

Date: 15 September 2022
Our ref: 402960
Your ref: EN010116



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BY EMAIL ONLY

Dear Sir/Madam

NSIP Reference Name / Code: EN010116

Natural England's comments in respect of North Lincolnshire Green Energy Park, Promoted by North Lincolnshire Green Energy Park Limited

Examining authority's submission deadline: 15 September 2022

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 Lisa Sheldon at Lisa.Sheldon@naturalengland.org.uk. and copy to consultations@naturalengland.org.uk.

Yours sincerely

Lisa Sheldon

Yorkshire and Northern Lincolnshire Area Team

Natural England

Summary of Natural England's Advice

Natural England's advice is that, in relation to identified nature conservation issues within its remit, there is no fundamental reason of principle why the project should not be permitted. However, 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

1. Impacts from ammonia emissions, and nutrient nitrogen deposition (Construction and Operation phase) on Humber Estuary SAC/SPA/Ramsar ('amber').
2. Impacts from ammonia emissions and nutrient nitrogen deposition (Operation phase) on Thorne and Hatfield Moors SPA and Thorne Moor SAC ('amber').
3. Impacts from dust emissions (Construction Phase) on Humber Estuary SAC and Ramsar designated features ('amber').
4. Impact of potential disturbance to the migration route of river lamprey and sea lamprey (Constriction phase) associated with Humber Estuary SAC/Ramsar ('amber').
5. Impacts from noise, vibration and visual disturbance on Humber Estuary Ramsar (construction and operation phase) ('amber').
6. Impacts from potential loss of functionally linked land associated with Humber Estuary SPA/Ramsar (construction phase) ('amber').
7. Impacts from noise, vibration and visual disturbance on functionally linked land associated with Humber Estuary SPA/Ramsar (construction and operation phase) ('amber').

• Nationally designated sites

1. Impacts from ammonia emissions, and nutrient nitrogen deposition (Construction and Operation phase) on Humber Estuary SSSI ('amber').
2. Impacts from ammonia emissions, nutrient nitrogen deposition, and acid deposition (Operation phase) on Thorne Crowle and Goole Moors SSSI ('amber').
3. Impacts from ammonia emissions, nutrient nitrogen deposition, and acid deposition (Operation phase) on Risby Warren SSSI ('amber').
4. Impacts from acid deposition (Operation phase) on Messingham Heath SSSI ('amber').
5. Impacts from dust emissions (Construction Phase) on Humber Estuary SSSI designated features ('amber').
6. Impact of potential disturbance to the migration route of river lamprey and sea lamprey (Constriction phase) associated with Humber Estuary SSSI ('amber').
7. Impacts from noise, vibration and visual disturbance on Humber Estuary SSSI (construction and operation phase) ('amber').
8. Impacts from potential loss of functionally linked land associated with Humber Estuary SSSI (construction phase) ('amber').
9. Impacts from noise, vibration and visual disturbance on functionally linked land associated with Humber Estuary SSSI (construction and operation phase) ('amber').

• Protected species

1. Further information is required to determine that the project will not adversely affect water voles, great crested newts, bats and badgers ('amber').

• Soils and best and most versatile agricultural land

1. The Agricultural Land Classification (ALC) Grade should be calculated for all agricultural land subject to development or disturbance.
2. Insufficient justification has been included in the assessment in order to conclude that BMV agricultural land is a low sensitivity receptor due to the relative abundance on the development site.

Natural England's Relevant Representations

PART I: Summary and Conclusions of Natural England's advice.
PART II: Natural England's detailed advice (starting on page 10)
PART III: Natural England's detailed comments on the Development Consent Order (DCO) starting on page 32)

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

Introduction

- 1.1. Natural England's advice in these relevant representations is based on information submitted by North Lincolnshire Green Energy Park Limited in support of its application for a Development Consent Order ('DCO') in relation to North Lincolnshire Green Energy Park (*the project*).
- 1.2. Part I of these representations summarises what Natural England considers the main issues¹ to be in relation to the DCO application, and indicate the principal submissions that it wishes to make at this point. Natural England will develop these points further as appropriate during the examination process. It may have further or additional points to make, particularly if further information about the project becomes available.
- 1.3. Our comments are set out against the following sub-headings which represent our key areas of remit:
 - Internationally designated sites
 - Nationally designated sites
 - Protected species
 - Biodiversity net gain
 - Nationally designated landscapes
 - Soils and best and most versatile agricultural land
- 1.4. Our comments are flagged as 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)
- 1.5. Natural England has been working closely with North Lincolnshire Green Energy Park Limited to provide advice and guidance since 12 August 2019.

