing of ground preparation, sowing and management of the AR HMA have been provided by way of updating the outline LBMP [APP-203]. The updated document has been provided at Deadline 3 (document reference 6.4.5.2, revision B).
Dust and Water Quality Impacts		
22	Habitats and species that make up the special interest of the Ramsar site, SSSI and MCZ in the vicinity of the proposal are susceptible to smothering from dust, and changes in water quality. However, Natural England's advice is	The Applicant welcomes Natural England's confirmation that the applied construction mitigation set out in the outline CEMP [APP-205] are sufficient in this respect.

Ref.	Statement	Applicant's Comment
	that standard construction mitigation measures, as set out in the Outline CEMP [APP-205], are sufficient to address potential dust emissions, and risks to water quality from the operation of plant and vehicles.	
23	Paragraph 3.9 of Natural England's Relevant Representation [RR-827] requested information on the current level of pesticide, fertiliser and herbicide use so that the benefit of ceasing the current arable operation can be quantified. This would also be helpful in determining whether the proposed application on the AR HMA is less than the amount of nitrogen currently applied, and hence whether this represents a benefit to the Ramsar and SSSI ditch plant species.	The Applicant has requested further information on baseline agricultural inputs from the landowner and expects to provide an update to the examination ahead of Deadline 4.
24	Through our common ground discussions, the Applicant has confirmed that it has not been possible to identify the levels of application for each individual field, or for the CHSP area as a whole, and that the information is only available at a whole farm scale. Nevertheless, the level of fertiliser applied will be less than the current baseline, as the proposal is to only fertilise the AR HMA rather than the whole CHSP site. Natural England accepts this is likely to be the case. However, in order to avoid nutrient run-off into the ditches surrounding the AR HMA, and to ensure a significant improvement on the current situation, Natural England recommends application of 12 tonnes organic manure/ha/year, leaving a 10m buffer between the ditch and the fertiliser application. We understand the Applicant will include details of the fertiliser application in an updated LBMP.	The Applicant confirms that the option proposed in the updated outline LBMP is for application of up to 12 tonnes of farmyard manure per hectare per year to the AR HMA, restricted in application to leave a 10 metre buffer adjacent to ditches. The updated outline LBMP will be submitted by Deadline 3 (document reference 6.4.5.2, revision B). A written representation covering existing agricultural inputs is expected to be provided ahead of Deadline 4.
Loss of Habitat		
25	The development site supports significant numbers of brent geese, golden plovers and lapwings in the winter. Numbers fluctuate according to the type of crop planted and other factors, including time of year, but at times the number of birds on site is large, and a significant proportion of the respective SPA populations. The applicant's surveys, and data from the Kent Wildlife Trust (Table A9.6 of the Ornithology Technical Appendix) [APP-223], demonstrate that the development site is regularly used by wintering geese and plovers, and hence is functionally linked to the SPA/Ramsar. Natural England's view is that, in order to have sufficient certainty that an adverse effect on integrity will be avoided, there should be no net loss of foraging resource as a result of the proposal. This has, therefore, been the prime focus of our discussions with the Applicant, through the HMSG.	These comments are noted.

Ref.	Statement	Applicant's Comment
26	As set out in our Relevant Representation [RR-827], Natural England is satisfied that the 'birddays' metric described in the Ornithology Technical Appendix [APP-223], is an appropriate method for calculating gains and losses of functional land. The bird surveys in support of the application were carried out during a representative period in the cropping cycle, and therefore the inter-annual mean of the intra-annual mean of the peak monthly counts (as described at paragraph 104 of the Ornithology Technical Appendix) is an appropriate way to calculate bird days.	This agreement is welcomed by the Applicant.
Brent Goose Functionally Linked Land		
27	Natural England has advised the applicant that the AR HMA should maximise its production of grass for brent geese. This is because geese are more site faithful and have a shorter foraging distance than lapwings or golden plovers. Experimental manipulation2 of management prescriptions for brent geese and accurate survey has shown that grass cut five times and fertilised with 50kgN/ha can support 2097 goose-days/ha. The study by Vickery et al. (1994) also demonstrated that there was no significant difference in goose usage of plots that were cut or grazed, the most important factor was that a short sward (<5cm) was achieved in October when the geese arrive. However, grazing (as opposed to cutting), and fertilising, both increased the protein content of grass.	These comments are noted.
28	The Outline LBMP [APP-203] describes the management of the AR HMA in terms of grazing at a low stocking density to achieve a sward height of <10cm. Natural England would welcome further discussion with the Applicant as to whether the management set out in the Outline LBMP will achieve the precise number of goose-days (ie 2097 per ha) that have been used in the caclulations in the RIAA [APP-026]. In particular, the goose-days in the Vickery et al. study were based on cutting to achieve a shorter sward than suggested in the Outline LBMP; and although it is noted that there was no significant difference between goose usage on cut or grazed plots, the paper does not give a goose-days figure for grazed land.	The Applicant will take forwards further discussion with Natural England and the HMSG to set out more detail regarding the management and desired sward length of the grassland for geese to achieve the appropriate capacity in terms of goose-days/ha. The Applicant considers that the 2,097 goose-days/ha figure used to propose the extent of mitigation land required is precautionary and does not necessarily represent a maximum capacity of the grassland. The study presents this finding as the measure of capacity that geese used under experimental prescriptions for the grassland sward in the study, rather than its maximum capacity. Other sources of information and advice suggest that the required number of geese can be accommodated in much smaller areas of grassland (*e.g.* the RSPB publication *Farming and Wildlife* (Andrews and Rebane, 1994) recommends 15-30 ha of alternative feeding area for every 1,000 geese; Summers and Critchley (1990) recommended 50 ha for every 1,000 geese. The peak-mean count of brent geese using the arable land within the Development site was approximately 850 birds, so in effect, the c. 50 ha of grassland in the AR HMA is seeking to provide for 850 birds.
29	The Outline LBMP [APP-203] states (paragraph 295) that organic fertiliser may be applied in the autumn. Natural England agrees that an adaptive approach is appropriate to managing the AR HMA,	The Applicant confirms that fertiliser would be applied annually and this will be updated in the outline LBMP [APP-203]. The updated outline LBMP [APP-203] will be submitted by Deadline 3 (1 August 2019).

