

Date: 18 June 2024
Our ref: 477473
Your ref: EN010143

The Planning Inspectorate
Major Applications & Plans
Temple Quay House
Temple Quay
Bristol
BS1 6PN

EastYorkshireSolarFarm@planninginspectorate.gov.uk

BY EMAIL ONLY

Dear Inspector,

NSIP Reference Name / Code: EN010143

Title: Natural England's Written Representations and response to the Examining Authority's first written questions in respect of the East Yorkshire Solar Farm Project.

Examining Authority's submission deadline EX1 with a date of 18 June 2024

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

For any further advice on this consultation please contact the case officer Laura Tyndall and copy to consultations@naturalengland.org.uk.

Yours faithfully,

Laura Tyndall
Lead Adviser
Yorkshire and Northern Lincolnshire Area Team



Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

Natural England's Written Representations

PART I: Summary and conclusions of Natural England's advice.
PART II: Natural England's detailed advice (starting on page 6)
PART III: Natural England's response to the Examining Authority's (ExA's) first written questions (starting on page 43)
PART IV: Natural England's detailed comments on the Development Consent Order (DCO) (starting on page 49)

Summary of Natural England's Advice

Natural England considers that the applicant has provided insufficient evidence and is not yet satisfied that the following issues have been addressed:

- **Internationally designated sites**
 - Potential loss of functionally linked land (FLL) for SPA / Ramsar birds
 - Potential noise disturbance during construction to FLL for SPA / Ramsar birds
 - Potential noise disturbance to SAC river lamprey, sea lamprey and bullhead
 - Direct loss of habitat within an SAC
 - In-combination impacts
- **Nationally designated sites**
 - Potential disturbance to SSSI fish and bird assemblage features.

Part I: Summary and conclusions of Natural England's advice

Part I of these Written Representations provides a summary (above) and overall conclusions of Natural England's advice. This advice identifies whether any progress in resolving issues has been made since submission of our Relevant Representations. Our comments are set out against the following sub-headings which represent our key areas of remit as follows:

- International designated sites
- Nationally designated sites
- Protected species
- Nationally designated landscapes
- Soils and best and most versatile agricultural land

Our comments are flagged as red, amber or green:

- **Red** are those where there are fundamental concerns which it may not be possible to overcome in their current form
- **Amber** are those where further information is required to determine the effects of the project and allow the Examining Authority to properly undertake its task and or advise that further information is required on mitigation/compensation proposals in order to provide a sufficient degree of confidence as to their efficacy.
- **Green** are those which have been successfully resolved (subject always to the appropriate requirements being adequately secured)

Internationally designated sites

Natural England's position regarding internationally designated sites has not changed following the submission of our Relevant Representations response (dated 08 March 2024) based on the documents currently submitted to the Planning Inspectorate. **However please note, we have been in discussion with the Applicant through our Discretionary Advice Service, to work towards resolving these issues through the Examination.**

Our position regarding impacts on internationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway within Part II.

Natural England is not yet satisfied for 'amber' issues identified in the text below that it can be ascertained beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity of the following internationally designated sites.

- Humber Estuary Special Protection Area (SPA)
- Humber Estuary Special Area of Conservation (SAC)
- Humber Estuary Ramsar
- Lower Derwent Valley Special Protection Area (SPA)
- Lower Derwent Valley Special Area of Conservation (SAC)
- Lower Derwent Valley Ramsar
- River Derwent Special Area of Conservation (SAC)

Further information is required to assess the following impact pathways for the above designated sites:

- Loss of functionally linked land (FLL) for the Humber Estuary SPA / Ramsar and the Lower Derwent Valley SPA / Ramsar (construction and operation) ('amber') **[NE1]**
- Noise and visual disturbance during construction to FLL for the Humber Estuary SPA / Ramsar and the Lower Derwent Valley SPA / Ramsar (construction) ('amber') **[NE2]**
- Disturbance impacts to otter (Lower Derwent Valley SAC / River Derwent SAC) (construction) ('amber') **[NE5]**
- Noise disturbance to river lamprey, sea lamprey (River Derwent SAC and Humber Estuary SAC); and bullhead (River Derwent SAC) (construction) ('amber') **[NE6]**
- Physical damage to River Derwent SAC habitat (construction) ('amber') **[NE7]**
- In-combination impacts on international designated sites (construction and operation) ('amber') **[NE9]**

Natural England is satisfied that 'green' issues are unlikely to result in adverse effects on the integrity (AEoI) of the above designated sites, subject always to the appropriate mitigation / compensation as outlined in the application documents being secured adequately. Please find a summary of each 'green' issue below, and refer to Part II, Table 1 for further details:

- Operational impacts (visual disturbance) to FLL for the Humber Estuary SPA / Ramsar and the Lower Derwent Valley SPA / Ramsar (construction) ('green') **[NE3]**
- Water quality impacts to the River Derwent SAC (construction) ('green') **[NE4]**
- Potential damage to River Derwent SAC habitats from dust (construction) ('green') **[NE8]**
- Air quality impacts from traffic emissions on internationally designated sites (construction) ('green') **[NE10]**
- Introduction and spread of non-native species on internationally designated sites (construction) ('green') **[NE11]**
- Impacts on Skipwith Common SAC, Thorne and Hatfield Moors SPA, and Thorne Moor SAC (construction) ('green') **[NE12]**

Nationally designated sites

Natural England's position regarding nationally designated sites has not changed since submission of our Relevant Representations response dated 08 March 2024, based on the information formally submitted to the examination.

Our position regarding impacts on nationally designated sites is as set out in our Relevant Representations. Further detail on our reasoning for this is given against each impact pathway within our Written Representations Part II.

On the basis of the information submitted in relation to these sites, Natural England is not yet satisfied that the project is not likely to damage features of interest of the following nationally designated sites.

- Humber Estuary SSSI
- Derwent Ings SSSI
- Brighton Meadows SSSI
- River Derwent SSSI
- Barn Hill Meadows SSSI

We note that the Humber Estuary SSSI, Derwent Ings SSSI, and Brighton Meadows SSSI nationally designated site features that are affected by this proposal are broadly the same as the internationally designated site features. Please refer to the points in the 'Internationally designated sites' section above for all 'amber' issues, that also apply to these SSSIs **[NE13]** **[NE14]** **[NE15]**.

Further information is required to assess the following impact pathways for the above designated sites:

- Potential impacts on the River Derwent SSSI bird assemblages **[NE17]** and fish assemblages **[NE18]** (construction) ('amber')

Natural England is satisfied that 'green' issues are unlikely to result in adverse effects on the integrity (AEoI) of the above designated sites, subject always to the appropriate mitigation / compensation as outlined in the application documents being secured adequately. Please find a summary of each 'green' issue below, and refer to Part II, Table 1 for further details:

- Potential impacts on the River Derwent SSSI dragonfly assemblage (construction) ('green') **[NE16]**
- Potential water quality impacts to Barn Hill Meadows SSSI (construction) ('green') **[NE19]**

Protected species

Natural England is not providing bespoke advice on the protected species information provided in the Environmental Statement (ES) for this project. Please refer to Part II, Table 1 for a summary of our standing advice ('green') **[NE20]**.

Biodiversity Net Gain

Natural England's position regarding provision of Biodiversity Net Gain (BNG) is summarised below. Further detail on our reasoning for this is given in Part II, Table 1:

- Although BNG is not yet a mandatory requirement for NSIPs, we strongly recommend that BNG provision is secured through this development ('green') **[NE21]**.

Soils and best and most versatile agricultural land

Natural England's position regarding soils and best and most versatile agricultural land (BMV) is summarised below. Further detail on our reasoning for this is given in Part II:

- We welcome that the Soil Management Plan is to be secured in the DCO. We also provide detailed comments / recommendations in relation soils and BMV in Part II, Table 1 ('green') **[NE22]**.

Natural England’s Written Representations

Part II: Natural England’s detailed advice

Part II of these Representations updates and where necessary augments Part I of the Relevant Representations. It expands upon the detail of all the significant issues (‘red’ and ‘amber’ issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible.

Natural England will continue engaging with the applicant to seek to resolve these concerns throughout the examination. Natural England advises that the matters indicated as ‘amber’ will require consideration by the Examining Authority during the examination.

