

## **Mallard Pass Solar Farm**

## **Environmental Statement Volume 2 Appendix 7.3: Ecology and Biodiversity - Consultation Summary**

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## Appendix 7.3: Consultation Record and Responses Relevant to Ecology and Biodiversity

- 1.1.1. This appendix provides a summary of the relevant stakeholder engagement and consultation responses with regards to *Chapter 7:*Ecology and Biodiversity of the ES [EN010127/APP/6.1] and the Consultation Report [EN010127/APP/5.1].
- 1.1.2. BSG Ecology compiled a letter to Sue Timms, the Team manager (Ecology) at Leicestershire County Council and to Marc Willis, the Applications Manager at Lincolnshire County Council (LCC) on the 11 May 2022 (letters included as Annexes A and B here). This set out the intended scope of surveys (as detailed in the Baseline Report BSG Ecology, 2022) and interim findings. The intention was to ensure that the scope of the surveys being carried out and those being effectively 'scoped out' from the suite of surveys was acceptable to both Local Planning Authorities (LPAs).
- 1.1.3. A meeting was also held on 5 April 2022 with Marc Willis in which the scope of the surveys and the rationale behind scoping out certain surveys or features for assessment was discussed.
- 1.1.4. The responses to these letters were received in the form of emails and the responses are summarised in Table 1.
- 1.1.5. This report also considers the Scoping Opinion received from the Planning Inspectorate (PINS) in March 2022 [EN010127/APP/6.2].

## Other consultation (responses to Stages 1 and 2 and Preliminary Environmental Information Report (PEIR))

Responses pertaining to Ecology and Biodiversity were also received as part of the wider consultation, including after the submission of the Preliminary Environmental Information Report (PEIR) were received as set out in Table 1.



Table 1 Key Matters Raised during Consultation in Relation to Landscape and Visual Matters

Stakeholder / Consultee	Response received	Response
Marc Willis (LCC)	International Designated Sites - no issue in principle given the low number of wildfowl identified (based on surveys carried out thus far) and distance from Rutland Water SPA. The ES should however ensure it covers the matters as identified by PINs in its Scoping Response.  National Designated Sites - no issue in principle and note PINs agreed operational impacts can be scoped out. In terms of construction impacts, these are to be addressed/mitigated principally through the provision of stand-offs and a CEMP and so it will be necessary for such a CEMP to be contained within the ES to ensure that these can be assessed in terms of the appropriateness.  Non-stat habitats - comments as per 'National Designated Sites'.	Section 7.4 of <i>Chapter 7: Ecology and Biodiversity</i> assesses impacts on designated sites and the <i>shadow HRA</i> provided in <i>Appendix 7.5</i> demonstrates that there would be no adverse effects on the European sites.  An <i>outline CEMP (oCEMP)</i> [EN010127/APP/7.11]. has been prepared as part of the DCO application and the requirement to produce a detailed CEMP is secured under the DCO produced covering mitigation measures pertaining to designated sites and retained habitats.
	Breeding birds - original surveys were conducted in 2021 and so it is suggested updated surveys be conducted in 2022 to ensure findings/evidence base is as up to date as it can be given the Examination is not likely to take place until 2023 (by which time the original surveys will be nearing 2 years old).  Otter and water vole - original surveys were conducted in 2021 and so it is suggested updated surveys be conducted	At submission of the DCO, the surveys are only one year old and the habitats within the Order limits have not changed significantly, therefore no update surveys are needed to assess the impacts of the Proposed Development. This age of data is in line with CIEEM guidance.



Stakeholder / Consultee	Response received	Response
	in 2022 to ensure findings/evidence base is as up to date as it can be given the Examination is not likely to take place until 2023 (by which time the original surveys will be nearing 2 years old).	
	<b>GCN</b> - agree with the suggested approach but recommend that the planned 2022 survey includes on-site ponds as well as off-site ponds to ensure 2021 findings remain true.	At submission of the DCO, the data at time of submission is only 1 year old and therefore sufficient for the purposes of the assessment. Updated and more detailed data will be sought for licensing purposes prior to construction in accordance with the <b>oCEMP</b> .
	<b>Badgers</b> - surveys conducted in 2021 and so it is suggested that updated surveys be conducted in 2022 to ensure findings/evidence remains true.	Update badger surveys are to be carried out as a mitigation and avoidance measure due to the mobile nature of the species as set out in the <i>Chapter 7: Ecology and Biodiversity</i> . These will be carried out prior to construction in accordance with the <i>oCEMP</i> . The data presented is considered sufficiently recent to be used for the purposes of this assessment.
	Wintering birds - approach agreed.  Bats - approach agreed.	No response is needed.
	SPI mammals, dormouse, reptiles and invertebrates - approach agreed	ino response is needed.