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	however, we recommend that fertiliser is applied every year, given the evidence that this increases the nutritional value of the grass. It is also likely to benefit lapwings and golden plovers by increasing the biomass of soil invertebrates (see below for further information). As noted at paragraph 3.3.3 of this representation, Natural England recommends application of 12 tonnes organic manure/ha/year, leaving a buffer of 10m between the application and the edge of any ditches. As fertiliser application achieves greater goose-days but should be avoided within 10m of ditches to avoid impacting other designated features, we recommend calculating whether this has any impact on the sufficiency of the AR HMA for brent geese.	The capacity figure of 2,097 goose-days per hectare for fertilised grassland was taken from Vickery *et al.* (1994). The same study reports a capacity of 1,562 goose-days per hectare in unfertilised plots of grassland. Using these same figures results in the following calculation: Functional area: 50.1 ha Fertilised functional area: 43.6 ha Unfertilised functional area: 6.5 ha Capacity = (43.6 × 2,097) + (6.5 × 1,562) = 101,580 goose-days. This is very similar to the 101,940 goose-days as measured by the peak-mean metric in arable fields of the Development site. The Applicant also reiterates the point above that these numbers do not represent a maximum capacity of grassland to support geese and other sources of management advice suggest that larger numbers of birds could be accommodated in the same or smaller extent of land.
Lapwing and Golden Plover Functionally Linked Land		
30	Lapwings and golden plovers feed on soil and surface invertebrates. Therefore, they do not compete for the same food as brent geese and can potentially be accommodated on the same piece of land. Whether the mitigation land can provide for all the geese, lapwings and golden plovers necessary will depend on: a) Whether there is physically enough space for the geese and waders to feed, as they tend to form separate flocks; b) Whether management of a dense grass sward to feed the geese means that soil invertebrates are less available to the waders.	As advised by Natural England during pre-application consultation, the management of the AR HMA is focussed on the provision of sufficient resources for Brent geese. The aim is therefore to provide a nutrient-rich short sward grassland favoured by this species. However, short-sward grassland is also known to be a habitat used, often preferentially, by golden plovers and lapwings – this was described in the literature review in Section 9.6.2.2 of Appendix A9.1: Ornithology Technical Appendix [APP-223] and Section 6.1.2.5 of the RIAA [APP-026]. The type of grassland preferred is short-sward (<10 cm), permanent and long-established; such grassland would typically have a close sward, providing the suitable micro-climate within which the birds' invertebrate prey is available to them above, at and near the soil surface. Barnard and Thompson (1985) analysed sward density as part of their study into foraging by gulls and plovers and found that older pastures (>25 years old) were preferred by foraging lapwings over newly established grassland (<4 years since sowed) and had a significantly higher sward density than newly established grassland. It is also proposed to fertilise the sward using farmyard manure, additionally providing suitable conditions for the birds' invertebrate prey. It is therefore the Applicant's view that the proposed management of the AR HMA to provide short-sward, fertilised grassland provides suitable conditions for foraging golden plover and lapwing as well as Brent goose. In the PEIR, the Applicant presented additional evidence regarding preferential use of grassland by Golden plovers and lapwings to support the reasoning that grassland would have a higher capacity to support these species than arable crops; however, following Section 42 consultation, this was removed to take the precautionary approach that grassland might only support a similar capacity for these to arable land. As a result, it is the capacity figures from Gillings et al (2007) that have been applied in assessing the potential for the AR HMA to support the required numbers of lapwing and golden plover.
31	The bird-days calculations for these species (described at paragraph 131 of the Ornithology Technical Appendix) come from work by Gillings et al (2007) on arable land in Norfolk3. We understand the Applicant has not been able to find a bird-days calculation for plovers on permanent pasture in the scientific literature. Therefore, it is not clear that grassland will support an equivalent number of bird-days to arable land. Whilst grassland can support a greater biomass of earthworms than arable, it is not certain that a dense sward will allow the birds the same access to the food as arable habitat (as noted above). In addition, Gillings et al (2007) calculated their bird-days based on the fields that actually held plovers as they were concentrated into a few fields. Calculating the density of birds across the whole Norfolk study area would have produced much lower bird-days. It is, therefore, not clear from that study why the plovers were aggregating in the fields they did, and whether those conditions will be replicated in the AR HMA.	
32	Using the bird-days calculations from Gillings et al (2007) indicates that 56ha of mitigation land is required for lapwings and 18.5ha for golden plovers, ie there is a small shortfall for lapwings, but over-provision for golden	The Applicant has reviewed the Gillings et al. (2007) study. There is insufficient detail in the paper about individual field use to ascertain how often lapwings and golden plovers were found foraging together and potentially competing for

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	plovers. The Applicant suggests, in their Ornithology Technical Appendix, that the shortfall in lapwing capacity can be made up by the over provision for golden plovers, as the two species feed in the same areas, and the mitigation requirements are not additive.	resources. However, the paper does state, for example: "In general both species selected and avoided the same habitats". Where the paper describes the bird-days/ha use by golden plovers and lapwings, it states: "…transect fields sustained on average 250,000 Golden Plover bird-days (range 165,000–301,000) and 160,000 Lapwing bird-days (range 126,000–259,000) per winter (October to February). These equate to densities of 121 Golden Plover bird-days/ha and 78 Lapwing bird-days/ha when calculated over the whole study area. However, plovers were concentrated into very few fields, meaning that although the total study area was 2063 ha, the area actually used (sum of field areas weighted by their frequency of occupancy) was only 160 ha, giving densities of 1,560 Golden Plover bird-days/ha and 1,000 Lapwing bird-days/ha." Whilst this does not specifically state that the 160 ha area was used by both species, the Applicant is of the opinion that any significant segregation between lapwings and golden plovers would have been reported in the paper. There is evidence of competition between the species for food. Golden plovers are described by Barnard and Thompson (1985) as using the presence of lapwing flocks to guide them to areas of good foraging. Gregory (1987) states that values of α (a measure of overlap in use of habitats) was very high, suggesting near total overlap between the two species in his study area. Regarding Barnard & Thompson (1985), the lack of impact of golden plovers on the time budgeting and feeding efficiency of lapwing cannot be correlated with an absence of competition for resources and this potentially provides support for the Applicant's position; if both species feed in the same location on the same resources with unaffected foraging efficiency, then depletion of resources will occur more rapidly than if there was an effect of one species on the other. Hence if one species is under-utilising the available resources, then more will be available for the other species. That study went on to report that interspecific aggression appears to be related to prey depletion as the local density of birds increases, and increases in local density of birds within the flock results in a reduction in individual feeding efficiency. Barnard & Thompson (1985) also report that in established foraging flocks within fields, there tends to be a much lower density of lapwings in those parts of the flock containing golden plovers and vice versa, which indicates that there is direct competition for resources. However, the Applicant recognises that there is a degree of uncertainty in this respect. This is one reason why a very use of the Development site by the wintering birds. The assessment for the Development has been made on the basis of only using the highest of any counts made in each month of the baseline surveys and averaging these peak monthly counts. This is in contrast for example to Gillings (2007) where the bird-days capacity of the utilised arable fields was calculated on the basis of the average across all survey visits. The result of use of the peak-mean for the CHSP assessment is likely to result in an overestimation of
33	Natural England is not certain that the bird-days figures can be used in this way, as it implies that there is competition between the two species for the same food resources, and that unused resource for golden plover can be used by additional lapwing. Therefore, we recommend that the Applicant provides further information on whether the lapwings and golden plovers were found foraging together in the Gillings et al (2007) study, whether competition for the same resources is likely, and hence whether it is appropriate to add the bird-days for the different species into a combined plover-days figure.	