¹ PINS NSIP Advice Note 11 Annex C sets out Natural England's role in infrastructure planning.
https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11_AnnexC_20150928.pdf

- 1.6. Part I of these representations provides an overview of the issues and a summary of Natural England's advice. Section 2 identifies the natural features relevant to this application. Section 3 summarises Natural England's overall view of the application and the main issues which it considers need to be addressed by the Secretary of State.
- 1.7. Part II of these representations sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by North Lincolnshire Green Energy Park Limited and the Examining Authority as part of the examination process in order to ensure that the project can properly be consented. These are primarily issues on which further information would be required in order to allow the Examining Authority properly to undertake its task or where further work is required to determine the effects of the project and to flesh out mitigation proposals, to provide a sufficient degree of confidence as to their efficacy.
- 1.8. Natural England will continue discussions with North Lincolnshire Green Energy Park Limited to seek to resolve these concerns and agree outstanding matters in a statement of common ground. Failing satisfactory agreement, Natural England advises that the matters set out in section 4 will require consideration by the Examining Authority as part of the examination process.
- 1.9. The Examining Authority may wish to ensure that the matters set out in these relevant representations are addressed as part of the Examining Authority's first set of questions to ensure the provision of information early in the examination process.

The natural features potentially affected by this application

Internationally designated sites

2. 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.
 - 2.1. Natural England is not yet satisfied for 'amber' issues identified 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
 - Thorne Moor SAC
 - Thorne & Hatfield Moors SPA
 - 2.2. The main issues raised by this application are that further information is required to assess the following impact pathways:
 1. Impacts from ammonia emissions, and nutrient nitrogen deposition (Operation phase) on Humber Estuary SAC/SPA/Ramsar ('amber').
 2. Impacts from ammonia emissions and nutrient nitrogen deposition (Operation phase) on Thorne and Hatfield Moors SPA ('amber').

3. Impacts from ammonia emissions, nutrient nitrogen deposition, and acid deposition (Operation phase) on Thorne Moor SAC ('amber').
 4. Impacts from traffic emissions to air (Construction phase) on Humber Estuary SAC/SPA/Ramsar designated features ('amber').
 5. Impacts from traffic emissions to air (Operation phase) on Humber Estuary SAC/SPA/Ramsar designated features ('amber').
 6. Impact of potential disturbance to the migration route of river lamprey and sea lamprey (Construction phase) associated with Humber Estuary SAC/Ramsar, due to potential noise and vibration from the development site ('amber').
 7. Impacts from dust emissions (Construction Phase) on Humber Estuary SAC and Ramsar designated features ('amber').
 8. Impacts from noise, vibration and visual disturbance on Humber Estuary Ramsar (construction and operation phase) ('amber').
 9. Impacts from potential loss of functionally linked land associated with Humber Estuary SPA/Ramsar (construction phase) ('amber').
 10. Impacts from noise, vibration and visual disturbance on functionally linked land associated with Humber Estuary SPA/Ramsar (construction and operation phase) ('amber').
 11. Impacts from recreational access (Operation phase) on Humber Estuary Ramsar/SPA ('amber').
- 2.3. Natural England is satisfied that 'green' issues are unlikely to result in adverse effects on the integrity (AEoI) of the following internationally designated sites, subject always to the appropriate mitigation/compensation as outlined in the application documents being secured adequately. Natural England is satisfied that the following impact pathways have been successfully resolved;
1. Water quality impacts due to surface water run off (Construction Phase) on Humber Estuary SAC/Ramsar ('green').
 2. Water quality impacts due to surface water run off (Operational Phase) on Humber Estuary SAC/Ramsar ('green').

Nationally designated sites

3. Natural England's position regarding nationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway in Part II.
 - 3.1. Natural England is not yet satisfied for 'amber' issues identified below that it can be ascertained beyond reasonable scientific doubt that the project would not impact the notified features of the following nationally designated sites.
 - Humber Estuary Site of Special Scientific Interest (SSSI)
 - Thorne Crowle and Goole Moors SSSI
 - Risby Warren SSSI
 - Messingham Heath SSSI
 - 3.2. The main issues raised by this application are that further information is required to assess the following impact pathways:

1. Impacts from ammonia emissions, and nutrient nitrogen deposition (Operation phase) on Humber Estuary SSSI ('amber').
 2. Impacts from ammonia emissions, nutrient nitrogen deposition, and acid deposition (Operation phase) on Thorne Crowle and Goole Moors SSSI ('amber').
 3. Impacts from ammonia emissions, nutrient nitrogen deposition, and acid deposition (Operation phase) on Risby Warren SSSI ('amber').
 4. Impacts from acid deposition (Operation phase) on Messingham Heath SSSI ('amber').
 5. Impacts from traffic emissions to air (Construction phase) on Humber Estuary SSSI ('amber').
 6. Impacts from dust emissions (Construction Phase) on Humber Estuary SSSI designated features ('amber').
 7. Impact of potential disturbance to the migration route of river lamprey and sea lamprey (Construction phase) associated with Humber Estuary SSSI, due to noise and vibration from the development site ('amber').
 8. Impacts from noise, vibration and visual disturbance on Humber Estuary SSSI (construction and operation phase) ('amber').
 9. Impacts from potential loss of functionally linked land associated with Humber Estuary SSSI (construction phase) ('amber').
 10. Impacts from noise, vibration and visual disturbance on functionally linked land associated with Humber Estuary SSSI (construction and operation phase) ('amber').
 11. Impacts from recreational access (Operation phase) on Humber Estuary SSSI ('amber').
- 3.3. Natural England is satisfied that the following impact pathways have been successfully resolved;
- Water quality impacts due to surface water run off (Construction Phase) on Humber Estuary SSSI ('green').
 - Water quality impacts due to surface water run off (Operational Phase) on Humber Estuary SSSI ('green').