Stakeholder / Consultee	Response received	Response
Sue Timms (Leicestershire County Council)	I agree with your assessment and scoping – the habitats are poor in general, and I would expect all net-gains to be possible on-site. I might have expected some interesting arable weeds – species like <i>Kicksia</i> , <i>Valerianella</i> , <i>Euphorbia exigua</i> and <i>Legousia hybrida</i> sometimes turn up on Rutland limestone areas – but this may reflect the lack of field margins. It is a massive area to survey! It is worth a close look at any margins that are present, however – and potential for creation of some 'arable' margins, too, as well as the more usual wildflower meadow strips around the perimeter.	Field margins were surveyed and notable arable weeds were not recorded. The habitat creation proposals have been tailored to the soil conditions, focussing on creating wildflower grassland and woodland habitats, though skylark plots (undrilled areas within cereal crops) will also be provided, which may provide suitable conditions for arable weeds. The <b>oLEMP</b> secures the provision and management of these habitats and the siting of this is shown on the <b>Figure 6.11: Green Infrastructure Strategy</b> of the ES.
	It is good to have a new record of Water vole for the West Glen River – the previous record was c. 25 years ago. It would be good, as part of BNG, to include some supplementary wetland creation along the river corridor.	The West Glen River will not be directly subject to aquatic habitat or marginal habitat enhancement, though the Proposed Development include new wet woodland planting in the area, enriching the diversity of habitats available.
	The impacts of solar panels (reflecting polarised light) on invertebrates seem quite unclear. I was only aware of the NE report on potential impacts on birds and bats (Evidence review of the impact of solar farms on birds, bats and general ecology (NEER012) – 2017) until I googled. I hadn't realised that BSG have published a more recent review, which was very interesting – but again, all rather unclear! I'm not sure if there is any more recent published information. On such a large site, I think these impacts have to be considered, and	The proposed PV Arrays have not yet been selected or designed, however these will be chosen at the time of commissioning the Proposed Development and as per best practice will seek to utilise panels with anti-reflective coating (ARC). This will therefore avoid the potential effect of attracting invertebrates. The perceived risk of polarised light is that it may attract aquatic invertebrates to the array, removing these from suitable sites. This is highly unlikely given



Stakeholder / Consultee	Response received	Response
	as part of this, a baseline survey that can be monitored may be helpful – it does look as though this scheme has the potential to add to scientific evidence on the subject. There's a lot of opinion, but not much research, and it doesn't look like there is any from the UK (but maybe we haven't built any this size as yet). So maybe a research programme looking into some of the hypothetical impacts could be considered, which may require some specific baseline studies	the lack of large water bodies in the area likely to support notable invertebrate assemblages and baseline data would be difficult to gather, as these species would not likely be present in sufficient numbers to inform a baseline assessment.
	It looks like the most significant impact may be on farmland birds. On small developments I would not require mitigation for these impacts, on the basis that populations can be displaced to adjacent farmland, but given the enormous size of this development, I would expect some bespoke mitigation within or immediately adj to the site, probably in several places, as part of a BNG plan.	The majority of farmland birds will likely benefit from the Proposed Development. However, skylark, a species known to not breed within solar farms and an SPI will be adversely affected by the proposal in isolation. Therefore, mitigation has been proposed and will be implemented so as to increase the carrying capacity of retained arable land in the Order limits. Larger areas of proposed new grassland will also support breeding skylark. The <i>oLEMP</i> secures this mitigation. The siting of this is shown on the <i>Figure 6.11: Green Infrastructure Strategy</i> of the ES.
	I also wonder about impact on hares – but if the development is not subdivided into small parcels, maybe they (and badgers) can thrive within the boundary, with small gaps for escape routes?	Gaps created specifically for the movement of small and medium sized mammals will be included in security fencing. This will ensure the Order limits remains permeable to hare, but also badger and hedgehog.



Stakeholder / Consultee	Response received	Response
	It would be good if the Essendine dismantled railway LWS could be restored.	Positive management of this LWS is included in the <b>oLEMP</b> and will be detailed in the LEMP.
	This will be a contentious development, so any decisions regarding surveys and wildlife impacts need to be well-argued, and a precautionary approach taken! There do appear to be some ill-founded reports of harm in the media, but mainly from the US and (I assume) relating to a different kind of solar collector	The scope of the surveys has been tailored to the Proposed Development and so as to gather a robust baseline for all features where a proven impact may occur. This scope has been discussed with Marc Willis and Sue Timms in order to identify a robust scope of works that reflects the likely impacts of the Proposed Development.  The Proposed Development has been designed to minimise adverse effects on ecological receptors through the retention of existing habitats and the provision of additional habitat (see Section 7.4 and 7.5 of Chapter 7: Ecology and Biodiversity and Figure 6.11: Green Infrastructure Strategy of the ES). The mitigation measures secured by the oCEMP, oOEMP, oDEMP and oLEMP are sufficient to avoid any significant adverse effects.
Lincolnshire County Council	LCC do not have an in-house ecologist however having reviewed the information provided within the PEIR, they are happy with the approach taken and have no comments to offer at the stage. However, the LPA has confirmed that as the project continues further comments will be provided where necessary.	This is noted. The Applicant has been liaising directly with Marc Willis of Lincolnshire County Council (see above).