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		the use of the site and hence there is likely to be a degree of over-provision of the area required to mitigate for loss of foraging are to the Development. This is illustrated by the difference in two metrics for lapwing and golden plover: (i) the inter-annual mean of the intra-annual monthly peak-mean (using just the highest counts each month), and (ii) the interannual mean of the intra-annual monthly mean (using all counts each month); for lapwings (i) results in 56,023 bird-days (Oct-Mar) compared to (ii) 23,237 bird-days (which equates to 23.2 ha of land based on 1,000 bird-days per hectare), whilst for golden plover (i) results in 28,801 bird-days (Oct-Mar) compared to (ii) 7,877 bird-days (which equates to 5 ha based on 1,560 bird-days per ha).
Marsh Harrier Functionally Linked Land		
34	Marsh harriers are an important component of the breeding bird assemblage and forage along the ditches within the development site. There is some uncertainty as to whether individuals will continue to forage within the solar park site as there are no equivalent sites with which to compare, regarding the response of marsh harriers. However, the setting back of panels to a minimum of 15m from the ditch is helpful in reducing the risk that 'pinch points' will deter birds. Natural England's view is that creating rough grassland to maximise the production of small mammals is crucial in encouraging marsh harriers to continue to forage in the area.	The outline LBMP [APP-203] sets out the prescriptions for establishment of large areas of 'grazing marsh grassland' between the solar panel arrays deployed in each field and will be developed further to include objectives and prescriptions for enhancing the water environment, including establishment of new reedbed. There is no published evidence either way regarding the reaction of marsh harriers to solar arrays of this scale, or any other scale, in the landscape. The inter-array grasslands will be a minimum of 30 m wide (or more, allowing for the ditch width), extending up to 80 m wide in some places and will be unbroken for substantial lengths spanning the site. A marsh harrier was witnessed foraging along a narrow grassland strip adjacent to a solar array on the Isle of Sheppey; the Applicant accepts the difference in scale, but the observation demonstrates that they are not averse to the presence of solar panels. On the basis of the provision of large quantity of good foraging habitat over and above the baseline availability and the absence of evidence that marsh harriers would be displaced at landscape scale, the assessment in Chapter 9 – Ornithology of the ES [APP-039] concluded that harriers will continue to forage at the site and will benefit from utilising the substantially increased area of suitable foraging habitat.
Future land uses		
35	In our Relevant Representation [RR-827], Natural England noted that the Environment Agency's Medway Estuary and Swale Coastal Flood and Erosion Strategy (MEASS) included the Cleve Hill site as a location for managed realignment in the 2nd epoch of that strategy. The Habitats Regulations Assessment for MEASS requires that intertidal habitat is created to compensate for losses due to sea level rise and coastal squeeze. Natural England understands that the Applicant is drafting an additional Requirement for the DCO to address the Environment Agency's request for a time limit on the consent. We will comment on the draft DCO when submitted, but we welcome the steps taken to resolve this issue.	The Applicant discussed the wording of Requirement 16 (previously 15) during the Issue Specific Hearing 2 on the draft DCO (see document reference 6.1.4 for a written summary). Updated wording for this Requirement has been provided in the latest version of the draft DCO submitted at Deadline 3.
The Swale SSSI and The Swale Estuary MCZ		
36	Natural England's view is that the mitigation measures set out in section 3.2 to 3.4, above, are sufficient to address potential impacts on	This agreement is welcomed by the Applicant.

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	the notified features of The Swale SSSI.	
37	As noted in section 2.2 above, the proposed works, are sited adjacent to The Swale Estuary MCZ, which is designated for a number of habitats including low energy intertidal rock, intertidal coarse sediment; intertidal mixed sediments; intertidal sand and muddy sand;estuarine rocky habitats; subtidal coarse sediment; subtidal mixed sediment; subtidal sand; and subtidal mud. Good examples of estuarine rocky habitats have been found in the area around Cleve Marshes and good examples of subtidal course sediment are present around Faversham Creek, near Nagden Marshes.	These comments are noted.
38	Eutrophication has not currently been noted to be significant. However it should be ensured that there are no increases in nutrients. Furthermore contaminants may impact the ecology of the Marine Protected Area by having a range of biological effects on different species within the habitat, depending on the nature of the contaminant. Therefore contractors should adhere to pollution prevention best practice guidelines including use of materials that are non-toxic to the marine environment.	The Development would result in improvements to water quality as set out in Chapter 8 - Ecology [APP-038] and Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground Conditions [APP-040] of the ES. The Outline Construction Environmental Management Plan [APP-205] includes pollution prevention measures to be implemented during construction. The non-toxic materials which can be used in the marine environment are set out in the dDCO which includes a Deemed Marine Licence (DML) at Schedule 8, Part 1, Section 3, which states: "The substances or articles authorised for deposit at sea include - (a) iron and steel, copper and aluminium; (b) stone and rock; (c) concrete; (d) sand and gravel; (e) timber; (f) plastic and synthetics; (g) marine coatings; and (h) material extracted from within the offshore Order limits."
Protected Species		
39	The development site supports populations of great crested newts and water voles. The Applicant has consulted Natural England on draft licences for these species, and we are in the process of reviewing them. Once this is complete we will supply a Letter of No Impediment.	Letters of No Impediment have been received from Natural England by the Applicant and have been submitted at Deadline 3 (document reference 6.4.9).
NATURAL ENGLAND'S ADVICE ON PROTECTED LANDSCAPES		
Kent Downs AONB		
40	Natural England has a number of specific statutory powers and duties in relation to protected landscapes (AONBs and National Parks). These encompass: • designation and any variation of boundaries • monitoring effectiveness in respect to the purpose of designation • advising Ministers on management and governance.	These comments are noted.
41	Our role is also to bring to the attention of the Secretary of State and local planning authorities the effect of developments that	