Natural England’s Written Representations, Part II, Table 1

NE key issue ref	Topic	Issue summary. (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment.	Natural England comment on the mechanism for securing mitigation / compensation measures in the DCO.	Risk (Red/ Amber/Green)
NE1	International designated sites <ul style="list-style-type: none"> • Humber Estuary SPA • Humber Estuary Ramsar • Lower Derwent Valley SPA 	Potential loss of functionally linked land (FLL) for the relevant qualifying bird features of the listed SPA / Ramsar sites. (C) and (O)	<u>Habitats Regulations Assessment (HRA) comments:</u> SPAs are classified for rare and vulnerable birds. Many of these sites are designated for mobile species that may also rely on areas outside of the site boundary (referred to as ‘functionally linked land’ (FLL)). These supporting habitats may be used by SPA bird populations or some individuals of the population for some or all of the time. These supporting habitats can play an essential role in maintaining SPA species populations, and	Natural England advises that the comments provided below on the proposed mitigation measures for loss of FLL cannot yet be finalised. The Applicant is currently carrying out an additional year of wintering bird surveys following advice we provided during the pre-application stage. As the full additional bird survey data for the 2023/2024 passage/wintering period will not be submitted until after the relevant representations deadline, we cannot comment on whether the	‘Amber’

	<ul style="list-style-type: none"> Lower Derwent Valley Ramsar 		<p>proposals affecting them may therefore have the potential to affect the designated site. Natural England concur with 6.3.2 of the Stage 1 screening assessment of the HRA, that likely significant effects (LSE) on the Humber Estuary SPA / Ramsar and Lower Derwent Valley SPA / Ramsar cannot be ruled out, due to the potential loss of FLL during construction and operation for passage/wintering bird species associated with these sites. As stated in 6.3.2: <i>“The Order limits are approximately 1.3km from the Lower Derwent Valley SPA/Ramsar and 3km from the Humber Estuary SPA/Ramsar, placing it within the core foraging ranges for some of the qualifying species.”</i> Section 8.4 of the appropriate assessment (AA) further assesses potential loss of FLL for both the Humber Estuary SPA / Ramsar and Lower Derwent Valley SPA / Ramsar.</p> <p>To conclude that LSE cannot be ruled out, and to inform the appropriate assessment (AA), the Applicant has carried out a desk-based study (including a records search), and wintering bird surveys (2022/2023) within the Survey Report for Non-Breeding Birds (Volume 2, Appendix 8-6) [APP-089]. The results of the surveys demonstrate peak counts within Order limits of 100 greylag geese, 80 pink-footed geese, and 51 lapwing. The peak count of pink-footed goose was recorded in Field 1a of the solar photovoltaic (PV) area. Winter wheat was planted at the time of the survey, and soils are described as <i>“Slowly permeable, seasonally</i></p>	<p>mitigation measures detailed in the HRA / framework Landscape and Ecological Management Plan (LEMP) [APP-246] (termed <i>“Ecology Mitigation Area”</i> and detailed from 6.1.72 to 6.1.86 in this document) will be sufficient to avoid adverse effects on integrity of the Humber Estuary SPA / Ramsar and the Lower Derwent Valley SPA / Ramsar. Therefore, detailed advice on the proposed mitigation measures will follow later in the Examination period, including more specific advice around the size, carrying capacity, habitat management, and any remediation measures.</p> <p>Subject to the Applicant submitting the additional surveys (and any required updates to the HRA / LEMP as a result) in sufficient time, we will aim to include this detailed advice at the Written Representations deadline. Please refer to the below sections for our initial comments on the mitigation measures.</p> <p><u>General comments on mitigation measures for loss of FLL</u></p> <p>Section 8.4.12 of the HRA appropriate assessment (AA) concludes that <i>“...mitigation will be</i></p>	
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			<p><i>waterlogged</i>". The peak count of golden plover was recorded in field 3b of the solar PV area, with cropping data demonstrating that winter wheat and oil seed rape were planted at time of the survey, with soils also described as <i>"slowly permeable, seasonally waterlogged"</i>.</p> <p>Following our previous advice, we welcome the inclusion of the cropping data, with 8.4.9 noting that: <i>"2022/2023 did not represent an unusual or 'less suitable' year for non-breeding birds in terms of its cropping pattern (see Table 13)"</i>. This also notes that the cropping forecast predicts this was due to also apply to 2023/2024. We welcome that this data has been provided and used to inform the conclusion that the Site could support significant numbers of pink-footed goose and golden plover, and <i>"...constitute functionally linked habitat"</i> based on <i>"...the 1% population threshold"</i>. We note however that this remains deemed a <i>"...precautionary measure"</i>. As advised in our S42 response, the 1% threshold is only one metric, and therefore it is not always appropriate to apply it strictly when assessing FLL. We consider, based on all evidence provided, that parts of the application Site are likely functionally linked, despite numbers not necessarily reaching a 1% threshold.</p> <p>We note that the peak count of greylag goose is 5.6% of the Humber Estuary population, with impacts on greylag geese associated with this designated site ruled out in section 8.4.8 of the</p>	<p><i>needed to offset the loss of functionally linked habitat associated with the Scheme"</i>. Natural England agree that mitigation measures will need to be provided to avoid adverse effects on integrity of the Humber Estuary SPA / Ramsar and Lower Derwent Valley SPA / Ramsar.</p> <p>We note that mitigation requirements are to be delivered <i>"as a package"</i> due to both sites falling within the Zone of Influence (Zol) of the scheme. We can confirm that we agree with this approach. As above, although we are unable to make full comments on the sufficiency of the mitigation measures at present, we can advise on the following principles:</p> <ul style="list-style-type: none"> • We advise that the final version of the LEMP (following any updates required throughout Examination) is secured within the DCO. • As detailed in 8.4.17 of the HRA, we advise that habitat must be established prior to commencement of construction works in the closest parts of the 	
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		<p>HRA. However, we have previously confirmed agreement with the justifications provided in the HRA for why greylags should not be the drivers of mitigation, as detailed in paragraph 8.4.13. We have also noted previously that the mitigation to be provided for pink-footed goose is also likely to provide some suitable habitat for greylag goose.</p> <p>Section 8.4.10 rules out impacts on little egret and mallard associated with the Humber Estuary, as the Site lies beyond the “<i>core foraging ranges</i>” reported for these species. We have previously concurred with the reasoning provided, and agree it is unlikely that those found in these surveys are linked with the Humber Estuary population.</p> <p>We advised in our S42 response that as the land has been identified as having potential suitability as FLL, the survey results should be considered at appropriate assessment stage, and if the development is demonstrated to lead to loss of functionally linked land for designated bird species, then the suitability of proposed mitigation should also be assessed in the HRA. We confirm that the results have been considered at the correct stage and agree that mitigation measures are required for loss of FLL. However, we advise that full conclusions cannot yet be drawn until we have sight of the 2023/2024 wintering bird survey results (please refer to below section entitled ‘<i>Previous survey advice and additional survey effort 2023/2024</i>’). We are also unable to</p>	<p>Scheme. We advise this is also specifically secured within the DCO.</p> <ul style="list-style-type: none"> • We advise that the mitigation area is secured in-perpetuity, and at least for the lifetime of the development. • We agree with detail included in 8.4.15 of the HRA around limiting surrounding hedgerows and woodland, along with roads and built-up areas, to facilitate long-distance views for birds and reduce disturbance. We advise that to ensure this is the case, an undeveloped / undisturbed 150m buffer around the mitigation area is secured. <p>We also note in the conclusions section of this part of the HRA (8.4.29), it is stated that “<i>This proposal has been discussed with and agreed to in principle by Natural England.</i>” We note that we have engaged with the Applicant pre-application and have agreed with some aspects, such as the habitat types, however, we are</p>	
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			<p>provide full comments on the proposed mitigation area for this reason, however, please refer to the column to the right for general comments.</p> <p><u>Previous survey advice and additional survey effort 2023/2024</u></p> <p>Natural England have previously provided advice on the 2022/2023 wintering bird surveys (summarised in Table 12 of the shadow HRA) carried out by the Applicant, throughout the pre-application process through our Discretionary Advice Service (DAS), and within our Section 42 response (dated 16 June 2023).</p> <p>We noted in our advice provided through DAS that two years' worth of surveys would provide a more robust understanding of the bird use on site and better inform the HRA. This advice was provided for the following reasons:</p> <ul style="list-style-type: none"> • There are limitations in the survey methodology and frequency used in the 2022/2023 surveys. • The proposed development has a very large footprint, and therefore has potential for a significant loss of land in proximity to both Humber Estuary and Lower Derwent Valley. • To help with determination of suitable design and extent of mitigation for loss of functionally linked land, based on 	<p>unable to provide full agreement until we see the results of the 2023/2024 wintering bird surveys, and any subsequent required changes to the mitigation design.</p>	
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			<p>potential year on year variation of bird use.</p> <p>We have been informed by the Applicant that an additional year of wintering bird surveys is now underway, following the above advice. We welcome this additional survey effort. However, as the additional bird survey data for the 2023/2024 passage/wintering period will not be submitted until after the first examination deadline, our advice in relation to FLL is currently limited to the results of the 2022/2023 surveys only and is therefore incomplete.</p> <p>We would like to also reiterate previous advice in that vantage point surveys should be undertaken when assessing whether a development site may constitute functionally linked land for wintering and passage birds. We note that this is the preferred methodology as it prevents flushing of birds which may occur when transect surveys are undertaken.</p> <p>In addition, if the redline boundary of the development is altered throughout the examination, then we advise that the suitability of new fields to act as FLL would need to be assessed. Including undertaking surveys of wintering and passage birds where there is determined to be potential suitability.</p>		
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NE2	<p>International designated sites</p> <ul style="list-style-type: none"> • Humber Estuary SPA • Humber Estuary Ramsar • Lower Derwent Valley SPA • Lower Derwent Valley Ramsar 	<p>Noise and visual disturbance during construction to FLL for the relevant qualifying bird features of the listed SPA / Ramsar sites.</p> <p>(C)</p>	<p>Potential noise and visual disturbance during construction is taken through to the appropriate assessment stage, due to LSE on FLL, with the following noted in 6.2.2 of the HRA (screening stage): <i>“The Site comprises extensive tracts of agricultural land, which lie within the maximum foraging ranges of some of the qualifying species in the Lower Derwent Valley SPA/Ramsar and Humber Estuary SPA/Ramsar”</i>. We agree with these impact pathways being taken through to the appropriate assessment stage (section 8.1). However, we are unable to concur with the conclusion of no adverse effects on integrity at present. Please refer to the below sections for further detail.</p> <p><u>Noise disturbance</u> The appropriate assessment provides further detail around noise disturbance in sections 8.1.1 to 8.1.11. It is concluded in 8.1.19 that there will be no adverse effects on the integrity on the listed designated sites from noise disturbance on functionally linked habitats. Having considered the assessment it is our advice that it is not possible to ascertain that the proposal will not result in adverse effects on the integrity of the sites in question. The assessment does not currently provide enough information and/or certainty to justify the assessment conclusion, and further assessment / consideration of mitigation options is required.</p>	<p><u>Noise disturbance</u> N/a – Further information required.</p> <p><u>Visual disturbance</u> As stated above for NE1, we advise that the mitigation area is secured prior to commencement of construction works.</p>	<p>‘Amber’</p>
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			<p>We advise that the following additional information and / or amendments are required:</p> <ul style="list-style-type: none"> Natural England does not support the use of IECS 2013 '<i>Waterbird disturbance mitigation toolkit</i>' as we do not consider the evidence to have been collected in a rigorous way, and the results have not been peer reviewed. Therefore, any assessment that relies on the toolkit may be inaccurate. Section 8.1.3 refers to the IECS 2013 toolkit, in relation to setting a disturbance distance for bird species. <p>We note that 8.1.3 concludes that a noise disturbance distance / zone of 200m is proposed (based on the IECS 2013 toolkit). However, we advocate a precautionary approach to assessing disturbance to birds, using a 300m as an initial disturbance zone and then reducing this where mitigation measures allow.</p> <ul style="list-style-type: none"> We welcome the inclusion of Figure 6 in the HRA which demonstrates modelled LAeq construction noise contours across the site, and how noise is predicted to attenuate. Based on the information provided in this Figure, and in the Noise and Vibration assessment (Volume 1, Chapter 11, Table 11-4. Sensitive receptors) [APP- 		
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			<p>063] and the Baseline Noise Survey (Volume 2, Appendix 11-3, results section) [APP-106], it appears that construction noise will result in potentially significant exceedances of the recorded baseline levels (these range from 43-58dB), at many of the receptor points.</p> <ul style="list-style-type: none"> • Despite the potential suitability of adjacent arable fields to the site as habitat for SPA / Ramsar birds, Figure 6 does not yet put exceedances into context of the birds present or utilising the area, or provide detail about timings of works / type of works planned at any given time. For instance, it is noted in 8.1.5 that tracked excavators will be used in construction and are associated with the highest sound pressure at source (L_{Amax} of 89dB at 10m). As these are required for several construction / decommissioning activities, mapping the timings, and anticipated time lengths of these works, would be useful. • We note that section 8.1.7 states that noise is anticipated to “<i>decay to acceptable levels</i>” within 400m. Additionally, section 8.1.8 provides various justifications around the reasons that areas with higher construction noise levels will not cause 		