Stakeholder / Consultee	Response received	Response
Ryhall and Belmesthorpe Parish Council	Biodiversity is essential and significant areas will be damaged beyond repair. The proposed addition of a number of footpaths will add nothing as the solar panels will be significant in height and any hedgerows that are added will not be developed enough to screen the panels for up to 15 years at best.	The change in value of biodiversity as a result of the Proposed Development has been assessed with an empirical metric and found to be positive and significant (over 72% for habitats and 35% for hedgerows). The Proposed Development will only result in the loss of habitats of very low biodiversity value: arable fields. The most valuable habitats have been retained and new habitats will be created. The habitat creation proposals will also be monitored to ensure its establishment and condition once implemented.  Planting and plant growth is addressed in <i>Chapter 6: Landscape and Visual</i> , of the ES, and within the <i>oLEMP</i> .
Careby with Aunby and Holywell	The effects on wildlife, particularly during construction, will be appalling and take years to recover from. The developer's proposals to mitigate this damage are suspect. An industrial site can never be a natural environment.	Section 7.4 and 7.5 of <i>Chapter 7: Ecology and Biodiversity</i> address the impacts to ecological features, both in terms of habitats and protected and notable species, and appropriate mitigation and enhancement is set out in the <i>oCEMP</i> , <i>oLEMP</i> , <i>oOEMP</i> and <i>oDEMP</i> , and captured in <i>Appendix 17.1 Mitigation Schedule</i> , of the ES. This is based on existing proven impacts of solar arrays and professional judgement and extensive experience on solar array proposals.



Stakeholder / Consultee	Response received	Response
Greatford	Fencing off large swathes of these territories for the security of the site will inevitably lead to the loss of local large animals (deer, foxes, badgers etc.) from our locality which would further alter the character of the landscape. Populations of other bird, small mammal, invertebrate and plant species will no doubt change as a result of this development, and will no doubt be part of the claimed 10% biodiversity gain, however, the large mammals mentioned above will largely be lost and this will be a tragedy for our area.	Gaps created specifically for the movement of small and medium sized mammals will be included in security fencing as set out in the <i>oLEMP</i> . This will ensure the Order limits remains permeable to hare, badger and hedgehog, all Species of Principal Importance (SPI).  There may be a reduction in areas available for ungulates (various deer species). However it is likely that these species will continue to be present in unfenced areas and in the wider landscape. In legislative and policy terms there are no specific drivers for the conservation of deer arising from a development project such as this. Deer species displaced from the site by fencing are not considered rare or vulnerable and as such are not considered important ecological features in EIA terms and not scoped into the assessment.
Braceborough and Wilsthorpe	The proposal will in turn have a detrimental impact on the bio-diversity of the area. Wildlife will lose their habitat and no amount of saying by Mallard Pass that it will all be ok, or in your words 'mitigated' will make it ok.  Deer could get caught in the fencing and die a horrible death as well as many other wildlife inhabitants of the fields and	Section 7.4 and 7.5 of Chapter 7: Ecology and Biodiversity address the impacts to ecological features, both in terms of habitats and protected and notable species, and appropriate mitigation and enhancement is set out in the oCEMP, oLEMP, oOEMP and oDEMP. This is based on existing proven impacts of solar arrays and professional



Stakeholder / Consultee	Response received	Response
	woodlands. I fear that bio-diversity net gain, something that the Government insists upon, will not be realised at all.	judgement and extensive experience on solar array proposals.
		The fencing will be designed so as to not result in captures or trapping of deer or any other animal as set out in the <i>oLEMP</i> . Gaps created specifically for the movement of small and medium sized mammals will be included in security fencing. This will ensure the Order limits remains permeable to hare, badger and hedgehog, all SPIs.
		The change in value of biodiversity as a result of the Proposed Development has been assessed with an empirical metric developed by DEFRA and found to be positive and significant (over 72% for habitats and 35% for hedgerows - see <i>Chapter 7: Ecology and Biodiversity</i> and <i>Appendix 7.6: BNG Metric</i> ). The Proposed Development will only result in the loss of habitats of very low biodiversity value: arable fields. The most valuable habitats have been retained and new habitats will be created in accordance with the <i>oLEMP</i> . The habitat creation proposals and enhancement used to run the metric will also be monitored to ensure they are established and achieve the anticipated habitat condition once implemented in accordance with the <i>oLEMP</i> .