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	are likely to be prejudicial to the natural beauty of National Parks or AONBs. We are a statutory consultee under a range of planning and transport legislation and we provide landscape advice on land use planning including development plans, nationally significant infrastructure proposals, Strategic Environmental Assessments and Environmental Impact Assessments (involving assessment of landscape/seascape and visual impacts).	
42	Given our statutory landscape role, described above, Natural England's landscape advice focuses on the potential impacts on the Kent Downs AONB. The potential impacts of the proposal on views from the Kent Downs Area of Outstanding Natural Beauty (AONB) have been assessed in Chapter 7 of the ES [APP-037]. Viewpoint 20, at Shepherd's Hill in the AONB, is around 7.6km from the development site, and as such there are only distant views of it. Therefore, Natural England concurs with the assessment (at paragraph 414) that the proposal would result in moderate/minor effects on the AONB which are not significant.	The Applicant welcomes Natural England's agreement on the LVIA assessment conclusions for the AONB.
NATURAL ENGLAND'S ADVICE ON OTHER, NON-STATUTORY, ISSUES		
Access and Recreation		
43	Natural England has a duty to provide coastal access on foot around the whole of the English coast and is aiming to complete this by 2020. This is a new National Trail with an associated margin of land predominantly seawards of this, for the public to access and enjoy. Natural England takes great care in considering the interests of both land owners/occupiers and users of the England Coast Path, aiming to strike a fair balance when working to open a new stretch. We follow an approach set out in the approved Coastal Access Scheme4.	As well as the visual impact of the Development, the Applicant has included an assessment of the recreational impact of the Development on the Saxon Shore Way / England Coast Path in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. Section 13.5.1.4 addresses effects during construction and section 13.5.2.2 addresses operational effects. The updated outline LBMP submitted at Deadline 3 provides further detail of the proposals for scrub planting and reed bed on the Development site. The Applicant also submitted an example photograph of existing scrub development adjacent to the Development site as Appendix B to the Applicant's Comments on Responses to ExQ1 [AS-023], in support of comments on responses to first written question 1.8.2.
44	Natural England submitted proposals for the Whitstable to Iwade stretch of the England Coast Path, for approval by the Secretary of State for Environment, Food and Rural Affairs, in June 2017 . In the vicinity of the development site, the proposal is for the England Coast Path to follow the route of the Saxon Shore Way.	
45	Natural England's concerns regarding the England Coast Path and new developments centre on ensuring they do not affect the ability of people to exercise their coastal access rights with respect to continuing along the proposed route. As set out in the Coastal Access Scheme (section 5.5.5) our role is to work with developers to ensure that proposals take account of our objective to provide the England Coast Path, and include provision for the trail on the seaward side wherever practicable. In this case, the route along the seaward side of the proposal will not be	

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	compromised. With respect to the wider visual and landscape aspects of the development and its accordance with relevant planning policies, it is not Natural England's role to provide detailed comments on these issues when responding to planning proposals, but they are nevertheless key issues to consider when determining the application.	
46	Notwithstanding the comments above, Natural England notes that Chapter 7 of the ES [APP037] includes an assessment of the visual impact of the proposal on the Saxon Shore Way (and hence the England Coast Path once opened), concluding that the proposal would have a major (years 1-10) and major/moderate (10 years onwards), negative, visual impact on users which is significant.	
47	Natural England recognises the attempts made by the applicant to mitigate this visual impact by softening the edges of the solar park, as indicated in the Outline LBMP [APP-203]. We defer to other Interested Parties to comment on the success of this. In our Relevant Representation, Natural England suggested that some of the scrub proposed could be replaced with reedbed, which would be preferable from a nature conservation point of view and more in keeping with the marsh landscape. We have discussed this suggestion with the Applicant through our common ground discussions, and understand that an updated LBMP will be submitted, which will provide more detail on the locations and type of scrub and reedbed proposed.	

2.18 REP2-100 Ramblers

Table 2.18: The Applicant's Comments on Ramblers Written Representation

Ref.	Statement	Applicant's Comment
INTRODUCTION		
1	This is a joint representation opposing the development of the Cleve Hill Solar Park submitted on behalf of the Ramblers, Faversham Footpaths Group. Swale Footpaths Group and the Open Spaces Society. Faversham Footpaths and Swale Footpaths Groups are independent local walking groups who are associate members of the Ramblers.	Landscape impacts are assessed in Chapter 7 - LVIA of the ES [APP-037]. The assessment is supported by figures [APP-054] and visualisations [APP-063 to APP-196].
2	I am Ian Wild, Coastal Access Officer for Kent, and I represent the Ramblers who are stakeholders in helping Natural England develop the England Coast Path. I have held this voluntary post for ten years. I have walked and surveyed the entire Kent coastline.	
3	To avoid repeating the representations of other organisations and individuals, our representation mainly relates to the Principal Issue of "Landscape and visual effects". However, I have listed all the Principal Issues and indicated where we have a view.	
Principal Issues		
Biodiversity and nature conservation (including Habitats Regulations Assessment)		
4	We share the concerns of other organisations more directly concerned with wildlife as to the impact on birds, in particular, and habitat loss. As walkers we derive great enjoyment from the area's distinctive flora and fauna. It is immaterial to us that it is classified as low grade arable farmland. It still changes throughout the seasons and there is great pleasure to be gained by the sighting of a flock of Brent geese grazing in the winter, a fox hunting along the reed beds or an occasional marsh harrier.	There will be a net gain in biodiversity, as set out in the ES Chapter 8 [APP-038]. A biodiversity metric has also been calculated using DEFRA's methodology, demonstrating net gain [REP2-045].
Landscape and visual effects		
5	This, from our perspective as walkers, is the key issue as it impacts so much on our enjoyment of the area. The Saxon Shore Way Long Distance Footpath (ZR484/CW55), which will also be the route of the England Coast Path, runs along the northern and western boundaries of the proposed park along the top of the sea defence. The solar panels will be located only 70-80m or closer from the path with limited or no vegetation screening. The photomontages confirm that the solar panels will completely dominate the landscape for some 5 km of the Path creating a monotonous industrial landscape. It will take at least an hour to walk from one end to the other. The photomontages of this area are in panoramic mode which is not how the human eye works. The solar panels will appear a lot nearer and more dominant in real life. While there are other stretches of the Kent section of the England Coast Path that are heavily	Effects on walkers are assessed in the ES Chapter 13 [APP-043]. It is noted that views to one side of the path will be significantly altered, though the panels will be below the walker's viewing height and views across the panels to the low hills inland to the south will be retained. Near-distance views, and views forward and to the north will not be affected by the Development. The feeling of space will not be affected, because the panels will not block horizontal views. No other aspect of recreational amenity will be affected. The photomontages are deliberately focused on the Development infrastructure, where a walker will generally be facing forwards, along the path, and the overall view from the path will not be dominated by the panels.