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			<p>disturbance, including field size and existing built-up areas. However, we require the above information to further determine if noise levels are likely to be disturbing to SPA / Ramsar birds. We advise that the further information would be best provided through provision of an overlay map containing the above detail, to help determine which birds are likely to be impacted by increased noise during construction.</p> <ul style="list-style-type: none"> • Considering the above, we note there is no discussion around possible mitigation options for noise disturbance, despite potentially significant increases in comparison to background noise levels. Further assessment of how mitigation might reduce noise impacts, including measures such noise fencing, is required. • As detailed for the NE1 section, we note that additional wintering bird surveys (2023/2024) are in the process of being completed. We advise that these results could also affect the outcome of the noise assessment and should also be considered in this context once available. <p>Although the above information is outstanding, we advise that construction noise impacts to the proposed FLL mitigation area can be ruled</p>		
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			<p>out, subject to the mitigation measures being secured prior to the commencement of construction works for the main application site. Please refer to NE1 for our full comments in relation to mitigation measures for loss of FLL.</p> <p><u>Visual disturbance</u></p> <p>The appropriate assessment further assesses visual disturbance in sections 8.1.12 to 8.1.18. As per our comments above, the IECS 2013 Toolkit is referenced in relation to setting a buffer for visual disturbance. Please refer to our comments above around the use of this toolkit. However, we advise that a 300m buffer for visual disturbance is likely sufficient.</p> <p>It is then concluded in 8.1.19 that there will be no adverse effects on the integrity on the listed designated sites from visual disturbance on functionally linked habitats. In relation to <u>visual disturbance only</u> (refer to comments above in relation to the further information required for noise disturbance), based on the information provided, Natural England agree with this conclusion, subject to appropriate mitigation being secured. Please refer to the column to the right for further detail.</p>		
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NE3	<p>International designated sites</p> <ul style="list-style-type: none"> • Humber Estuary SPA • Humber Estuary Ramsar • Lower Derwent Valley SPA • Lower Derwent Valley Ramsar 	<p>Operational impacts (visual disturbance) to FLL for the relevant qualifying bird features of the listed SPA / Ramsar sites. (O)</p>	<p>Sections 6.3.3 to 6.3.8 of the HRA (screening stage) assess operational impacts, primarily potential visual disturbance to birds using FLL. Section 6.3.9 then concludes the following: <i>“Overall, there will be no LSEs of the Scheme regarding visual disturbance impacts in the operational phase, including obstruction of flight movements, disturbance displacement, from maintenance activities and glint and glare. Therefore, this impact pathway is screened out from AA.”</i> Based on the information provided (summarised below), Natural England agree with this conclusion. However, we advise that this pathway is considered in-combination (please refer to key issue NE9).</p> <p>The assessment provided includes the following details:</p> <ul style="list-style-type: none"> • Discussions around the height of the development, which will be lower than current landscape features such as hedgerows, trees, and woodland (6.3.3) • Detail of potential visual disturbance by operational maintenance staff, which is anticipated to include only three permanent on-site maintenance staff, and occasional ad-hoc visitors, carrying out maintenance works including <i>“...vegetation management, equipment maintenance and periodic repair works”</i>. This is considered no more 	N/a	‘Green’
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			<p>disturbing than current farming practices (6.3.4)</p> <ul style="list-style-type: none"> Impacts on SPA / Ramsar birds resulting from glint and glare impacts are ruled out in 6.3.5 to 6.3.8 due to the solar PV technology contains built in mechanisms to reduce reflectivity, stating the following: <i>“Given that reflection from the solar PV panels will be minimal due to the technology utilised, will further reduce any glint and glare effects on overflying birds.”</i> It is also noted that any exposure time from possible glint and glare is unlikely to result in impacts due to the following: <i>“...it is considered that qualifying birds are likely to transit through the landscape surrounding the Scheme on a broad front, as there are no topographical and geographical features that would concentrate bird movements in particular corridors.”</i> We note that the Applicant has also completed a Glint and Glare Assessment (Appendix 16-3, ES Volume 2) [APP-122], which they note corroborates the above conclusions. 		
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NE4	<p>International designated sites</p> <ul style="list-style-type: none"> River Derwent SAC 	<p>Potential water quality impacts during construction</p> <p>(C)</p>	<p>Natural England notes the provision of a number of Horizontal Directional Drilling (HDD)-related water quality measures, which we advise must be included within the Construction Environmental Management Plan (CEMP) [APP-238] to prevent ecological impacts occurring via this impact pathway. Point 9.3.1 of the HRA states that <i>'As identified in the AA, comprehensive water quality protection measures are secured in the Framework CEMP EN010143/APP/7.7], including the adherence to Good Practice Guidance, use of temporary drainage systems, minimum distances between storage spaces for excavated materials and water features, and dedicated wash-down areas.'</i> In addition to these measures, contingency plans must be place for potential 'frac-out' events. Natural England advises that these measures should be detailed in the final CEMP.</p> <p>Natural England welcome the commitment to delivering a water management plan in Table 4, page 45 of the framework CEMP - <i>'The Water Management Plan (WMP) (to be delivered post consent secured through the CEMP) will include details of pre, during and post construction water quality monitoring'</i>. Natural England notes that section 6.3.14 of the HRA clarifies that the solar PV panels will be cleaned with water, therefore screening this impact pathway out from AA. Natural England concurs with this conclusion.</p>	<p>All water quality mitigation measures relating to HDD should be included in the CEMP and secured in the DCO.</p> <p>The inclusion of the water management plan within the CEMP should be secured within the DCO.</p>	<p>'Green'</p>
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NE5	<p>International designated sites</p> <ul style="list-style-type: none"> • River Derwent SAC • Lower Derwent Valley SAC 	<p>Potential impacts to otter (<i>Lutra lutra</i>) during construction, including horizontal directional drilling (HDD)</p> <p>(C)</p>	<p>Natural England welcomes the inclusion of a buffer for HDD to minimise disturbance to SAC species, though notes inconsistencies with the distance of buffering used between different documents. It must be ensured that HDD buffering distances are standardised across documents (30m for the River Derwent, River Ouse, and Watercourse DE53; 10m for all other watercourses).</p> <p>See examples below:</p> <p>Chapter 8, page 169 ‘of Environmental Statement – “The Scheme incorporates minimum 10m stand-off buffers from watercourses/ditches (bank top). This buffer is extended to a minimum of 30m for the River Derwent, River Ouse, and Watercourse DE53”.</p> <p>9.3.2 of HRA – “Potential negative water quality impacts from HDD operations are minimised by delivering precautionary drill depth, undertaking pre-works hydrogeological assessments (including a site-specific hydraulic fracture risk assessment) and distancing HDD pits a minimum of 30 m from the edge of watercourses”.</p> <p>Page 63 of Framework CEMP – “The sections of the cables that will be installed via trenchless approaches will require launch and reception pits to be installed at each crossing point. These are identified in Figure 9-3, ES Volume 3 [EN010143/APP/6.3]. The send and</p>	<p>The buffers which are to be used for HDD in relation to specific watercourses should be established within the CEMP. Specific details regarding where HDD is to occur in relation to SAC boundaries should also be detailed in the CEMP, following completion of the Hydraulic Fracture Risk Assessment.</p> <p>These measures should be secured within the DCO.</p> <p>All noise mitigation measures relating to, for instance, HDD and the timing of works, should be included in the CEMP and secured in the DCO.</p>	<p>‘Amber’</p>
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		<p><i>receive pit excavations for drilling/boring will be located at least 10 m from the watercourse edge, as measured from the top of bank”.</i></p> <p>We have based our advice on the understanding that the 30m buffer will be utilised to prevent impacts to the River Derwent SAC, and the CEMP (and all other documents) should be consistent in the reflection of this.</p> <p>Natural England welcomes HDD as a means of mitigating impacts on waterways in which there could potentially be otter presence. However, further information should be provided as to why DE52, DE03, and OU24 have not been considered for HDD rather than open trenching methods. Each of these waterways has been scoped in for suitability as otter habitat (as stated in the Riparian Mammal Survey Report [APP-093]) and will be directly crossed by the grid connection corridor, resulting in significant disturbance. Natural England notes that the Riparian Mammal Survey Report states that DE52, DE03, and OU24 have not been deemed as suitable for otter as the River Ouse, the River Derwent, and DE53 - nor have they displayed evidence of otter presence. Given the suitability of these habitats for otter, and proximity to waterways in which otter have been recorded, Natural England advises that further justification should be provided as to why HDD is not necessary for crossing these</p>		
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		<p>habitats with a view to minimising any adverse effect on otter.</p> <p>Natural England notes the screening in of 'noise and visual disturbance in the construction period' on the Lower Derwent Valley SAC and River Derwent SAC. Natural England welcomes this conclusion and the mitigation proposed of the use of noise barriers around HDD send and receive pits to mitigate for noise impacts on otter. Due to the suitability of OU20, OU24, and OU13 for otter, Natural England advises that noise barriers should be used to avoid disturbance of these waterways during any adjacent construction phase activities.</p> <p>Point 11.7.16 of the Environmental Statement states that <i>'it should be noted that this identification of a likely significant effect is precautionary as it is expected that HDD activities outside of the daytime period would only be required if there is a clear and obvious benefit'</i>. Natural England concurs that generally nighttime working, in particularly with regard to HDD, should be minimised and only occur in instances when 24/hour working is unavoidable, to avoid disturbance to the nocturnal activities of otter.</p>		
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NE6	<p>International designated sites</p> <ul style="list-style-type: none"> • River Derwent SAC • Humber Estuary SAC 	<p>Potential impacts to river lamprey, sea lamprey (River Derwent SAC; and Humber Estuary SAC); and bullhead (River Derwent SAC) during construction, including noise disturbance.</p> <p>(C)</p>	<p>Both river lamprey (<i>Lampetra fluviatilis</i>) and sea lamprey (<i>Petromyzon marinus</i>) are designated fish features of the River Derwent SAC, along with bullhead (<i>Cottus gobio</i>). Additionally, the Humber Estuary SAC features include river lamprey and sea lamprey, with migratory routes (FLL for lamprey) extending from the estuary into various adjoining watercourses, including the Derwent and the Ouse.</p> <p>As noted above, the project intends to cross the river Derwent and the river Ouse using HDD methods, and potential impacts on the fish features of the above designated sites are assessed at the HRA screening stage in 6.2.3, 6.2.5 and 6.2.6. Section 6.2.7 then rules out LSE on the qualifying fish features of the River Derwent SAC and Humber Estuary SAC in both the construction and de-commissioning phase.</p> <p>On the basis of the information provided, Natural England advises that there is currently not enough information to rule out the likelihood of significant effects. We advise that the following additional information and / or amendments are required:</p> <ul style="list-style-type: none"> • The River Derwent SAC bullhead (<i>Cottus gobio</i>) feature is not assessed within this section. We advise that impacts on this feature are also assessed, as they will not necessarily be the same as for lamprey. 	N/a: Further information required.	'Amber'
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			<ul style="list-style-type: none"> • The HRA notes in 6.2.6 that there will not be any works within the river, as <i>“trenchless technologies (i.e., HDD) will be used for crossing the Featherbed Drain, River Derwent and River Ouse”</i>. It is also noted in 6.2.6 that the cables will be 5m below the bed of both the River Ouse and River Derwent, with the send and receive pits at a minimum of 30m from the edge of the watercourse. We welcome confirmation of distance buffers to be used, however, we advise that further justification is required as to whether these distances will allow noise/vibration from HDD to attenuate to acceptable levels for the relevant fish species. • Detail is also provided around the migration timings for the lamprey species in 6.2.5, noting the following: <i>“The return of reproductively active river lamprey to upstream spawning migrations occurs between October and December, whereas upstream movement of sea lamprey takes place in April and May”</i>. However, there is currently no comparison made with migration periods and the timings of any potentially disturbing works. There is also no detail of how long any of the most disturbing works are anticipated to last. 		
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			<ul style="list-style-type: none"> We note however that the following is presented in Table 8 – 12 (pg183) of 6.1 Chapter 8 – Ecology [APP-060]: <i>“The core fish migration season of September to February and May will be avoided for HDD beneath the River Ouse and River Derwent, unless the depth of the HDD is confirmed to be of a sufficient minimum distance of approximately 10m below the riverbed to avoid noise and vibration effects”</i>. This information is not included in the HRA in relation to the River Derwent SAC. Further justification around whether these measures are sufficient should be provided, including consideration around whether these are mitigation measures (and therefore should be included at the appropriate assessment stage). 		
NE7	International designated sites <ul style="list-style-type: none"> River Derwent SAC 	Potential physical damage to River Derwent SAC habitat during construction (C)	We note that section 6.2.25 states: <i>“...temporary access into the field to the north in the form of a bell mouth would require the temporary removal of a section of verge habitat within the designated site boundary.”</i> We agree with the conclusion that is then made in 6.2.26 of the HRA; that LSE on the River Derwent SAC cannot be ruled out due to the potential for temporary loss / damage to habitat during vegetation clearance required for temporary access.	The restoration plan for the removed vegetation within the River Derwent SAC must be secured within the DCO. The plan could be included within the final LEMP. The buffers which are to be used for HDD in relation to specific watercourses should be established within the CEMP. Specific details regarding where HDD is to occur in relation to SAC	‘Amber’