Stakeholder / Consultee	Response received	Response
Stamford Town Council	Despite the comprehensive work done by the Preliminary Environmental Information Report (PEIR) it is still impossible to determine what the overall effects of this PD (Proposed Development) will have on the wildlife during the construction and operational stages of the Solar PV Farm. The PEIR states that additional surveys need to be carried out in April-May 2022, so have these been carried out?	Additional surveys were carried out in 2022, including off site ponds being surveyed for great crested newt and the findings of impacts on these ecological features are incorporated into Section 7.4 and 7.5 of <i>Chapter 7: Ecology and Biodiversity</i> .  This ES addresses the impacts to ecological features, both in terms of habitats and protected and notable species and appropriate mitigation and enhancement is set out in Section 7.3 of <i>Chapter 7: Ecology and Biodiversity</i> and the <i>oLEMP</i> , which the developer is required to deliver by requirements under the DCO.
EA	The presence and significance of the West Glen River is recognised in the PEIR, in particular in paragraph 7.2.29, appendix 5.2, outline plans for ecological surveys and management. However, we have not found any reference to ecological surveys carried out or planned specifically for the Glen, and the aquatic environment.  We would wish to see a pre-project aquatic survey of the West Glen in the location of the solar farm covering aquatic invertebrates, fish population and macrophytes.  We would also like a specific river habitat survey.	The West Glen was covered by the Phase 1 Habitats surveys and for water voles and otter, as set out in the <i>Appendix 7.4: Baseline Ecology Report</i> of the ES. Given the avoidance of this recognised ecological feature, its retention and likely enhancement by reducing, at least at a site level, the adverse effects of intensive arable farming in its vicinity, no detailed surveys were carried out or considered necessary as no significant specific adverse impacts from the Proposed Development have been identified during the scoping exercise or by the EA.



Stakeholder / Consultee	Response received	Response
	A monitoring programme should be designed to cover these elements into the future and measure any long-term effects.	In addition obtaining a baseline and then setting in place a monitoring programme for a river where such a small stretch would be within the Order limits and subject to enhancements would be problematic and result in data which would be very difficult to interpret as any trends would be almost impossible to separate from wider national or local trends or impacts arising from outside the development area.  As set out in the ES the nature of the Proposed Development and the control measures as set out in the <b>oCEMP</b> which will be implemented will not result in adverse effects such as pollution events, or effects on hydrology. As such there is not a trigger for the degree of baseline survey and monitoring proposed by the EA.
NE	The potential effects on biodiversity diversity of the proposed development have been assessed and appropriate avoidance or mitigation measures incorporated into the various draft management plans, which will consider designated sites and other ecology and nature conservation during all phases. We note that these plans are preliminary and further certainty of the potential environmental effects as a result of the proposed development will be gained as the EIA process progresses alongside the development of the project design.	The <b>oLEMP</b> , <b>oCEMP</b> , <b>oOEMP</b> and <b>oDEMP</b> have been updated following the completion of the detailed design of the Proposed Development.



Stakeholder / Consultee	Response received	Response
	The management plans supporting the DCO, these should undergo further review for the cable route and design of the project is finalised. Resulting agreed plans should be requirements of the DCO as part of any planning permission.	
NE	There are four internationally important statutory designated sites within 10km of the site: Rutland Water Special Protection Area (SPA) and Ramsar site; Baston Fen Special Area of Conservation (SAC); Grimethorpe SAC; and Barnack Hills and Holes SAC. Natural England would recommend that a Habitats Regulation screening assessment (HRA) is attached to the ES to confirm no likelihood of significant impact.	A <b>shadow HRA</b> provided in <b>Appendix 7.5</b> has been prepared to support the ES. This has concluded that there is no likelihood of significant effects on designated sites.
NE	Ryhall Pastures and Little Warren Verges Site of Special Scientific Interest (SSSI) was found to be hydrologically connected to and within the site. Construction activities have the potential to impact the SSSI. A 'draft Water and Construction Management Plan' (WCMP) (Appendix 12.2) has been drawn up, which will be secured by a DCO requirement. This describes water management measures to control surface water runoff and drain hardstanding and other structures during the construction, operation and decommissioning of the proposed development and will form part of a Pollution Prevention Plan (PPP). The measures set out in the draft WCMP will be included within the oCEMP, OEMP and oDEMP; watercourses will have	The outline Water Management Pan (oWMP) [EN010127/APP/7.13] (formerly the Water Construction Management Plan (WCMP) at PEIR stage) has been prepared in support of the DCO. The oWMP sets out measures to control surface water runoff and drain hardstanding and other structures during the construction, operation and decommissioning of the Proposed Development. In addition to the minimum buffers around water courses and drainage ditches which infrastructure will not encroach on are considered sufficient to avoid adverse effects on Ryhall Pastures and Little Warren Verges SSSI.