Protected species

4. Natural England's position regarding European protected species is summarised below. Further detail on our reasoning for this is given in part II.
 - 4.1. Further information is required to determine that the project will not adversely affect the following protected species ('amber');
 - European water vole
 - Great crested newt (GCN)
 - Bats
 - Badger

Biodiversity Net Gain

5. Natural England's position regarding provision of biodiversity net gain is summarised below. Further detail on our reasoning for this is given in Part II.
 - 5.1. Natural England welcomes the use of Defra Biodiversity Metric 3.0 to assess the pre- and post-development value of the land ('green').
 - 5.2. The project demonstrates a 10% net gain in biodiversity for all of the on-site habitat types identified (habitat, hedgerow and river units) (Appendix I: Biodiversity Net Gain Report) ('green').
 - 5.3. The Biodiversity Net Gain Report states that all of the land within the order area, including the large areas of arable land to the east of the Project, has been included as on-site (and is therefore subject to 10% net gain), Natural England is satisfied with this approach ('green').

Soils and best and most versatile agricultural land

6. Natural England's position regarding soils and the best and most versatile agricultural land is summarised below. Further detail on our reasoning for this is given in Part II.
 - 6.1. On the basis of the information submitted, Natural England is not yet satisfied with the following soils and best and most versatile agricultural land issues:
 - Site level ALC data is necessary to assess the degree to which soils are going to be disturbed/harmed as part of this development and the impact of agricultural resources from the proposal. The Agricultural Land Classification (ALC) Grade should be calculated for all agricultural land subject to development or disturbance ('amber').
 - Insufficient justification has been included in the assessment in order to conclude that BMV agricultural land is a low sensitivity receptor due to the relative abundance on the development site ('amber').
 - An assessment of the potential impact of increased flooding of the land on the ALC grade is required due to changes to frequency and duration of flooding ('amber').

Natural England's overall conclusions

- 11.1. Natural England's advice is that there are a number of matters which have not been resolved satisfactorily as part of the pre-application process that must be addressed by North Lincolnshire Green and the Examining Authority as part of the examination and consenting process before development consent can be granted, as summarised in Section 2 above and outlined in further detail in Part II below.
- 11.2. Some of these matters are important enough to mean that if they are not satisfactorily addressed it would not be lawful to permit the project due to its impacts on the SAC, SPA, Ramsar and SSSI interests. However, Natural England's advice is that all of these matters are capable of being overcome. The specific concerns in relation to each are detailed in Part II.
- 11.3. Natural England's advice is that in relation to identified nature conservation issues within its remit there is no fundamental reason of principle why the project should not be permitted but that:

- 11.3.1. The applicant has provided insufficient evidence to establish that there will be no adverse impacts on the following internationally designated sites: Thorne and Hatfield Moors SPA. Thorne Moor SAC and Humber Estuary SAC/SPA/Ramsar.
- 11.3.2. The applicant has provided insufficient evidence to establish that the project is not likely to damage features of interest of the following nationally designated sites: Humber Estuary SSSI, Thorne Crowle and Goole Moors SSSI, Risby Warren SSSI and Messingham Heath SSSI.

Natural England's Relevant Representations

Part II: Natural England's detailed advice

12. Part II of these representations expands upon the detail of all the significant issues ('amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows 'green' issues where a resolution has been reached and subject always to the appropriate requirements being adequately secured.