			<p>Section 8.5.2 of the HRA notes that the access track does not impact the habitat feature “water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation”, as this habitat is aquatic and not dependent directly on the terrestrial vegetation in this location. It is then stated that “<i>The vegetation that would be temporarily removed is considered to be part of the wider site fabric, which is not essential for the SAC to achieve its Conservation Objectives.</i>” However, as the vegetated banks are supporting habitat for designated otter, we advise that there is potential for adverse effect on integrity, if the habitat is not fully restored. Therefore, the HRA must state that a restoration plan for the removed vegetation will be undertaken, and this restoration plan must be developed prior to commencement of development.</p> <p>We also note that page 61 of the Framework CEMP states ‘<i>a site-specific Hydraulic Fracture Risk Assessment would be developed prior to construction following further investigation of specific ground conditions at the crossing locations, and appropriate mitigation developed in line with best construction practice</i>’. Natural England welcomes the inclusion of HFRA prior to commencement of HDD. However, we advise that if there is potential for use of an alternate water crossing methodology, in the case of HDD being unviable, Natural England advise that the impacts are also assessed upfront.</p>	<p>should be included within the CEMP and secured within the DCO.</p>	
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NE8	<p>International designated sites</p> <ul style="list-style-type: none"> River Derwent SAC 	<p>Potential damage to SAC habitats from construction dust.</p> <p>(C)</p>	<p>We agree with the conclusions given in 6.2.34 of the HRA that LSE cannot be ruled out for potential impacts of dust deposition during the construction or decommissioning phases for the River Derwent SAC. This notes the following: <i>“In the absence of mitigation measures, any construction or decommissioning activities carried out within 200m of the SAC, particularly those requiring earthworks and the use of construction materials, may result in increased dust deposition to floating aquatic vegetation (e.g., water crowfoot Ranunculus fluitantis) and the water column.”</i></p> <p>At the appropriate assessment stage, we note that in 8.3.2, it is stated that: <i>“Many of the measures included in the CEMP will be effective in minimising dust release. For example, the following good practice guidelines such as Guidance for Pollution Prevention (GPP), CIRIA documents and British Standards Institute (BSI) documents will be adhered to, which will contribute towards minimising the release of dust from construction activities.”</i> We also note that the framework CEMP contains detail around dust control measures, particularly in Table 12 – Air Quality. This also references the creation of a Dust Management Plan prior to construction.</p> <p>With the above measures secured, Natural England agree with the conclusion given in 8.3.4, that there will not be adverse effects on the integrity of the River Derwent SAC</p>	<p>All dust mitigation measures included in the CEMP should be secured in the DCO.</p> <p>The inclusion of a dust management plan as referenced in the CEMP should be secured within the DCO.</p>	<p>‘Green’</p>
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			resulting from dust deposition. However, we advise that this conclusion is based on the project <u>alone</u> . Please refer to the below section [NE9] relating to the further assessment required for <u>in-combination</u> impacts.		
NE9	International designated sites In-combination impacts on all relevant international designated sites	Potential in-combination impacts on international designated sites. (C) and (O)	We advise that the developments scoped in for potential impacts in-combination in Table 10 is comprehensive, in terms of inclusion of the correct types of development. However, the current HRA does not provide a sufficient in-combination assessment, which requires further details to address the outstanding issues. We advise that the HRA should identify where impacts have been fully avoided through mitigation and where there is still a potential residual impact that could act in combination (i.e. loss of openness on functionally linked land due to multiple developments). This assessment should consider the residual effects of developments together. If mitigation or compensation has completely avoided or removed the effect that this would not act in combination with other projects. Natural England will review the assessment in more detail after further information is provided about impacts (and associated mitigation) as detailed above. Further in-combination assessment is therefore required for the following identified impact pathways:	N/a: Further information required.	'Amber'