Stakeholder / Consultee	Response received	Response
	buffers by set distances determined as part of the WCMP, which infrastructure will not encroach on. We agree that such an approach, in conjunction with the measures set out in the WCMP, should be sufficient to avoid potential effects on the hydrological and hydrogeological resource. Buffer distances from drains will also be included as part of the WCMP as a sediment control measure.	
NE	There is the potential of accidental damage and other indirect effects to the Ryhall Pasture and Little Warren Verges Site of Special Scientific Interest (SSSI) and Tolethorpe Road Verges SSSI, within and adjacent to the site, to occur during the construction or decommissioning phases. (Ref: 7.4.9) These will be avoided or reduced to insignificant impacts by the implementation of the measures set out in the oCEMP and oDEMP.  Details regarding the proposed highway and cabling routes are still being developed and may affect SSSIs adjacent to the site through required excavation works and/or highway access improvements. (Ref: 7.5.2). As the design progresses, it is proposed that opportunities to embed mitigation into the proposal in order to avoid and minimise	The more detailed proposals developed since the PEIR are now included in <i>Chapter 7: Ecology and Biodiversity</i> and have been subject to detailed assessment. The <i>oCEMP</i> and the <i>oCTMP</i> set out the mitigation being put in place.
	direct impact. This will be explored and reported on within the Environmental Statement (ES).	
NE	"We advise any works to SSSIs must be discussed in advance with Natural England, at as early a stage as	•



Stakeholder / Consultee	Response received  possible." We welcome that it is recognised that the development poses an opportunity to create additional habitat which could complements the SSSIs in this area, and/or contribute to increasing the ecological connectivity of the area. This is noted within the section on Green Infrastructure and we comment further below.	included sections of SSSI verge but these are intended as being used for management of
NE	Two Local Wildlife Sites (LWS): Carlby/Essendine Verge LWS and Essendine Dismantled Railway Embankment LWS are located within the Mitigation and Enhancement Area, with both LWSs featuring priority habitats (calcareous grassland and a stream) and nationally scarce species. We note that the Lincolnshire Environmental Records Centre and the Leicestershire and Rutland Environmental Records Centre were contacted to gain information on pre-existing ecological information (i.e. location and citations of Local Wildlife Sites (LWSs).  We recommend consultation with the relevant site owners/managers, i.e. Wildlife Trusts, who have extensive local knowledge of these sites.	Losses to LWS are extremely limited and the design was refined so as to minimise these. The remaining impacts have been considered in section 7.4 of <b>Chapter 7: Ecology and Biodiversity.</b> and will be mitigated for through appropriate replanting as set out in and secured by the <b>oLEMP</b> .



Stakeholder / Consultee	Response received	Response
	Measures to remove or reduce impacts on any affected LWS will be included within the Framework CEMP and submitted with the ES.	
NE	The site does not support any ancient woodland; however, there are parcels of ancient woodland outside of on the north-eastern boundary (replanted ancient woodland at Braceborough Little Wood) and north-western site boundary (ancient woodland and replanted ancient woodland at Newell Wood. (Ref: 7.2.33). The PEIR, has examined potential impacts to ancient woodland from changes to air quality.  Natural England and the Forestry Commission have produced standing advice in relation to ancient woodland and ancient and veteran trees. Natural England will only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a SSSI or in exceptional circumstances. However, we recognise the steps put forward (e.g. undeveloped buffers and standard environmental protection measures) to protect these sites.	Woodland as set out within the Design Guidance and the <i>oLEMP</i> .  An <i>outline CEMP</i> ( <i>oCEMP</i> ) has been prepared as part of the DCO application and the requirement to produce a detailed CEMP is secured under the DCO produced covering mitigation measures pertaining to designated sites and retained habitats.
NE	There are three potential construction routes to the site, identified in Figures 9.2 (Route 1), 9.3 (Route 2) and 9.4 (Route 3). On proposed construction Route 2, there are two	Chapter 5: Project Description, of the ES, sets out the revised construction routes to the Order limits.



Stakeholder / Consultee	Response received	Response
	potentially sensitive ecological sites: Math/ Elsea Wood SSSI and Park Wood Ancient Woodland, which are located within 200m of the roadside. A baseline air quality review has been undertaken to determine the existing air quality within 3.5 km of the site. (Ref:11.2.5).	Chapter 15: Other Environmental Topics sets out the Air Quality assessment and monitoring data at Appendix 15.1.
NE	Based on the information provided Natural England agrees that the proposal has the potential to impact protected species.  Natural England's Standing Advice provides guidance on how protected species should be dealt with in the planning system. The Standing Advice should not be treated as giving any indication or providing any assurance in respect of European Protected Species (EPS) that the proposed development is unlikely to affect the EPS present on the site; nor should it be interpreted as meaning that Natural England has reached any views as to whether a licence may be granted.  "Additional surveys were recommended to be carried out in April/May 2022 targeting additional ponds for the presence of GCN. If required further Phase 1 habitat surveys will be undertaken if any highway works require any vegetation removal." (Ref: 7.8.3). Natural England can advise you of the of the possibility of applying for District Level Licensing (DLL) which may become available later in the year in	Entering into the DLL scheme will also be considered.