Natural England's Relevant Representations, Part II, Table 1

Natural England key issue reference	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
1	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SPA/SAC/Ramsar Thorne and Hatfield Moors SPA Thorne Moor SAC <p>National designated sites</p> <ul style="list-style-type: none"> Humber Estuary SSSI Thorne Crowle and Goole Moors SSSI 	<p>(O) Impacts from ammonia emissions, and nutrient nitrogen deposition (Operation phase) on European Sites SAC/SPA/Ramsar (alone and in combination).</p> <p>(O) Impacts from ammonia emissions, and nutrient nitrogen deposition (Operation phase) on national</p>	<p>ES Chapter 19 Mitigation, table 1, states that the Energy Recovery Facility (ERF) has been designed with Best Available Technique abatement systems, and stack heights for the ERF, backup generator and boilers are designed to disperse emissions sufficiently. However the information provided in the Habitats Regulations Assessment (HRA) and Environmental Statement (ES) chapter 5 Air Quality, does not include information to demonstrate the effectiveness of this mitigation. Section 7.2 of chapter 5 suggests that the mitigation has been built into the model, however the documents do not include a version of the modelling without the mitigation included. This information should be provided to demonstrate how effective the mitigation has been in reducing impacts.</p>	<p>Table 1 within ES Chapter 19 Mitigation, states that air quality mitigation measures are secured within Schedule 2, Requirement 3. However, rather than it being included within a statement about adhering to design, we advise that the requirement to include mitigation measures should be explicitly stated. We advise that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites.</p>	Amber

	<ul style="list-style-type: none"> • Risby Warren SSSI • Messingham Heath SSSI 	sites (alone and in combination).			
2	<p>International designated sites</p> <ul style="list-style-type: none"> • Humber Estuary SPA/SAC/Ramsar 	<p>(O) Impacts from ammonia emissions, and nutrient nitrogen deposition (Operation phase) on Humber Estuary SAC/SPA/Ramsar (alone and in combination).</p>	<p>Natural England notes that Table 7 of the HRA states that the background ammonia level is in exceedance of the sites' critical levels, and there will be an additional significant contribution from the proposed development.</p> <p>We also note that Table 10 of the HRA states that the background nitrogen deposition level is in exceedance of the sites' critical loads, and there will be an additional significant contribution from the proposed development.</p> <p>However at the Appropriate Assessment (AA) stage of the HRA it is determined that as only a very small area of habitat will be impacted by the >1% Process Contribution (PC) then no adverse effect on site integrity is anticipated. Recent case law (Dutch Nitrogen ruling) makes it clear that small contributions should not be disregarded entirely. Where a site is in an unfavourable ecological state or condition or exceeds the environmental benchmarks, potential additional damaging effects will need careful justification. We advise that further justification should be provided to determine whether the additional contribution is likely to undermine the conservation objectives of the site. If adverse effect cannot be ruled out then further mitigation may be required.</p>	Our advice is as above in key issue reference 1.	Amber

			In addition, we advise that reedbed habitat is considered to be part of the saltmarsh feature on the Humber Estuary SAC.		
3	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(O) Impacts from ammonia emissions, and nutrient nitrogen deposition (Operation phase) on Humber Estuary SSSI.	Our advice is as above in key issue reference 2.	Our advice is as above in key issue reference 1.	Amber
4	International designated sites <ul style="list-style-type: none"> Thorne and Hatfield Moors SPA Thorne Moor SAC 	(O) Impacts from ammonia emissions and nutrient nitrogen deposition (Operation phase) on Thorne and Hatfield Moors SPA (in combination) and Thorne Moor SAC (in combination).	<p>For Thorne and Hatfield Moors SPA, Table 7 of the HRA states that the background ammonia level is in exceedance of the site critical level. The additional contribution from the proposed development is equal to 0.1% of the critical load.</p> <p>Table 10 of the HRA states that the background nitrogen deposition level is in exceedance of the site critical load. The additional contribution from the proposed development is equal to 0.3% of the critical load.</p> <p>For Thorne Moor SAC, Table 7 of the HRA states that the background ammonia level is in exceedance of the site critical level. The additional contribution from the proposed development is equal to 0.2% of the critical load.</p> <p>Table 10 of the HRA states that the background nitrogen deposition level is in exceedance of the site critical load. The additional contribution from the proposed development is equal to 0.3% of the critical load.</p>	Our advice is as above in key issue reference 1.	Amber

			<p>Natural England agree that alone the development will not have significant impacts on the SPA or SAC due to ammonia or nutrient nitrogen deposition, however, in combination with Keadby 2 and Keadby 3 there is potential for impact. At Appropriate Assessment predicted baseline trends in air pollution are provided to evidence why the in combination impacts can be ruled out.</p> <p>We advise the Dutch Nitrogen ruling also concluded that an appropriate assessment may not consider the existence of conservation measures, preventive measures, measures specifically adopted for a programme or autonomous' measures (i.e., measures not part of that programme), if the expected benefits of those measures are not certain at the time of that assessment. Therefore, further evidence as to why there will not be an adverse effect due to cumulative air pollution outputs should be provided.</p>		
5	<p>National designated sites</p> <ul style="list-style-type: none"> • Thorne Crowle and Goole Moors SSSI 	(O) Impacts from ammonia emissions and nutrient nitrogen deposition (Operation phase) on Thorne Crowle and Goole Moors SSSI (alone and in combination).	Our advice is as above in key issue reference 4.	Our advice is as above in key issue reference 1.	Amber
6	International designated sites	(C) Impacts from traffic emissions to air (Construction phase)	The construction traffic information in sections 4.1 and 8.1 of Chapter 5, Air Quality, of the ES states that the screening criteria set out by	We advise that the requirement for additional mitigation measures will depend on the outcome of the	Amber