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	industrialised and not particularly pleasant walking, none are new or as long or so flat and repetitive.	
6	The footpath (ZR485) that crosses the site will become an alley dominated by the panels on either side.	Across the majority of the Development site including along the route of ZR485 where a greater separation has been designed of the majority of the route, the minimum separation distance between ditches and solar panels is 15 m, leading to a minimum gap of 30 m between PV arrays in these areas. The Applicant doesn't agree with the characterisation of these areas of land as "an alley dominated by the panels".
7	The Graveney marshes are a very special area with a unique beauty – huge horizons, both out to sea towards Sheppey and across the flat landscape to the Blean. It is their very remoteness and isolation and the feeling of "being away from it all" that is their attraction for walkers.	As noted above, the horizons will not be affected by the Development except on the footpath ZR485 that crosses the site.
8	While most people associate the iconic White Cliffs with the Kent coastline, the reality is that much is made up of reclaimed marshland. This particular section of the Coast Path will be almost unique in that the path is along the top of the sea defence with a view of both the sea and over open farmland. Along most of the Coast Path, where it borders reclaimed marshland, it will be located on the landward side below the sea defence. Where it goes along the top, most of the inland view is spoilt by urbanisation, that is, an adjacent road or housing as along the Romney Marsh.	Landscape and visual impacts are assessed in Chapter 7 - LVIA of the ES [APP-037]. Section 7.5.2 assesses landscape effects during operation, and section 7.6.2.2 assesses visual amenity effects during operation on recreation and public amenity receptors. As well as the visual impact of the Development, the Applicant has included an assessment of the recreational impact of the Development on the Saxon Shore Way / England Coast Path in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. Section 13.5.1.4 addresses effects during construction and section 13.5.2.2 addresses operational effects.
Noise		
9	I quote a colleague "One of the great attractions of being out on this section of the coast is the virtual complete absence of man-made noise. I was at Castle Coot recently and was struck by the fact that all I could hear was the cry of gulls, terns and oystercatchers and the sea breeze". This could be lost.	ES Chapter 13 [APP-043], section 13.5.2.2 para 197, states that "Noise effects on residential receptors located on or close to PRoW are assessed in Chapter 12: Noise and Vibration, and predict negligible day-time noise effects at all residential properties". The footpaths around the site are generally elevated and a sea breeze is likely to create more noise than would have been assumed at residential properties. The noise effects for walkers on the Saxon Shore Way are therefore likely to be lower than on residents. There is no reason to consider that any aspect of amenity will be lost because of noise from the Development.
Socio- economic		
10	People visit this area because it is accessible and unique. If it is spoilt for their enjoyment then they simply won't come and this will impact on local businesses. Both the Sportsman Inn at Seasalter and the Ferry Inn at Harty on Sheppey, which would overlook the site, have both recently invested in holiday accommodation.	The effects on tourism are assessed in the ES Chapter 13 [APP-043], section 13.5.2.1 as being negligible. Views in one direction from each of the two properties mentioned may contain Development components at a distance of a few hundred metres. This is not likely to deter tourists, if the 400 kV overhead power lines currently in place do not do this.
11	One of the main reasons for the England Coast Path is that it will bring people and business to the coast. This has been recognised by both the conservative and	The effects on tourism are assessed in the ES Chapter 13 [APP-043], section 13.5.2.1 as being negligible.

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	labour governments who have held office during its delivery and why the target for its completion was brought forward. The Welsh Coast Path, which has been open some years, has proved immensely successful. If this section is marred by this development, then this area will not benefit.	
Need		
12	We do not dispute the need for renewable energy but we do dispute the need to locate a huge solar park in this location. The prime reason appears to be that it is immediately adjacent to a point of connection to the National Grid!	Grid connection opportunities are currently the main limiting factor for solar development in the UK, as set out in the Statement of Need [APP-253] and the Sequential Test Report [APP-201]. At this site, solar irradiance is suitable, the agricultural land classification is poor, the transmission network is proximate allowing transmission scale grid balancing and the scheme is commercially viable at this scale. All of these factors put this site amongst a very small number in the UK (there are 3 solar proposals, including this site, currently in the public domain, with a capacity of over 50 MW, and no operational schemes of this size currently exist in the UK). In responding to climate change, these are the principal reasons providing the need for a solar park in this location.
Conclusion		
13	While we fully support the provision of renewable energy we are totally opposed to this application on the grounds of its vast scale which would have a massively detrimental environmental and visual impact, ruining the enjoyment of the many people who clearly take great pleasure in walking the paths in this area.	The ES chapter 7 [APP-037] acknowledges the significant visual impact from locations close to the Development, because of the substantial change in view. However, the ES Chapter 13 concludes that the recreational amenity will not be significantly affected except on the path ZR 485 that passes through the site, between the solar PV modules.

2.19 REP2-101 Royal Society for the Protection of Birds

Table 2.19: The Applicant's Comments on RSPB Written Representation

Ref.	Statement	Applicant's Comment
INTRODUCTION		
1	This Written Representation sets out a summary of the RSPB's position with regard to the Cleve Hill Solar Park Project application (the development), based on its Relevant Representation. It also provides the RSPB's answer to one of the Examining Authorities Written Questions.	The Applicant notes RSPB's position regarding further submissions to the Examination and welcomes ongoing commitment to their involvement in the HMSG.
2	Due to short term, but acute, resource constraints the RSPB will be unable to make further submissions to the Examination and will defer to the Kent Wildlife Trust and Natural England on relevant matters relating to our objection below. We will use our currently constrained resources to continue to input to the Habitat Management Steering Group and thereby support the Kent Wildlife Trust and Natural England in that respect.	
Summary of the RSPB's position		
3	The RSPB objects to the development. The reasons for this objection (set out in the RSPB's Relevant Representation) are summarised as follows:	The Applicant notes RSPB's position and continues to discuss the issues raised with the RSPB through the HMSG. RSPB has stated that due to resource constraints it does not intend to agree a statement of common ground in relation to the Application.
4	The development will result in the loss of a key coastal site upon which birds from the adjacent European and national protected Swale estuary depend, and which should be considered for inclusion in future extensions of those protected areas. The Cleve Hill site is relied upon by birds from the Swale Estuary Special Protection Area and Ramsar site (the SPA/Ramsar site), especially for feeding and roosting by important populations of nonbreeding waterbirds. The SPA/Ramsar site is integral to the Greater Thames Estuary, one of the most important places for wildlife in Europe, providing crucial feeding and roosting habitat for the second largest aggregation of wintering ducks, geese and waders in the UK and breeding habitat for 75% of South East England's breeding wader population. Even though most of this area is protected as an SPA and/or Ramsar site, it remains vulnerable to threats from disturbance, sea level rise and incremental development. The Cleve Hill site is particularly important for at least three SPA species (dark-bellied brent goose, golden plover, lapwing). As such, the RSPB believes it should be in the area of search for any future SPA extension for these species when Natural England reviews its boundary. This would be consistent with the conclusions of JNCC's 2001 and 2016 reviews of the UK SPA network. The RSPB respectfully disagrees with the applicant's characterisation of these reviews as having no legal standing. The	From the outset, the Applicant has recognised the Development site's functional link with the SPA (paragraph 75 of Section 9.3.1 of Chapter 9: Ornithology of the ES [APP-039] and in paragraph 52 of Section 5.2.1 of the RIAA [APP-026]. The Applicant agrees that the JNCC Reviews have provided a legal mechanism for review of the SPA network, but these have not yet been implemented at the time of the Application. The statement in the RIAA [APP-026] regarding legal standing was made in respect of the qualifying interest features listed under the 2001 Review, as published on the JNCC web site. The JNCC states: "*The legal list of qualifying species, for which a Special Protection Area (SPA) has been selected and is managed, is given on the relevant SPA citation (available from the country agency concerned). A review of the UK network of SPAs was co-ordinated by JNCC in the late 1990s. Following formal submission to, and agreement by, relevant Ministers, the results were published in 2001.* *However, it is taking some time to revise all the relevant SPA citations in light of the review. Where there is a mismatch between species listed in extant citations and listed in the 2001 Review for the same sites, there has been confusion as to the 'correct' list of qualifying species to be used at any site for purposes of management, assessment and development control.* *At sites where there remain differences between species listed in the 2001 Review and the extant site citation, then the relevant country agency should be contacted for further guidance*." Natural England, as the relevant SNCB, has clarified that the species listed on the Conservation Objectives are the legally