Stakeholder / Consultee	Response received Lincolnshire. If this option is available, the applicant would need to either:  a) provisionally sigh up to DLL before the scheme launch or b) if the scheme has launched, sign up when they need to commence works on the ground and need a licence.	Response
NE	A programme of landscape and habitat reinstatement and creation will commence during the construction phase. Areas under the PV arrays and landscape buffers will be planted with a combination of native grassland mix, wildflower mixes, scrub and hedgerows. Woodland blocks and belts will be planted in strategic locations to provide visual screening, ecological habitats in order to achieve a minimum 10% biodiversity net gain.  We welcome that the biodiversity enhancements which are proposed may give rise to significant biodiversity net gains on the site.  We recommend use of the Biodiversity Metric 3.1, which can be found here, to quantify these gains and demonstrate that the development will benefit biodiversity overall.	The Defra 3.1 metric has been used to assess the Proposed Development's impact on biodiversity as set out in <i>Chapter 7: Ecology and Biodiversity</i> . A significant net gain for habitats and hedgerow has been secured and will be delivered through measures set out in <i>Figure 6.11: Green Infrastructure Strategy Plan</i> and the <i>oLEMP</i> .



Stakeholder / Consultee	Response received	Response
	We do therefore advise that taking the net gain approach would make this development exemplary and would be illustrative of the intent to work to benefit the environment through development. Natural England would be pleased to advise on any plan of action regarding BNG. We would recommend that a BNG calculation and report is included in the ES.	
	Please be advised that the DEFRA metric should not be used to assess impacts and calculate compensation for habitat damage or loss in designated sites or irreplaceable habitats. Any impacts on such habitats and sites should be assessed in accordance with planning policy and via the environmental assessment.	
NE	The oLEMP will be needed to explain how the site will continue to be managed and secured for the lifetime of the development. The oLEMP should also provide details on the planned retention and enhancement of existing habitat features such as hedgerows, woodland and ponds.	The <b>oLEMP</b> does set out management measures and objectives.
NE	We would also particularly need details on proposed habitat connectivity to surrounding habitats which would contribute to the wider Nature Recovery Network and if included in an	Figure 6.11: Green Infrastructure Strategy Plan includes new woodland belts, hedgerows and grassland habitats connecting similar habitats within the Order limits and adjacent to it.



Stakeholder / Consultee	Response received	Response
	application there should be the presumption of retention at the design stage of the layout.	
NE	Note that habitat enhanced or created for mandatory BNG must be secured, managed and maintained for at least 30 years and must achieve the distinctiveness and condition as intended.	The LEMP, which will be a detailed version of the <b>oLEMP</b> will set out specific management measures and targets for monitoring which will assess the created habitats against the criteria used for the condition assessment used in the BNG metric.
NE	We note that proposed embedded mitigation and additional measures have been incorporated into the scheme design, with detailed proposals and locations to be submitted with the DCO application. We understand that these measures are provided given the baseline conditions known at the time of reporting. We recognise that further measures may be required as the baseline conditions are fully established and, if required, the scheme design will be further refined to embed mitigation. Which include retaining the existing landscape field structure, incorporating strong and appropriate landscape buffers, and further planting has been proposed as illustrated in the Green Infrastructure Strategy Plan. We are happy to comment on these final measures on receipt of the ES but are content with the approach taken to date covering all topics above. (Ref:6.5.2).  The proposal is not located within or in the distinctive setting of any nationally designated landscape	Figure 6.11: Green Infrastructure Strategy Plan has been designed in order to complement the existing retained habitats on and off site so will be in keeping with the local area. The Proposed Development adheres to Statements of Environment Opportunity SEO 2 and SEO 3 of the Natural England's National Character Area Profile for Kesteven Uplands (Natural England, 2014) in that they increase the extent and quality for connectivity on unimproved grassland and limestone grassland areas and enhance biodiversity and ecological networks (SEO 2) and they expand the extent of native woodlands through new woodland planting (SEO 3).