	<ul style="list-style-type: none"> Humber Estuary SAC/SPA/Ramsar 	<p>on Humber Estuary SAC/SPA/Ramsar designated features (in combination).</p>	<p>DEFRA and IAQM has been used to determine potential for likely significant effect. We advise the thresholds stated in Natural England's guidance document NEA001 should be used to determine significant effect. Either, PC <1% of the designated site critical load, or AADT of 1000 cars or 200 HGVs should be used. We also advise that the same thresholds should be applied to identify the potential for in combination impacts with other relevant projects, in line with the Wealden judgement.</p> <p>In addition, if there is potential for a significant impact based on the screening criteria, ammonia impacts should also be included within the assessment. Ammonia can be emitted from vehicle exhaust emissions as a by-product of the catalytic conversion process designed to reduce emissions of nitrogen oxide. As traffic composition transitions toward more petrol and electric cars (i.e., fewer diesel cars on the road), catalytic converters may aid in reducing NOx emissions but result in increased ammonia emissions.</p> <p>For further information please see this report from Air Quality Consultants (AQC) that looks at ammonia emissions from roads for assessing impacts on nitrogen-sensitive habitats. Whilst we are aware that the current CREAM model created by AQC used to assess ammonia emissions from road traffic has not been peer reviewed, at this time it has been recognised as a Best Available Tool and</p>	<p>assessment of potential impacts on internationally and nationally designated sites.</p> <p>Natural England note that Schedule 2, requirement 10 details the need for a construction workers traffic plan to be developed prior to commencement of work. However, we are unclear whether this could secure any potential mitigation requirements at this stage.</p>	
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			we deem it appropriate to be used where any caveats associated with this model are also considered within the assessment.		
7	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(C) Impacts from traffic emissions to air on Humber Estuary SSSI (alone and in combination).	Our advice is as above in key issue reference 6.	Our advice is as above in key issue reference 6.	Amber
8	International designated sites <ul style="list-style-type: none"> Humber Estuary SAC/SPA/Ramsar 	(O) Impacts from traffic emissions to air (operation phase phase) on Humber Estuary SAC/SPA/Ramsar designated features (in combination).	<p>ES Chapter 5 Air Quality, states that operational road traffic emissions to ecological sites have been included within the overall operational air quality modelling (section 8.4).</p> <p>The individual contribution from operational traffic has not been stated. It should be clarified whether ammonia outputs from traffic have been included within the calculations, and as stated in key issue reference 6 above, whether the thresholds in <u>NEA001</u> have been adhered to, in order to determine the correct receptors to scope into the assessment.</p>	<p>We advise that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites.</p> <p>Natural England notes that Schedule 2, requirement 13 details the need for an operational travel plan to be developed prior to commencement of work. However, we are unclear whether this could secure any potential mitigation requirements at this stage.</p>	Amber
9	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(O) Impacts from traffic emissions to air on Humber Estuary SSSI (alone and in combination).	Our advice is as above in key issue reference 8.	Our advice is as above in key issue reference 8.	Amber
10	National designated sites <ul style="list-style-type: none"> Risby Warren SSSI 	(O) Impacts from ammonia emissions, nutrient nitrogen deposition, and	ES Chapter 10 Ecology and Nature Conservation, section 4.3.5.1 concludes that PCs of ammonia, nitrogen and acid deposition from the proposed development will all exceed 1% of the relevant critical levels/loads for Risby Warren SSSI. As the	Table 1 within ES Chapter 19 Mitigation, states that air quality mitigation measures are secured within Schedule 2, Requirement 3. However, rather than it being included within a statement about adhering to design, we advise that	Amber

		acid deposition on Risby Warren SSSI (alone).	site is currently negatively impacted due to the high background levels of nitrogen deposition, a SSSI impact assessment is required. This should identify the potential impacts to notified features which may arise due to additional inputs from the development, and assess the effectiveness of the proposed mitigation to reduce or prevent impacts to the designated site.	the requirement to include mitigation measures should be explicitly stated. We advise that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites.	
11	National designated sites <ul style="list-style-type: none"> Messingham Heath SSSI 	(O) Impacts from acid deposition on Messingham Heath SSSI (alone).	<p>ES Chapter 10 Ecology and Nature Conservation, section 4.4 identifies that the PC of acid deposition from the proposed development is 1.1% of the critical load for Messingham Heath SSSI. The Predicted Environmental Contribution (PEC) for the site is also currently in exceedance due to high background levels of sulphur and nitrogen. Paragraph 4.4.1.4 states that significant impacts to the SSSI have been ruled out due to the additional contributions from the development being close to 1%.</p> <p>Natural England does not accept this approach to round down to a whole number. Our concern is that this could lead to situations where there are multiple process contributions, for example, 1.1% + 1.3% being screened out entirely, but when added together are significant. Where any PC has exceeded the 1% threshold and the PEC exceeds > 70% of the threshold, this triggers the requirement for further assessment to demonstrate that the proposed emissions will not damage or destroy the interest features for which the SSSIs have been notified.</p>	Table 1 within ES Chapter 19 Mitigation, states that air quality mitigation measures are secured within Schedule 2, Requirement 3. However, rather than it being included within a statement about adhering to design, we advise that the requirement to include mitigation measures should be explicitly stated. We advise that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites.	Amber