			<ul style="list-style-type: none"> • Impacts to FLL, including loss of openness in the landscape, and noise / visual disturbance (<i>Humber Estuary SPA / Ramsar and Lower Derwent Valley SPA / Ramsar</i>) • Noise impacts to any designated sites if there is potential for timing overlap during construction. • Water quality (<i>River Derwent SAC</i>) • Atmospheric pollution (dust) (<i>River Derwent SAC</i>) <p>Please refer to the sections below for any specific in-combination comments on specific designated sites/impact pathways.</p> <p><u>River Derwent SAC</u> <i>Temporary habitat loss in-combination</i></p> <p>Section 8.5.4 of the HRA notes that although several NSIPs overlap with the Grid Connection Corridor, it is considered there will be no in-combination impacts from temporary habitat loss to the River Derwent SAC, due to the localised nature of the impact. This also notes the following: <i>“Specifically, no other project will require vegetation removal in this location and over the same timescale as the Scheme”</i>. Based on this information provided, it is therefore likely that impacts can be ruled out in-combination. However, please refer to our advice around River Derwent SAC habitat loss for further information about impacts</p>		
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			alone, and the restoration plan required [NE7].		
NE10	International designated sites <ul style="list-style-type: none"> Any relevant site within 200m of the Affected Road Network (ARN) 	<p>Potential air quality impacts from traffic emissions during construction on relevant designated sites <u>alone</u> or <u>in-combination</u> with other plans and / or projects.</p> <p>(C)</p>	<p>Section 6.2.13 of the HRA rules out LSE of traffic emissions for the project alone. The reasoning provided for this is that HGV movements will not exceed 50 per day, and that "...a preliminary assessment of the proposed routing of HGVs (also known as the 'Affected Road Network' [ARN]) indicates that none of the routes lie within 200m of any European site."</p> <p>Based on this information, that none of the affected routes are within 200m of any designated site, we advise that impacts can therefore be ruled out alone or in-combination.</p>	N/a	'Green'
NE11	International designated sites <ul style="list-style-type: none"> Lower Derwent Valley SAC / SPA / Ramsar River Derwent SAC 	<p>The potential effects of the introduction and spread of non-native species during construction on qualifying habitats.</p> <p>(C)</p>	<p>We note that invasive non-native species (INNS) have been screened out from impacts, as the biosecurity measures will be carried out, irrespective of the presence of designated sites. We agree this is an acceptable approach but would advise the measures are reiterated in the final CEMP for the development.</p>	<p>We advise the INNS biosecurity measures should be included within the final CEMP and secured within Schedule 2, no 11 of the DCO.</p>	'Green'

	<ul style="list-style-type: none"> Humber Estuary SPA / Ramsar 				
NE12	International designated sites <ul style="list-style-type: none"> Skipwith Common SAC Thorne and Hatfield Moors SPA Thorne Moor SAC 	Potential impacts on Skipwith Common SAC, Thorne and Hatfield Moors SPA, and Thorne Moor SAC (C) and (O)	Natural England notes the information included in the HRA (4.2.7) in relation to these designated sites and agree that they can be screened out of further assessment.	N/a	'Green'
NE13	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	Potential impacts on Humber Estuary SSSI designated features (C) and (O)	Our advice regarding impacts on the Humber Estuary SSSI coincides with our advice regarding the potential impacts upon the Humber Estuary SPA / Ramsar, as detailed above.	N/a: Further information required	'Amber'

NE14	National designated sites <ul style="list-style-type: none"> Brighton Meadows SSSI Derwent Ings SSSI 	Potential impacts on Brighton Meadows SSSI and Derwent Ings SSSI designated features (C) and (O)	Our advice regarding impacts on Brighton Meadows SSSI and Derwent Ings SSSI coincide with our advice regarding the potential impacts upon the Lower Derwent Valley SPA / Ramsar, as detailed above.	N/a: Further information required	'Amber'
NE15	National designated sites <ul style="list-style-type: none"> River Derwent SSSI 	Potential impacts on River Derwent SSSI designated features (C) and (O)	Our advice regarding impacts on the River Derwent SSSI coincides with our advice regarding the potential impacts upon the River Derwent SAC, as detailed above. However, for features which do not overlap, please refer to the below sections [NE16] [NE17] [NE18].	N/a: Further information required	'Amber'
NE16	National designated sites <ul style="list-style-type: none"> River Derwent SSSI 	Potential impacts on the River Derwent SSSI dragonfly assemblage during construction (C)	Natural England notes the screening in of construction, operational, and decommissioning water quality impacts on the River Derwent SSSI dragonfly assemblage. The water quality measures detailed above in key issue ref NE4 are also proposed to mitigate impacts to the habitat utilised by the dragonfly assemblage. Natural England concurs with this proposed mitigation.	Water quality mitigation measures should be included within the CEMP, and secured within the DCO in Schedule 2, requirement 11. We note that Schedule 2, requirement 9 includes a statement that any foul water drainage plan must be submitted to the relevant planning authority prior to development. We advise that if the foul water plan is changed at a	'Green'