Ref.	Statement	Applicant's Comment
	2001 Review was approved by Government: any changes identified in it should be treated as potential SPAs. The 2016 Review assumes the 2001 Review has and will be properly implemented. It also identifies the Swale Estuary as an SPA whose boundary should be reviewed to determine which areas should be added to protect important feeding and roosting areas for these species.	correct ones to assess, as these are derived from the citation. Natural England confirmed in the pre-submission Statement of Common Ground, November 2018, [APP-256] that the Applicant has identified the correct species making up the breeding and wintering assemblage of the SPA. The scope of qualifying features associated with The Swale SPA/Ramsar Site screened into the HRA, these being listed in Section 5.2.4 of the RIAA [APP-026], are correct. Similarly, the statement regarding legal standing in relation to the 2016 Review was made in respect of the findings of the Review; i.e. the recommendations for review of the SPA boundaries have not yet been undertaken or implemented. Natural England confirmed in the pre-submission Statement of Common Ground, November 2018, [APP-256] that a SPA boundary review has not taken place for The Swale and there is no evidence of a timetable for it taking place. It is appropriate for the assessment under the Habitats Regulations to consider The Swale SPA based on the boundaries as they currently stand at the time of the Application, noting that the Development site is functionally linked to The Swale SPA.
5	Acknowledging a background of continued declines in biodiversity (Hayhow et al., (2016) State of Nature 2016), the RSPB considers we need to make good decisions about how we use land, particularly in the vicinity of protected landscapes with high-value habitats. The Lawton Review (Lawton et al (2010) Making Space for Nature) identified the need to create bigger, better and more connected landscapes if we are to provide a sustainable future for our threatened species. The Greater Thames Estuary is a landscape of international importance that is under threat from development, recreational disturbance and sea level rise and urgently needs a long-term plan that includes the creation of new habitat. The development of Cleve Hill would represent a lost opportunity to secure the long-term sustainability of the SPA/Ramsar site. Cleve Hill is located within the Graveney Marshes area, one of the very best options for wetland and intertidal habitat creation on the North Kent Marshes. This would enable the adjacent estuarine habitat to adapt over time, providing sustainable, long-term solutions for the breeding and non-breeding bird populations dependent on them. This would also align with the Government's aspirations in DEFRA's A Green Future: Our 25 Year Plan to Improve the Environment to create a 'Nature Recovery Network', consisting of new habitat outside designated areas. The proposed development would deny this opportunity at a critical point for a vulnerable landscape – the RSPB considers action is needed now, not in 40 years' time.	The presence of the Development and the opportunity for Managed Realignment (MR) are not mutually exclusive in time. MR on the Cleve Hill site is unlikely to take place until at least 2039, according to the EA. The EA in the draft MEASS proposes MR from year 20 (Epoch 2) in the absence of the solar park, as there are a number of technical constraints to delivering MR on the Cleve Hill site in Epoch 1 (2019 to 2039). The Applicant expects the Development to operate for a finite period, anticipated to be 40 years. The latest version of the draft DCO submitted at Deadline 3 includes requirement 16, which could result in the end of the operational phase of the Development after 40 years of operation, subject to the EA (or equivalent body at the time) demonstrating that the MR proposals could be delivered on the Cleve Hill site. This Requirement would allow the decarbonisation benefits of the site to be realised through the Development whilst still allowing MR to take place in epoch 2. A Statement of Common Ground between the Applicant and the Environment Agency setting out the agreed position was agreed in May 2019 [AS-017]. The wording of Requirement 16 has been the subject of continued discussion, including at Issue Specific Hearing 2 on the draft DCO (see Deadline 3 document reference 6.1.4 for a written summary).
6	The need for a full understanding of the impacts of the development on the nature	A full understanding of the potential impacts of the Development on nature conservation interests is provided in