Stakeholder / Consultee	Response received	Response
	We welcome the reference made to Natural England's National Character Areas, and advise that the development should complement and where possible enhance local distinctiveness.	
NE	A 'long list' of existing and proposed developments that fall within the ecological Zone of Influence was drawn up and a short list produced. The assessment once undertaken will be reported within the ES. The long list will be kept under continual review up until the point of determination of the DCO application.	This is being included in the ES, however in terms of Ecology and Biodiversity, given the lack of residual effects on any features other than two LWS, no cumulative effects are envisaged as set out in Section 7.8 of <i>Chapter 7: Ecology and Biodiversity</i> .
	Where schemes have been discounted, they will continue to be monitored to ensure that any changes to those schemes are identified and their omission from the short list is reassessed.	Chapter 6: Landscape and Visual of the ES sets out how the cumulative effects of the Proposed Development and other developments have been assessed.
	The next stage of the cumulative effects assessment will be to gather further information on the short-listed developments, Natural England is happy to provide feedback. (Ref: 19.3.24).	
	The assessment concluded that there are no cumulative schemes that have the potential to interact cumulatively with the effects of the proposed development and that 'Other cumulative schemes are not likely to contribute to the effects on ecological receptors identified in Chapter 7 and therefore	



Stakeholder / Consultee	Response received	Response
	the no additional significant cumulative effects are envisaged at this stage'. Natural England recommends that landscape and visual impact could be a potential cumulative effect from all current solar farm proposals.	
NE	We welcome that measures will be designed to integrate with and enhance the local green infrastructure network, improving ecological and recreational connectivity across the Order limits. Natural England will be happy to provide detailed comment on receipt of the ES.  We also recommend the use of Biodiversity Opportunity Mapping (BOM) to identify key areas of habitat creation and network expansion. However, we would also encourage greater enhancements outside these areas, to go above and beyond the BOM to create additional habitat, where this is possible/appropriate.	The Proposed Development has been designed to maximise biodiversity in all available land, even within the array, where a relatively diverse grassland will be created though this will also be grazed. The proposals for enhancement areas were designed through an understanding of the local context, underlying geology and ecological value of given habitats and the connectivity they would provide.  Green Infrastructure Plan and <i>oLEMP</i> set out the proposals for the enhancements and habitat creation.
	The existing hedgerows, woodland, ditches, ponds and field margins will be retained within the layout of the PV arrays, with the exception of small breaks and/or crossings required for new access tracks, security fencing and cable routes. Any breaks or crossing will be designed to use existing agricultural gateways/tracks between the fields and the width of any new breaks will be kept to a minimum.  We note that the majority of the fields within the Mitigation and Enhancement Areas will continue to be farmed under	A total of five PRoW run through the Order limits and several more run adjacent to the Order limits boundary at various points along it (see <i>Figure 6.11: Green Infrastructure Strategy Plan.</i> As set out in the <i>oLEMP</i> , the Proposed Development will involve the Creation of new native planting along existing routes to screen close views to the Proposed Development, comprising a combination of wildflower planting, tree belt and hedgerow planting.



Stakeholder / Consultee	Response received	Response
	arable rotation with additional measures to support skylarks. We welcome the production of the Green Infrastructure Strategy (Ref: Figure 6.10) and support the general proposals it makes, which aim to improve the quality and connectivity of habitats at a landscape level across the Order limits, and mitigation and enhancement area, as well as performing important screening and assimilatory functions to respond to and enhance the local landscape fabric.	Access to all existing PRoW will be retained during the construction phase, with a limited number of temporary PRoW diversions to allow the construction of access tracks where they cross PRoW. The PRoW will be managed throughout the construction phase to ensure that they can continue to be used safely as set out in the <b>oCEMP</b> .
	The minimum offsets/buffers from the solar arrays or security, as set out in Table 5.13, will be incorporated within the design of the proposed development, with the exception of where access tracks, security fencing and/or cable routes are required to cross an existing feature.	
	These offsets/buffers have been established based on best practice and guidance and will be used to deliver additional planting of diverse habitats to either increase habitat connectivity and structural diversity through combinations of hedgerow, scrub, grass / wildflower planting.	
	The buffers/offsets are a minimum and for example may be increased to deliver further mitigation or enhancements and/or respond to root protection areas where required.	
	The existing Public Rights of Way (ProW) that cross the Solar PV Site and Ecological Mitigation and Enhancement	



Stakeholder / Consultee	Response received	Response
	Areas will be retained and incorporated within multifunctional green corridors.	
	"Subject to the construction phasing and methodology there may be a requirement to temporarily divert or close a PRoW for a period during the construction phase."	
	The Mitigation and Enhancement Areas as identified on Figure 5.1a and 5.1b will also provide areas for GI, including the creation of wildflower grassland adjacent to the West Glen River and the small valley in the north-west of the Order limits.	
	The majority of the fields within the Mitigation and Enhancement Areas will continue to be farmed under arable rotation with additional measures to support skylarks.	
	We welcome that an opportunity was identified to improve connectivity of Mallard Pass Solar Farm to Little Warren Wood and Ryhall Pastures SSSI	
	The extent of solar infrastructure was set back from the northern boundary to reflect the offset to arable on the northern side of the ditch that runs through this part of the Order limits. Natural England will be happy to work with the applicant to achieve this.	