			Recent case law (Dutch Nitrogen ruling) makes it clear that small contributions should not be disregarded entirely. Where a site is in an unfavourable ecological state or condition or exceeds the environmental benchmarks, potential additional damaging effects will need careful justification. We advise that as the site is already in exceedance, the potential for impacts due to additional inputs should be considered in a SSSI impact assessment.		
12	International designated sites <ul style="list-style-type: none"> Humber Estuary SAC and Ramsar 	(C) Dust emissions during the construction phase (alone).	<p>Section 4.2 of ES Chapter 5 outlines the assessment of construction dust which has been undertaken. It is noted that ecological receptors within a 50m buffer of the development site boundary have been screened in based on the IAQM guidance (section 4.2.1.3). However Natural England advise a buffer of 200m should be used. Therefore, further consideration for potential dust impacts should be undertaken and this should be incorporated into the HRA.</p> <p>We broadly welcome the proposal to develop a dust management plan as part of the final CEMP. However the measures to be included within this will need to be informed by a 200m screening distance for ecological receptors. Currently the HRA concludes no Likely Significant Effect (LSE) due to a predicted small, localised impact. However if further impacts are identified then the impact should be considered at AA, as the effectiveness of the mitigation measures will need to be considered.</p>	The requirement for a dust management plan has been included within the draft DCO under Environmental management, requirement 4(3). This has secured the inclusion of the dust management plan within the CEMP. Natural England should be consulted on the final CEMP prior to commencement of development.	Amber

13	National Designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(C) Dust emissions during the construction phase (alone).	Our advice is as above in key issue reference 12.	Our advice is as above in key issue reference 12.	Amber
14	International designated sites <ul style="list-style-type: none"> Humber Estuary SAC/Ramsar 	(C) Potential disturbance to the migration route of river lamprey and sea lamprey (Construction phase) associated with Humber Estuary SAC/Ramsar ('amber'), due to noise and vibration from the development site.	The HRA does not include an assessment of potential impacts from noise and vibration generated during the construction phase on migrating river and sea lamprey. The proposals state that the construction work will include piling, therefore the potential impact for disturbance due to the maximum noise levels should be considered. An assessment of the potential impacts should be included within the HRA and suitable mitigation proposed if required.	If there is a requirement for mitigation it should be secured within the DCO. This could be included within the CEMP or a separate fish management statement.	Amber
15	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(C) Impact of potential disturbance to the migration route of river lamprey and sea lamprey (Construction phase) associated with Humber Estuary SSSI ('amber'), due to noise and vibration from the development site.	Our advice is as above in key issue reference 14.	Our advice is as above in key issue reference 14.	Amber
16	International designated sites <ul style="list-style-type: none"> Humber Estuary Ramsar 	(C) and (O) Impacts from noise, vibration and visual disturbance on Humber Estuary Ramsar.	Natural England notes that the HRA 4.5.1.3-4.5.1.6 states that " <i>The wintering and migratory bird survey also found that the area of the River Trent adjacent to the Project did not support significant populations of most waterbirds, with only small numbers of birds recorded</i> " and " <i>Given... the low numbers of qualifying feature bird species recorded, the</i>	Natural England advises that the measures previously specified in Chapter 10, paragraph 7.1.2.2 of the Preliminary Environmental Impact Report (PEIR) are included in a Construction Ornithological Monitoring Plan (COMP) and secured via the DCO.	Amber