				later stage, and will no longer be removed from site for treatment, then impacts to designated sites from discharges will need to be addressed.	
NE17	National designated sites <ul style="list-style-type: none"> River Derwent SSSI 	Potential impacts on River Derwent SSSI bird assemblages during construction (C)	We advise that it is currently unclear from the information provided in 6.1 Chapter 8 – Ecology [APP-060] whether there has been any direct assessment on the ‘ <i>Assemblages of breeding birds</i> ’ and ‘ <i>Aggregations of non-breeding birds - Bewick’s Swan, Cygnus columbianus bewickii</i> ’ features of the River Derwent SSSI. These features do not overlap with those of the River Derwent SAC. We therefore advise that further information is provided in relation to potential construction phase impacts on these features. Please refer to the River Derwent SSSI Designated Sites View page for further details, including the SSSI citation.	N/a: Further information required	‘Amber’
NE18	National designated sites <ul style="list-style-type: none"> River Derwent SSSI 	Potential impacts on the River Derwent SSSI fish assemblage during construction (C)	We advise that it is currently unclear from the information provided in 6.1 Chapter 8 – Ecology [APP-060] whether there has been any direct assessment on the River Derwent SSSI ‘ <i>Outstanding assemblage of native fish</i> ’ feature. Aspects of this feature do not overlap with the River Derwent SAC designated fish features. As detailed in [NE6] , we note that the following is presented in Table 8 – 12 (pg183) of 6.1 Chapter 8 – Ecology [APP-060] in relation to	N/a: Further information required.	‘Amber’

			<p>mitigation of noise/vibration impacts from HDD: <i>“The core fish migration season of September to February and May will be avoided for HDD beneath the River Ouse and River Derwent, unless the depth of the HDD is confirmed to be of a sufficient minimum distance of approximately 10m below the riverbed to avoid noise and vibration effects”</i>. We advise that further justification is provided around why this is considered sufficient to mitigation impacts for the species within the SSSI assemblage.</p> <p>We therefore advise that further information is provided in relation to potential construction phase impacts on these features. Please refer to the River Derwent SSSI Designated Sites View page for further details, including the SSSI citation.</p>		
NE19	<p>National designated sites</p> <ul style="list-style-type: none"> Barn Hill Meadows SSSI 	<p>Potential water quality impacts during construction (C)</p>	<p>Natural England have previously advised that further information was required regarding potential water quality and water supply impacts on Barn Hill Meadows SSSI. Page 191 of the Environmental Statement states that <i>‘surface water drainage will incorporate suitable quality controls to mitigate impacts to surrounding watercourses. Foul water will be collected and removed from Site for treatment. Standard environmental protection measures ... will minimise indirect impacts on existing habitats in these sites due to runoff during construction or other waterborne pollution’</i>. Natural England welcomes the inclusion of</p>	<p>Water quality mitigation measures should be included within the CEMP, and secured within the DCO in Schedule 2, requirement 11.</p> <p>We note that Schedule 2, requirement 9 includes a statement that any foul water drainage plan must be submitted to the relevant planning authority prior to development. We advise that if the foul water plan is changed at a later stage, and will no longer be</p>	<p>‘Green’</p>

			these measures. All mitigation measures proposed during construction should be secured in the final CEMP.	removed from site for treatment, then impacts to designated sites from discharges will need to be addressed.	
NE20	Protected Species	Protected species – General	<p>Natural England has adopted standing advice for protected species, which includes guidance on survey and mitigation measures. Natural England is not providing bespoke advice on the protected species information provided in the ES for this project.</p> <p>A separate protected species licence from Natural England or Defra may be required. Applicants should refer to the guidance at Wildlife licences: when you need to apply to check to see if a mitigation licence is required. Applicants can also make use of Natural England’s charged service Pre Submission Screening Service for a review of a draft wildlife licence application. Natural England can then review a full draft licence application to issue a Letter of No Impediment (LONI) which explains that based on the information reviewed to date, that it sees no impediment to a licence being granted in the future should the DCO be issued. See Advice Note Eleven, Annex C – Natural England and the Planning Inspectorate National Infrastructure Planning for details of the LONI process.</p>	Requirement for mitigation has not been assessed by Natural England.	‘Green’

NE21	Biodiversity net gain (BNG)	BNG - General	<p>Natural England have not undertaken a detailed assessment of the metric calculations provided within document 7.11 Biodiversity Net Gain Assessment Report [APP-243] (dated 19 December 2023). However, we have provided general advice on incorporation of BNG within NSIP proposals below.</p> <p>The Environment Act 2021 includes NSIPs in the requirement for BNG. The biodiversity gain objective for NSIPs is defined as at least a 10% increase in the pre-development biodiversity value of the on-site habitat.</p> <p>The biodiversity baseline should include all and contained within the site's red line boundary and proposals can be iteratively refined over time and throughout detailed design.</p> <p>We encourage developers to:</p> <ul style="list-style-type: none"> • develop their BNG proposals in adherence with well-established BNG principles. • use the latest version of the Defra biodiversity metric, adhering to the metric guidance. 	<p>We welcome the commitment to delivering BNG on this project. We recommend that the target increase in BNG across all biodiversity unit types is secured by a suitably worded requirement in the DCO. Biodiversity gains should ideally be secured for a minimum of 30 years and be subject to adaptive management and monitoring.</p>	'Green'
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NE22	Soils and Best and Most Versatile (BMV) Agricultural Land	Soils and BMV Agricultural Land – Detailed comments	<p>Natural England note paragraph 1.1.4 of the Framework Soil Management Plan [APP-241]. Within the IoQ Guidance, there is a preferred set of handling practices, which are set out in Sheets A to D (these correspond to the Defra Construction Code). These sheets set out the methodology for soil stripping; creating soil stockpiles; excavation of soil stockpiles; and soil replacement, all using Excavators and dump trucks. These are considered best practice to achieve high standards required for BMV reinstatement.</p> <p>Natural England advise when referring to IoQ guidance we would expect specific sheets to be referred to alongside the reference. Natural England welcome this approach to on-site supervision set out in paragraphs 1.2.7 to 1.2.9.</p> <p>Soils should only be handled in a dry and friable condition. A field suitable method for assessing whether soils are in a dry and friable condition based on plastic limits set out in Part One (Explanatory Note 4 – Table 4.2 provided below in Annex 1) of the Institute of Quarrying’s Good Practice Guide for Handling Soils in Mineral Working, and this approach together with the associated rainfall protocols should be adopted.</p> <p>Soil handling should normally be avoided during October to March inclusive, irrespective of soil moisture conditions, because it will generally not be possible to establish green</p>	We note and welcome that the Soil Management Plan is secured within Schedule 2, parts 15 (1) and (2), of the DCO.	‘Green’
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			<p>cover over winter to help dry out soils and protect them from erosion. This is recognised in EN010143/APP/7.9 Table 11. Natural England advises the same commitment should be referenced during the construction phase.</p> <p>Topsoil stripping depths should be informed through a detailed soil survey. The soil survey will also identify the different soil types, and can be used to inform storage requirements, including the volumes and areas necessary.</p> <p>Where topsoil is proposed to be stripped, typically for construction compounds; access tracks and laying cabling, the soil handling methodology (movement, storage & replacement) and soil protection proposals are reviewed to ensure that appropriate mitigation is in place to allow for the restoration of the land to the baseline ALC Grade.</p> <p>For topsoil the preference is for a 1 to 3m height to minimize the impact of storage on biological processes, whereas for subsoils where the biological activity is lower, subject to safe operations, mounds are often raised to heights of 3 to 5m depending on the resilience of the soils to compaction.</p> <p>Natural England notes and welcomes the applicant's commitments to providing a detailed Soil Management Plan (SMP) in paragraph 4.7.1. The Environmental Statement and associated SMP needs to clearly demonstrate how the ALC Grades and soil types will inform</p>		
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			<p>soil handling and restoration, setting out the site specific mitigation measures with reference to the best practice guidance (Defra Construction Code of Practice), i.e. secondary mitigation measures. The British Society of Soil Science has published the Guidance Note Benefitting from Soil Management in Development and Construction which also contains useful guidance.</p> <p>Natural England note and welcome the commitment stated in paragraph 4.7.2; however, we advise this commitment emphasises the importance for a closed season during winter months as establishment of low maintenance ground cover would be hindered and risk to soil erosion increased. The SMP should recognise the exact amount (%) of BMV land that has been identified in the ALC report. We advise the measures to be implemented to short term soil stockpiles to avoid or reduce potential long-term damage or loss should be clarified (paragraph 4.7.5).</p> <p>An SRP will normally form part of the Materials Management Plan for the site (paragraph 4.8.2). It should include the following:</p> <ul style="list-style-type: none"> • maps showing topsoil and subsoil types, and the areas to be stripped and left in-situ. • Methods (including machinery) for stripping, stockpiling, respreading, and ameliorating the soils. 		
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			<ul style="list-style-type: none"> • location of soil stockpiles and content (e.g. Topsoil type A, subsoil type B). • schedules of volumes for each material. • expected after-use for each soil whether topsoil to be used on site, used, or sold off site, or subsoil to be retained for landscape areas, used as structural fill or for topsoil manufacture. • identification of person responsible for supervising soil management. <p>The depth of decompaction should reflect the depth of compaction (paragraph 4.10.15). Additionally, where compaction is likely to take place further consideration should be given to providing a decompaction strategy to maximise the effectiveness of decompaction methods. Further guidance may be found here; IQ Soil Guidance Sheet O.pdf</p> <p>It is unclear when the 'after' statement will take place (paragraph 4.10.18). Natural England advise this should take place for all phases where both permanent and temporary impacts are expected.</p> <p>We note Table 9 of the Framework Operational Environmental Management Plan [APP-239]. Soils should only be handled in a dry and friable condition. A field suitable method for assessing whether soils are in a dry and friable condition based on plastic limits set out in Part One (Explanatory Note 4 – Table 4.2 provided</p>		
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		<p>below in Annex 1) of the Institute of Quarrying's Good Practice Guide for Handling Soils in Mineral Working, and this approach together with the associated rainfall protocols should be adopted.</p> <p>The commitment made in paragraph 1.1.4 of the Framework Decommissioning Management Plan [APP-240] is welcomed, and the additional consideration of land management is acknowledged. It is clear that the intention is to retain the current ALC grade and go beyond this. Nonetheless, Natural England consider that the commitment could be altered to be clear that the site will be restored at a minimum to the same ALC grade, and additional measures will be taken to further benefit the land and quality/productivity. We consider the specific commitment to retaining the same ALC grade to be key to provide certainty in terms of the DCO that the land quality will not be affected. Restoration criteria should be included in the detailed SMP to ensure the restored land is aligned to the ALC survey results.</p>		
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Natural England’s Written Representations