Stakeholder / Consultee	Response received	Response
	We are also supportive of the commitment to contribute to the improvement of the amenity value of the Public Rights of Way (ProW) network via provision of new permissive routes that interconnect with existing PRoW along new and enhanced GI corridors.	
PINS	International Statutory Designated Sites - Additional information required as to the ducks present within the Order limits and state that the ES should provide and assessment of the likely significant effects to international Statutory designated sites.	International Statutory Designates Sites have been considered fully in <i>Chapter 7: Ecology and Biodiversity</i> and <i>Appendix 7.5: shadow Habitat Regulations Assessment</i> has been submitted concluding there are no likely significant effects on any of these sites.
PINS	National Statutory Designated Sites – PINS states that they agree that effects to national designated sites can be scoped out of the effects but state the ES assesses effects during the construction phase.	Chapter 7: Ecology and Biodiversity sets out the assessment of impacts (both direct and indirect) on national designated sites during all phases. Measures are also put in place to safeguard these against accidental impacts.
PINS	Non-statutory designated sites – Impacts to non-statutory designated sites cannot be scoped out of the assessment in the ES.	Chapter 7: Ecology and Biodiversity sets out the assessment of impacts (both direct and indirect) on non-statutory designated sites. Measures are also put in place to safeguard these against accidental impacts.
PINS	Protected species (excluding wintering birds) - The ES should consider impacts to protected species including	



Stakeholder / Consultee	Response received	Response
	breeding birds during operation and should set out the mitigation and enhancement measures included in the Proposed Development.	known to be present or may be present. Mitigation (including retention and avoidance measures) are set out as are the enhancement measures and how these benefit various protected (and notable) species.
PINS	Effects on wintering birds during decommissioning– There is no justification for scoping out wintering birds from the assessment and this should be considered in the ES.	Chapter 7: Ecology and Biodiversity considers wintering birds in the assessment of effects at all stages of the Proposed Development.
PINS	Study Area – Further justification provided for the 2 km radius for the study area and recommended that a wider search area for international sites designated for bats (30 km) is used.	Appendix 7.2: Methodology sets out the rationale for the search and study areas. A 30 km search radius for international sites designated for bats was employed.
PINS	Fish and aquatic invertebrates – The results of fish and aquatic invertebrates in the West Glen River are provided or justification as to the lack of need of these surveys is set out in the ES.	The West Glen was covered by the Phase 1 Habitats surveys and for water voles and otter, as set out in the <i>Appendix 7.4: Baseline Ecology report</i> of the ES. Given the avoidance of this recognised ecological feature, its retention and likely enhancement by reducing, at least at a site level, the adverse effects of intensive arable farming in its vicinity, no detailed surveys were carried out or considered necessary as no significant specific adverse impacts from the Proposed Development have been identified during the scoping exercise or by the EA.



Stakeholder / Consultee	Response received	Response
		In addition obtaining a baseline and then setting in place a monitoring programme for a river where such a small stretch would be within the Order limits and subject to enhancements would be problematic and result in data which would be very difficult to interpret as any trends would be almost impossible to separate from wider national or local trends or impacts arising from outside the development area.  As set out in the ES the nature of the Proposed Development and the control measures as set out in the <b>oCEMP</b> which will be implemented will not result in adverse effects such as pollution events, or effects on hydrology. As such there is not a trigger for the degree of baseline survey and monitoring proposed by the EA.
PINS	Plants – An assessment of the impacts to plants is included in the ES.	Chapter 7: Ecology and Biodiversity of the ES has a section on plants and considers the likelihood of the presence of notable communities and assesses the impacts to these.
PINS	Panel configuration – The ES should consider the potential effects of panels on vegetation growth, especially LWS within the Order limits.	Chapter 7: Ecology and Biodiversity of the ES considers the impacts to valuable ecological features, including vegetated habitats and the LWS.



Stakeholder / Consultee	Response received	Response
PINS	Hedgerows – The ES should include an explanation of how hedgerows on the boundaries of the Order limits will be retained and enhanced.	
PINS	Ancient woodland and veteran trees – The ES should assess impacts to ancient woodland and veteran trees.	Chapter 7: Ecology and Biodiversity of the ES assesses impacts to ancient woodland.  The Arboricultural Impact Assessment (AIA) submitted as Appendix 15.2 assesses impacts on veteran trees, including the provision of buffers.
PINS	Confidential Annexes – Sensitive information pertaining to the locations of badger setts will need to be provided as a confidential Annex.	The locations of badger setts are shown in a distinct confidential figure (see <i>Figure 7.7</i> of the ES).