			<p><i>effects of disturbance or displacement on birds from the Ramsar designation are not predicted to be significant.</i>” However, Natural England does not support this conclusion. The stretch of the River Trent adjacent to the proposed site is part of the Humber Estuary Ramsar designated site. Therefore, the application of a 1% threshold to rule out likely significant effect on Ramsar birds (generally applied in the context of functionally linked land) is considered inappropriate in this instance as the River Trent is within a site designated for bird features. The proposed site falls within a 50m impact risk zone for the Humber Estuary SSSI (and Ramsar). We therefore advise that further assessment should be provided in the appropriate assessment regarding potential impacts associated with noise, vibration and visual disturbance during construction and operation.</p> <p>The HRA does not include an assessment of noise impacts on ecological receptors. Consideration should be given to potential noise/vibration disturbance from highly disturbing construction works, such as piling, in proximity to the River Trent. We note that the HRA 5.3.1.4 refers to <i>“The existing industrial location of the site means that birds will be habituated to some disturbance already.”</i> However, the HRA should consider how noise levels during construction will compare to the existing background noise levels on site. Volume 6 of the ES 6.2.9 Water Resources and Flood Risk refers to</p>	<p>We are broadly satisfied that the appropriate lighting measures are secured in the requirements of the DCO.</p> <p>Natural England advises that the requirement for mitigation measures for other operational visual and noise disturbance will depend on the outcome of the assessment of impacts on the Humber Estuary Ramsar.</p>	
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			<p>construction work including “<i>drilling/piling for foundations</i>”. Noise from piling activity will result in loud bangs which have a more significant disturbance impact on bird features than constant ambient noise. Therefore, a detailed assessment of potential impacts from piling works should be included in the HRA and suitable mitigation measures should be introduced (see below).</p> <p>Natural England welcomes reference to potential lighting impacts and relevant mitigation in 8.2.2.17 of the ES Ecology and Nature Conservation chapter. We recommend that the Indicative Lighting Strategy at Annex 4 to the ES (Document Reference 6.3.4) is included as mitigation in the HRA appropriate assessment.</p> <p>Further assessment should also be provided regarding other visual disturbance during operation. We note that additional information regarding increased disturbance from traffic and human presence on wintering birds has been provided in 8.2.2.18 of the ES Ecology and Nature Conservation chapter. We recommend that these details are included in the HRA to inform the assessment.</p> <p>Natural England recommends that the mitigation measures previously included in Chapter 10, paragraph 7.1.2.2 of the Preliminary Environmental Impact Report (PEIR) should be reintroduced via the previously proposed Construction Ornithological Monitoring Plan (COMP). We</p>		
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			do not agree with the statement in Table 2 of the ES Ecology and Nature Conservation chapter that “A <i>Construction Ornithological Monitoring Plan (COMP)</i> is no longer required.” Therefore, the mitigation measures previously proposed for highly disturbing works close to the River Trent taking place between October-March should be assessed in the Appropriate Assessment. The Appropriate Assessment should determine whether adverse effect on integrity of the Humber Estuary Ramsar can be ruled out, taking into account any mitigation measures proposed. As stated in our previous response dated 23 July 2021, mitigation measures should be agreed and implemented before construction work begins and Natural England advises against reliance on a ‘monitor and manage’ approach which we have found to be very difficult to implement.		
17	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(C) and (O) Impacts from noise, vibration and visual disturbance on Humber Estuary SSSI.	Our advice is as above in key issue reference 16.	Our advice is as above in key issue reference 16.	Amber
18	International designated sites <ul style="list-style-type: none"> Humber Estuary SPA Humber Estuary Ramsar 	(C) Impacts from potential loss of functionally linked land associated with Humber Estuary SPA/Ramsar.	Natural England highlights that the HRA likely significant effect test identifies whether there is a credible risk that the project might undermine the conservation objectives for the European site. In this case, we advise that likely significant effect cannot be ruled out at the screening stage for loss of functionally linked land associated with the Humber Estuary SPA/Ramsar, due to: the proximity of the proposed site to the designated sites;	Natural England advises that the requirement for mitigation measures will depend on the outcome of the assessment of potential loss of functionally linked land.	Amber

			<p>potential habitat suitability for SPA/Ramsar birds; scale of the project; and bird records returned. Therefore, we advise that the bird survey results should be assessed at the appropriate assessment stage of the HRA.</p> <p>Natural England has reviewed the data provided in the Technical Appendix E: Ornithological Surveys of the ES Ecology and Nature Conservation chapter. However, we advise that there is currently a lack of clarity in the assessment of these results in the HRA. We recommend that the relevant bird survey results are presented more clearly in the HRA to inform the assessment, for example using a summary table that highlights peak counts, date and location recorded for the relevant SPA/Ramsar species.</p> <p>We note that Technical Appendix E: Ornithological Surveys includes survey results for pink-footed goose and redshank. Pink-footed goose and redshank are component species of the Humber Estuary SP/Ramsar designated sites; therefore, potential impacts on these species should be assessed in the HRA.</p> <p>We also note that the ES Ecology and Nature Conservation chapter 6.2.2.21 refers to “<i>24 [mallard] birds using the water drains and arable farmland within the Order Limits</i>” and 8.3.1.2 states that these habitats “<i>will not be affected by habitat loss.</i>” However, this information is not included in the HRA. Please</p>		
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			clarify whether this area of functionally linked land is proposed to be lost in the HRA to inform whether likely significant effect from loss of functionally land can be ruled out.		
19	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(C) Impacts from potential loss of functionally linked land associated with Humber Estuary SSSI.	Our advice is as above in key issue reference 18.	Our advice is as above in key issue reference 18.	Amber
20	International designated sites <ul style="list-style-type: none"> Humber Estuary SPA Humber Estuary Ramsar 	(C) and (O) Impacts from noise, vibration and visual disturbance on functionally linked land associated with Humber Estuary SPA/Ramsar.	<p>Natural England recommends that potential impacts from noise, vibration and visual disturbance on functionally linked land associated with Humber Estuary designated sites should also be included in the appropriate assessment. We recommend that additional information is provided in the HRA, including further assessment of potential noise and lighting impacts during construction and operation (as highlighted above, Natural England key issue reference 16.)</p> <p>We note that the measures recommended to mitigate for disturbance impacts on the Ramsar site (Natural England key issue reference 16) may also provide mitigation for potential construction impacts to functionally link land and should therefore be considered in the appropriate assessment for this impact pathway.</p>	<p>Natural England advises that the measures previously specified in Chapter 10, paragraph 7.1.2.2 of the Preliminary Environmental Impact Report (PEIR) are included in a Construction Ornithological Monitoring Plan (COMP) and secured via the DCO.</p> <p>We are broadly satisfied that the appropriate lighting measures are secured in the requirements of the DCO.</p> <p>The requirement for mitigation measures for operational visual and noise disturbance will depend on the outcome of the assessment of impacts on the Humber Estuary SPA/Ramsar</p>	Amber
21	National designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(C) and (O) Impacts from noise, vibration and visual disturbance on functionally linked land associated with	Our advice is as above in key issue reference 20.	Our advice is as above in key issue reference 20.	Amber