PART III: Natural England’s response to the Examining Authority’s (ExA’s) first written questions, with a deadline of 18 June 2024.

ExA question ref	Question addressed to	Question	Answer
Q2.0.2	The Applicant, Natural England (NE) and local planning authorities (LPAs)	<u>ES Table 8-1 page 8-25/26</u> . Has there been any on-going consultation with NE and the LPAs to align habitat enhancement proposals with any Local Nature Recovery Strategies (see EN-1(24) paragraph 4.6.14)? If so, please provide further details.	Yorkshire and Northern Lincolnshire Area Team are not aware that consultation has been taking place in relation to Local Nature Recovery Strategies (LNRS) with the Applicant.
Q2.0.3	NE	<u>ES8.3.14</u> . Please comment on the bird survey methodology, particularly that the spring passage period had not been covered by the 2022/23 surveys for non-breeding birds.	In our Relevant Representation NE stated that we would request inclusion of passage surveys within the additional bird surveys to be undertaken for the 2023/24 period (Table 1: <u>“Previous survey advice and additional survey effort 2023/2024”</u>). However, alternatively the Applicant could provide additional evidence as to why surveying within the Spring passage would not be required. This could be in the form of annual cropping data and a habitat suitability assessment, to demonstrate whether the vegetation height is suitable for bird use. However, it should be demonstrated that this is the standard management practice on the proposed development site based on historic data.

Q2.0.6	NE	ES8.3.22. Please comment on the Applicant's approach to scoping out impacts on common and widespread habitats of low sensitivity and/or conservation interest.	<p>In our response to the EIA Scoping report Natural England advise use of the Chartered Institute of Ecology and Environmental Management's (CIEEM) guidelines on undertaking an EIA.</p> <p>Therefore, provided the correct methodology has been followed, this is a reasonable approach.</p> <p>Natural England have no further comments on this issue.</p>
Q2.0.7	The Applicant, NE, and LPAs	ES8.4.2 appears to discount the effect on fauna of a longer construction period based on the likelihood of it occurring, rather than what the effect may be. (a) Applicant: Please clarify your approach. (b) NE and LPAs: Please comment on the Applicant's approach to this matter.	<p>It is our advice that in terms of European protected sites (i.e. Special Protection Areas, Special Areas of Conservation and Ramsar sites), in-line with the Habitats Regulations, a precautionary approach should always be taken where deemed necessary. We advise that in-line with this, a worst-case assessment should be carried out, and therefore the maximum length of construction period should be assessed. However, the Applicant has provided further assessment of the potential impacts within the submitted HRA, and we have provided our advice based on this.</p> <p>In relation to ecological features that are not linked with protected sites, we have no additional comments to make on the Applicant's approach.</p>

Q2.0.8	NE and LPAs	ES8.4.5. Please comment on the absence of an assessment of the air quality effects of construction traffic on ecological features.	<p>We advised in our Relevant Representations (see Table 1, NE10) that likely significant effects (LSE) on European designated sites (SPAs, SACs, and Ramsar sites), and National designated sites (SSSIs) can be ruled out as there are no roads within 200m of any designated site that will experience increased construction traffic. This information has been included in the Applicant's HRA, which we have based our advice on.</p> <p>In terms of Natural England's remit, we are satisfied with the approach to assessment of construction traffic. In relation to ecological features that are not linked with protected sites, we have no additional comments to make on the Applicant's approach to air quality.</p>
Q2.0.10	The Applicant and NE	ES8.4.10. Please comment on the suitability of the existing and Phase 1 habitat and condition assessment data used in the Biodiversity Metric 3.1 Habitat Condition Assessment for use in the Biodiversity Metric 4.0 assessment?	<p>We welcome the inclusion of Biodiversity Net Gain (BNG) provisions by the Applicant as part of the project design, as at present, Biodiversity Net Gain (BNG) is not a mandatory requirement for NSIPs.</p> <p>Generally, we would advise that considering this is currently being delivered as <u>non-mandatory</u> BNG, there is no requirement to copy from one old version of the biodiversity metric to another, following submission of the application. Whether translation between metrics can reasonably occur depends on the level of information/ evidence available. If the right information about condition is available to fill in slight changes/ extra requirements in a newer version of the metric, then this could be justified. However, if there is not enough information to complete the changes, then re-surveying could be required to gather this information.</p> <p>In this case, we have not fully assessed whether the existing Phase 1 habitat and condition assessment data is sufficient to complete Metric 4.0 (Statutory BNG metric). However, considering the above, we are not in a position to advise on whether further information should be gathered.</p>

Q2.0.12	The Applicant, NE, and LPAs	The effect of the proposal on the local deer number of RRs. population has been raised in a Please comment on concerns about impacts arising from changes to deer movements in the area as a result of the Proposed Development, particularly arising from the perimeter fencing around the solar PV panel areas (see also EN-1(24) paragraph 5.4.22).	Natural England have no comment to make regarding the impact on movements of deer populations. It should be noted that Natural England's comments are limited to topics within our remit as set out in <i>Advice Note 11, Annex C – Natural England and the Planning Inspectorate</i> and detailed within our representations. We advise the LPA may be able to comment on this topic as it relates to local ecological knowledge.
Q2.0.15	The Applicant, NE and LPAs	ES Table 8.12 finds a considerable number of minor adverse effects which, considered individually, would not be significant as defined in the ES methodology. Please comment on the combined effect of this number of minor adverse effects.	Table 8-12 of ES Chapter 8 includes statements about potential impacts to designated sites. These impacts have been further addressed through the Habitats Regulations Assessment, and we have provided our advice on the matters which we advise require further consideration of the potential in combination effects in Part II, Table 1 above.