Ref.	Statement	Applicant's Comment
	conservation interest (current and potential) described above.	Chapter 8 - Ecology, and Chapter 9 - Ornithology of the ES [APP-038 and APP-039], and the RIAA [APP-026].
7	Should the development proceed, the need for a package of measures designed to avoid an adverse effect on the integrity of those protected areas and their features, with all the necessary legal, financial and planning guarantees in place. This includes ensuring that the package of measures: • provides a sufficient area of functionally available habitat for each impacted species; • contains detailed design, prescription, management and monitoring for the habitat area; • appropriate legal, financial and planning guarantees securing the mitigation and compensation measures, to be tied in to the Development Consent Order.	Mitigation and biodiversity enhancement proposals to protect and improve biodiversity, including management and monitoring proposals, are described in the outline CEMP [APP-205], BBPP (Appendix B of the outline CEMP), outline SPA Construction Noise Mitigation Plan (SPA CNMP, [APP-243]) and outline LBMP [APP-203]. Updates in response to comments made during the Examination will be submitted in revised documents for Deadline 3 and Deadline 4. The draft DCO submitted with the Application [APP-016] and subsequent updates include an obligation to provide a finalised LBMP prior to commencement of construction through Requirement 4.
8	Finally, in line with DEFRA's 25-year plan, we expect the development to demonstrate a clear net-gain for biodiversity.	The Applicant has undertaken a Biodiversity Metric calculation for the Development using the DEFRA Biodiversity Metric methodology, which was submitted to the Examination at Deadline 2 [REP2-045], which concludes that there is a net gain in biodiversity as a result of the Development. The Development therefore accords with the NPPF in this regard.
Examining Authority's Written Questions		
9	With regards to the Examining Authority's written questions and requests for information, we have the following comment. EXQ 1.1.8 (part) In relation to potential bird mortality or injury through collision with solar panels or fences, are the Applicant, Natural England, Kent Wildlife Trust, RSPB or the Local Authorities aware of any relevant monitoring studies at existing solar farm sites?	The BSG Ecology review was submitted to the Examination at Deadline 2 [REP2-010]. A robust programme of baseline data collection was implemented across three breeding seasons and four winter seasons allowing good quantification of use of the site by breeding and wintering birds. Displacement of some species of breeding birds requiring open vistas was assessed as part of the breeding farmland bird community. Paragraph 371 and 372 of ES Chapter 9 - Ornithology [APP-039] assess the potential effect of loss of arable habitat to solar panels on ground-nesting birds including lapwing, skylark and yellow wagtail. The assessment concludes that if the more open habitat preferring species do not find that space between the arrays is sufficiently large to be attractive to them, then there would be lower numbers of these species, although the larger grassland extents provided by the Habitat Management Areas will provide enhanced habitat for these species. The outline LBMP [APP-203] sets out its ornithological objectives. There are no specific parts of the outline LBMP that set out measures to mitigate for ground-nesting birds, beyond the general aims of the habitat management in areas between the arrays (as grazing marsh grassland) and in the HMAs (specifically the AR HMA and LGM HMA). The residual effect for these open-field, ground-nesting species would be negative and not significant, but overall the residual effect on the farmland bird community (which includes species associated with field margin and peripheral habitats) was assessed as uncertain positive and not significant. Use by wintering birds was measured in a precautionary
10	The following webpage provides a review of evidence and gaps in knowledge: 'Impacts of Operational Solar Farms on Biodiversity: a Review of Studies and Call for Evidence - BSG Ecology' https://www.bsg-ecology.com/impacts-of-operational-solar-farms-on-biodiversity/ A key concern is the displacement of birds: in the context of the development this would include species which require open vistas, for example wintering grassland waders and geese.	

Ref.	Statement	Applicant's Comment
		manner using a 'peak-mean' metric, as set out in Technical Appendix A9.1 to Chapter 9 - Ornithology of the ES [APP-223]. On this precautionary basis, the impact of the loss of foraging/roosting opportunities (displacement) for these wintering species was assessed in Chapter 9 - Ornithology of the ES [APP-039], and the RIAA [APP-026]. Mitigation proposals in the form of an alternative foraging area (the AR HMA) are described in the outline LBMP [APP-203], which provide for full provision of foraging resources for wintering geese and plovers. The rationale for and calculations of the area of land required to mitigate lost foraging opportunities are set out in Technical Appendix A9.1 to Chapter 9 - Ornithology of the ES [APP-039].

3 SUMMARY OF WRITTEN REPRESENTATIONS BY MEMBERS OF THE PUBLIC AND THE APPLICANT'S RESPONSES

5. The relevant representations received from members of the public have been classified by topic and are summarised in the following sections.

6. The Applicant's responses provide the location of the information in the Application which addresses the points raised.

7. 19 topics have been identified giving consideration to a wide breadth of issues raised.

8. Table 3.1 sets out the written representations addressed in this document and the key topics raised. These broad topics have then been addressed in Table 3.2 with reference to documents submitted as part of the Application for the Development, and subsequent submissions to the examination.

Table 3.1: List of Members of the Public who submitted WRs and Topics Raised

PINS Reference	Written Representation Received from	Topics Raised
REP2-058	Brian Jefferys	Public Right of Way Network Construction Traffic Lack of Community Fund
REP2-060	Bruno Erasin	Agricultural Land Classification
REP2-063	Chris Lowe	Planning Policy Public Interest and Compulsory Purchase Acquisitions Site Selection Grid infrastructure, commercial arrangements, grid management and electricity demand. Land use and Agricultural Land Classification Ecosystems and biodiversity Flood protection Carbon reduction Consideration of Alternatives
REP2-072	F R Gomes	Ecology and Ornithology
REP2-089	Jenny Cutts	Planning Policy
REP2-094	Marie King	Planning Policy Construction Traffic Air Quality
REP2-098	Patricia Benstead	Ecology / Biodiversity Impact on Rights of Way Users Scale
REP2-102	Sarah Jefferys	Ecology and Wildlife Scale Construction Traffic Lack of Community Fund Lack of Consultation (school)
REP2-103	Stephen Ledger	Planning Policy Flood Risk and the Medway Estuary and Swale Strategy (MEASS) Land Management Noise
REP2-105	The Ely Family	Scale Site Selection Visual Impact from the Saxon Shore Way Visual Impact from the wider landscape Impact on Faversham's long-term economy Impact on wildlife Flooding Issues Battery Technology
REP2-112	Tom King	Construction Traffic
REP2-113	Chala Fiske	Electric and Magnetic Fields

PINS Reference	Written Representation Received from	Topics Raised
		Safety and Fire Risk

Table 3.2: List of Topics Raised and the Applicant's Responses

Topic Raised	Where addressed in the Application
Public Right of Way Network and Impact on Rights of Way Users	Recreational amenity effects are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. Section 13.5.1.4 addresses effects during construction and section 13.5.2.2 addresses operational effects. Visual impacts upon rights of way and public amenity areas are assessed in Chapter 7 - LVIA of the ES [APP-037].
Construction Traffic, and associated noise and air quality impacts	Access and traffic impacts are assessed in Chapter 14 - Access and Traffic of the ES [APP-044]. In this chapter, the primary school is classed as a high sensitivity receptor to changes in road traffic. As set out in Table 14.6 of Chapter 14, 2018 baseline Annual Average Daily Traffic (AADT) flow data for HGVs on Head Hill Road (north) and Seasalter Road are 123 HGVs and 65 HGVs respectively, daily. Measures proposed to manage construction traffic, including in the vicinity of the school are described within the outline CTMP, Technical Appendix A14.1 of the ES [APP-245]. Measures include restrictions on HGV movements to avoid school opening / closing time and a construction vehicle speed limit of 20 mph past the school. The outline CTMP has been produced as a 'live' document which will continue to be updated on an ongoing basis through consultation with stakeholders during examination of the Application. This will then form the basis of a final CTMP to be approved by the relevant local planning authority before construction can commence (see requirement 12 of the draft DCO submitted at Deadline 3). Noise and vibration impacts from construction traffic are assessed in Chapter 12 - Noise and Vibration of the ES [APP-042], section 12.5.3. Chapter 16 - Air Quality [APP-046], addresses the air quality impacts of the Development.
Lack of Community Fund	As well as the substantial business rate contribution of the Development, the draft DCO submitted at deadline 2 [REP2-003] includes Requirement 15, local skills supply chain and employment which requires that a skills, supply chain and employment plan is submitted ahead of construction. This plan will identify opportunities for individuals and businesses to access employment and supply chain opportunities associated with the construction, operation and maintenance of the Development.
Agricultural Land Classification and Land Management	The specific WR provided by Dr Erasin in relation to Agricultural Land Classification set out his view that the report provided with the Application [APP-244] was considered to be inaccurate. The Applicant stands by the conclusions of the report which are supported by the report's authors, Land Research Associates, who have confirmed that the report was undertaken in strict accordance with the MAFF 1988 Revised guidelines and criteria for grading the quality of agricultural land. A more detailed response to the specific points raised by Dr Erasin will be provided by Deadline 4.
Planning Policy	The Applicant submitted a WR on NSIP Policy and Procedure at Deadline 2