Q2.1.18	NE	Please confirm whether it agrees with the Applicant's conclusions in respect of LSE and AEoI for the European sites and features considered in the HRA which are not specifically referenced in its Relevant Representation.	<p>Please refer to Part II, Table 1 above, for the issues we consider resolved ('green' issues) or outstanding/unresolved ('amber' issues) in relation to designated sites. Where possible, we have added our conclusions on LSE/AEoI. For any matters which NE have not raised a specific concern, we agree with the Applicant's conclusion.</p> <p>However, please note that for several of the outstanding/unresolved issues ('amber' issues) above, we cannot yet confirm our view on the LSE/AEoI conclusions provided by the Applicant, as further assessment/information remains outstanding for these.</p> <p>Our comments in Table 1 are based on the information which has been formally submitted to the Examination. However, we are currently in discussion with the Applicant to resolve the outstanding issues.</p>
Q8.0.1	The Applicant and NE	The proposed approach to the soil and Agricultural Land Classification (ALC) surveys of the interconnecting cable corridor land is set out in the Applicant's response to NE of 9 May 2023 (ES Appendix 15-3 [APP-118]). (a) Applicant: Please confirm why this approach was not included in the survey programme for the Solar PV Site (it is not explained in the ES whether there were access difficulties). (b) NE: Please comment on the Applicant's approach to the soil and ALC surveys.	<p>b. Regarding the Applicant's approach to survey of the cable corridor, we note that in ES chapter 15, Table 15-2, the Applicant states that further targeted surveys of the cable corridor will be undertaken when the final location is determined. We advise that the final Soil Management Plan should be informed by this information, as we would advise the full redline boundary should be included within the assessment. However, we accept the approach of undertaking the surveys once the final route has been determined.</p> <p>Our further advice on matters related to BMV soils is included in issue NE 22 above.</p>

Q8.0.8	The Applicant and NE	ES Appendix 15-3. Please comment on (a) the extent and distribution of the more detailed investigation (1 observation per ha) undertaken for the Survey Report; and (b) the rationale for not undertaking laboratory soil testing and its implications for sustainable soil re-use and identifying areas of habitat enhancement.	Natural England agree with the methodology of undertaking one boring observation per ha.
Q9.0.2	The LPAs and NE	ES Table 10-1 page 10-12. Please comment on the Applicant's approach to the tranquillity assessment and its finding of no significant noise effects.	Natural England have not reviewed the tranquillity assessment in relation to local/national character as this does not fall within our remit on designated landscapes as set out in <i>Advice Note 11, Annex C – Natural England and the Planning Inspectorate</i> .
Q9.0.3	The LPAs and NE	ES Table 10-1 page 10-13. Please comment on the content of the LEMP, including whether it gives adequate consideration to wider landscape character opportunities to enhance green infrastructure and the provisions for long term maintenance.	Natural England have not reviewed the information regarding enhancement of the wider landscape character area as this does not fall within our remit on designated landscapes as set out in <i>Advice Note 11, Annex C – Natural England and the Planning Inspectorate</i> .
Q9.0.4	NE	ES Table 10-2 page 10-17. Please comment on the omission of the Yorkshire Wolds National Character Area (NCA) from the landscape and visual impact assessment (LVIA).	Natural England have not reviewed the information regarding impacts to national character areas as this does not fall within our remit on designated landscapes as set out in <i>Advice Note 11, Annex C – Natural England and the Planning Inspectorate</i> .

Q14.5.1	NE	ES16.8.27. Please comment on the Applicant's approach and findings regarding the electro-magnetic field effects of the proposal on fish in the River Ouse and River Derwent.	<p>We note this paragraph details that salmon and trout are sensitive to DC electromagnetic fields. NE would not provide comment on these species as they are not notified features of nationally or internally designated sites.</p> <p>At the time of this response, we do not currently hold evidence of potential impacts to migrating river lamprey, sea lamprey or bullhead due to electromagnetic waves.</p>
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Natural England’s Written Representations

PART IV: Natural England’s detailed comments on the Development Consent Order (DCO) and associated documents.

Part IV of these Representations provides Natural England’s detailed comments on the Development Consent Order and detailed comments on issues not addressed in the DCO.

Page	DCO or omission ref	Natural England’s comments	Risk (Red/Amber/Green)
38	Schedule 2, requirement 5	We welcome that Schedule 2, requirement 5 sets out how the final detailed design should be adhered to, including the following: “(2) <i>The details submitted must accord with the outline design principles statement</i> ”, and “(3) <i>The authorised development must be carried out in accordance with the approved details.</i> ” However, as there are outstanding matters as detailed in Table 1 (all ‘amber’ issues), we cannot yet provide agreement with the final detailed design. Therefore, this also remains an ‘amber’ issue at present.	‘Amber’
38	Schedule 2, requirement 6	<p>We advise that the securing of the Landscape and Ecological Management Plan (LEMP), with this being “...<i>substantially in accordance with...</i>” the framework LEMP (fLEMP), is an essential requirement. However, we advise that we do not consider that the current fLEMP sufficient, as updates will be required as detailed in NE1 and NE7 in Part II, Table 1. Please refer to the below for a summary of the advice in these sections.</p> <p><u>Summary of relevant advice in NE1 and NE7</u></p> <p>NE1: As we are currently awaiting the results of the 2023-2024 wintering bird surveys from the Applicant, we cannot yet comment on whether mitigation measures detailed in the Landscape and Ecological Management Plan (LEMP) (termed “<i>Ecology Mitigation Area</i>” and detailed from 6.1.72 to 6.1.86 in this document) will be sufficient to avoid adverse effects on integrity of the Humber Estuary SPA / Ramsar and the Lower Derwent Valley SPA / Ramsar designated sites. Once we have received this survey data, and any subsequent updates to the fLEMP, we will be able to provide further commentary. Please refer to NE1 (Part II, Table 1) for further details.</p>	‘Amber’

		NE7: We advise that the LEMP should be updated to include a restoration plan for the removed vegetation within the River Derwent SAC. Please refer to NE7 (Part II, Table 1) for further details.	
38	Schedule 2, requirement 7	We welcome the requirement for the biodiversity net gain strategy to be submitted and approved to the relevant planning authority prior to the commencement of development. As noted in NE21 , we recommend that this is least a 10% increase in the pre-development biodiversity value of the on-site habitat, is secured for a minimum of 30 years, and is subject to adaptive management and monitoring.	'Green'
39	Schedule 2, requirement 9	Natural England notes that surface water drainage measures are secured. The production of the CEMP is secured within schedule 2, point 11 of the DCO. Natural England advises that the CEMP should include all mitigation measures in relation to water quality impacts put forward, specifically those which have been established for Horizontal Directional Drilling, surface water drainage, and the future Water Management Plan. Natural England welcomes the use of Horizontal Directional Drilling as a method for managing water quality and disturbance impacts to designated sites. All water quality mitigation measures relating to Horizontal Directional Drilling should be included in the CEMP and secured in the DCO. The inclusion of the water management plan within the CEMP should be secured within the DCO.	'Green'
39 – 40	Schedule 2, requirement 11	We welcome that the measures in the Construction Environmental Management Plan (CEMP) will be secured through requirement 11, and that approval will be required from Natural England (as detailed in 11(1)). As per Part II, Table 1, we have advised several aspects should be secured within the CEMP using more specific wording, and the framework CEMP may require updates. Therefore, this remains as 'amber' at present. However, we can provide agreement with the inclusion of this requirement more generally, subject to the final CEMP containing all elements Natural England have advised on. A summary of all aspects we have advised should be secured in the CEMP / through the DCO is provided below (refer to Part II, Table 1 for full advice). <u>Summary of relevant CEMP advice (NE4, NE5, NE7, NE8, NE11, NE16, NE19)</u>	'Amber'

		<p><u>NE4:</u> We advise all water quality mitigation measures relating to HDD should be included in the CEMP and secured in the DCO. The water management plan within the CEMP should also be secured within the DCO.</p> <p><u>NE5:</u> The buffers for HDD in relation to specific watercourses should be established within the CEMP. Where HDD may occur within the SAC, alongside any noise mitigation measures, should be detailed in the CEMP and secured within the DCO.</p> <p><u>NE7:</u> The buffers for HDD in relation to specific watercourses should be established within the CEMP. Where HDD may occur within the SAC should be detailed in the CEMP and secured within the DCO.</p> <p><u>NE8:</u> All dust mitigation measures included in the CEMP should be secured in the DCO, including the dust management plan.</p> <p><u>NE11:</u> We advise the INNS biosecurity measures should be included within the final CEMP and secured in this section of the DCO.</p> <p><u>NE16 and NE17:</u> Water quality mitigation measures should be included within the CEMP and secured within the DCO. We note that Schedule 2, requirement 9 includes a statement that any foul water drainage plan must be submitted to the relevant planning authority prior to development. We advise that if the foul water plan is changed at a later stage, and will no longer be removed from site for treatment, then impacts to designated sites from discharges will need to be addressed.</p>	
40	Schedule 2, requirement 12	We welcome that this requirement secures the Operational Environmental Management Plan (OEMP), and highlights this must be substantially in accordance with the framework OEMP. We advise this is an essential requirement.	'Green'
40	Schedule 2, requirement 15	We welcome that this requirement secures the soil management plan (SMP), and highlights this must be substantially in accordance with the framework SMP. We advise this is an essential requirement.	'Green'

41	Schedule 2, requirement 18	We note this requirement is for decommissioning and restoration and advise this is an essential requirement. We advise that Natural England are consulted on this plan once finalised, if impacts to designated sites during decommissioning are identified.	'Green'
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