Topic Raised	Where addressed in the Application
	[REP2-026] which addresses the policy considerations raised.
Public Interest and Compulsory Purchase Acquisitions	The Applicant will continue to negotiate agreements with interested parties. The written summary of Compulsory Acquisition Hearing 1 (see document reference 11.1.2 for a written summary) provides further information on the status of negotiations with interested parties.
Site Selection	A description of the site selection process (section 4.2), and an analysis of alternative brownfield sites (section 4.4.5) is provided in Chapter 4 - Site Selection, Development Design and Consideration of Alternatives of the ES [APP-034].
Grid infrastructure, commercial arrangements, grid management and electricity demand.	These aspects are addressed in the Statement of Need submitted with the Application [APP-253] and its addendum [AS-008]. A further summary is provided by the Applicant at Deadline 3 (document reference 6.4.10) in response to a submission by GREAT [AS-035] made in relation to the Applicant's Statement of Need.
Ecology and Ornithology, ecosystems, wildlife and biodiversity	The effects of the Development on habitats, birds and other wildlife are assessed in Chapter 8 – Ecology [APP-038] and Chapter 9 – Ornithology [APP-039]. The HRA documented in the RIAA [APP-026] provide an assessment of the potential effects of the Development on bird species, including the impact of the loss of functionally linked land. Mitigation and biodiversity enhancement measures included within the Development are described in the outline LBMP [APP-203], an updated version of that document is submitted at Deadline 3 (document reference 6.4.5.2, revision B). The Applicant is aware that a detailed response was received from Mr F R Gomes [REP2-072] regarding ornithology. Further detail on this submission was discussed at the Issue Specific Hearing on Biodiversity and Nature Conservation Matters, a written summary of this is provided at Deadline 3 (see document reference 6.1.6 for a written summary). The points raised will continue to be considered in discussions with consultees and will be discussed at the HMSG meeting planned to take place ahead of Deadline 4.
Flood protection, Flood Risk and the Medway Estuary and Swale Strategy (MEASS)	A Flood Risk Assessment is provided as Technical Appendix A10.1 of the ES [APP-227]. No part of the Site acts as a functional floodplain as the agricultural land is protected by engineered flood defences, as outlined in section 10.3.1 of Chapter 10 - Hydrology, Hydrogeology, Flood Risk and Ground Conditions of the ES [APP-040] and 1.3 of the FRA [APP-227]. As such, tidal waters do not flow into the site and no floodplain storage is offered by the site. The draft Development Consent Order submitted with the Application [APP-016] and subsequent updates include the powers and rights necessary for the Applicant to maintain the existing flood defences throughout the operational lifetime of the Development (see Work No. 9 in Schedule 1, Part 1, and the Deemed Marine Licence in Schedule 8). The EA has confirmed that they can delay managed realignment and still deliver their obligations under the Habitats Regulations. A Statement of Common Ground has been agreed between the Applicant and the Environment Agency in May 2019 [AS-017] which reflects the current status

Topic Raised	Where addressed in the Application
	of discussions regarding flood risk and coastal defence. The draft DCO to be submitted at Deadline 3 (document reference 3.1, revision C) includes revised wording for Requirement 16, which seeks to time limit the operation of the Development to 40 years from commencement of power generation if the EA can demonstrate that managed realignment can be delivered.
Carbon reduction	The Development represents the best option for decarbonisation at the Cleve Hill site. Evidence of this is presented in a WR submitted by the Applicant at Deadline 3 (document reference 6.4.5), which provides a comparison between managed realignment on the site and the proposed Development.
Consideration of Alternatives	A description of the site selection process (section 4.2), and an analysis of alternative sites (section 4.4) is provided in Chapter 4 - Site Selection, Development Design and Consideration of Alternatives of the ES [APP-034]. Paragraph 114 of Chapter 4 - Site Selection, Development Design and Consideration of Alternatives of the ES [APP-034] states: "As set out in the Statement of Need which accompanies the Application [APP-253] there is a clear and urgent need for greater renewable energy capacity and energy storage capability. Therefore if there is potential for renewable energy generation and energy storage to be accommodated on the alternative sites identified, this should be in addition to the Cleve Hill site, not instead of."
Air Quality	Chapter 16 - Air Quality [APP-046], addresses the air quality impacts of the Development.
Scale	The scale of the project responds to a need for greater renewable energy production as set out in the Statement of Need submitted with the Application [APP-253] and its addendum [AS-008].
Lack of Consultation (school)	Graveney Primary School was consulted during the pre-application process including through attendance by a representative of the school at a public consultation event in the village.
Landscape and Visual Impact, including from Saxon Shore Way	Landscape and visual impacts are assessed in Chapter 7 - LVIA of the ES [APP-037]. Section 7.5.2 assesses landscape effects during operation, and section 7.6.2.2 assesses visual amenity effects during operation on recreation and public amenity receptors. The assessment is supported by figures [APP-054] and visualisations [APP-063 to APP-196]. Recreational amenity effects are assessed in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. Section 13.5.1.4 addresses effects during construction and section 13.5.2.2 addresses operational effects.
Impact on Faversham's long-term economy	The socio-economic impacts of the Development are assessed at a district level in Chapter 13: Socio-economics, Tourism, Recreation and Land-Use of the ES [APP-043]. The tourism offer of the area including wildlife and other attractors are referred to under paragraph 90. Public perception of renewable energy Development is discussed in section 13.2.4.4. No likely significant long-term socio-economic effects on the economy of Swale have been identified in the assessment.
Battery Technology, Safety and Fire Risk	The Applicant has submitted a WR relating to electrical safety at Deadline 3 (document reference 11.4.1).

Topic Raised	Where addressed in the Application
Electric and Magnetic Fields	Chapter 17 - Miscellaneous Issues of the ES [APP-017] includes an assessment of Electric and Magnetic Fields (EMFs). A Statement of Common Ground has been agreed with Public Health England covering EMFs) [AS-018].