		Humber Estuary SPA/Ramsar.			
22	International designated sites <ul style="list-style-type: none"> Humber Estuary SPA and Ramsar 	(O) Recreational disturbance impacts due to accessibility of the wetland habitat to Humber Estuary SPA and Ramsar.	Further information is required to determine the potential for impact due to recreational access. Section 4.5.3.2 of the HRA states that bird species associated with the designation have only been recorded in small numbers in the adjacent section of the River Trent. However, as per our advice in key issue reference 16 above, the adjacent section of River Trent is included within the Ramsar designation, and the potential for the development to prevent the ability for the site to support birds in future should be considered. The potential for bird flushing due to disturbance should be considered, and the assessment should include information on lighting and predicted visitor numbers. The height of the embankment should also be clarified to determine whether visitors will be sufficiently screened from the estuary.	We note that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites. However if recreational impacts are identified appropriate mitigation should be detailed within the Operation Environmental Management Plan (OEMP), which is secured in the DCO in schedule 2, requirement 4(6).	Amber
23	National Designated sites <ul style="list-style-type: none"> Humber Estuary SSSI 	(O) Recreational disturbance impacts, due to accessibility of the wetland habitat to Humber Estuary SSSI.	Our advice is as above in key issue reference 22.	Our advice is as above in key issue reference 22.	Amber
24	Soils and best and most versatile agricultural land	Insufficient soils and land classification data	Based on the information provided with the planning application, it appears that the proposed development comprises approximately 235 ha of agricultural land (Environment Statement para 6.8.1.4). This includes approximately 101 ha agricultural land required for construction (Environment Statement para 8.2.5.5), of which 36 ha will be permanently lost (Environment Statement para 8.3.6.1). In addition a further 103 ha is	Natural England advises that additional information regarding sustainable soil management should be included in the Soil Handling Management Plan (SHMP) as part of the CEMP. We recommend that these measures are secured in the requirements of the DCO. Appropriate measures in the SHMP may include:	Amber

			<p>set aside for replacement floodplain storage (Environment Statement para 8.3.6.2) which may impact on soil resources. Natural England notes that the impact of the proposal on agricultural land quality is assessed in Chapter 14 of the Environmental Statement however we do not consider that sufficient evidence has been provided to reach the conclusions and recommendations presented.</p> <p>Natural England notes that the assessment appears to rely exclusively on the Provisional Agricultural Land Classification (ALC) dataset which is not appropriate in this context. The dataset does not utilise the most up to date methodology for determining ALC grade, does not subdivide between grades 3a and 3b agricultural land and is presented at a scale which is only appropriate for strategic planning at a regional level. We advise that site level ALC data is necessary to assess the degree to which soils are going to be disturbed/harmed as part of this development and the impact of agricultural resources from the proposal.</p> <p>Natural England advises that the assessment makes use of the available post 1988 ALC survey which covers a large area of the proposal site and is available online at [REDACTED]. This survey was undertaken using the most up to date ALC methodology and is appropriate for the assessment of agricultural land quality. However the survey does not cover the entire</p>	<ul style="list-style-type: none"> • Site specific soil management considerations informed from detailed ALC survey and available Post-1988 ALC survey information. • The SHMP should demonstrate the sustainable, beneficial soil re-use of potential surplus soil resources. • Plans of the detailed ALC grades should inform restoration and allow confirmation that the current baseline across the Site has been restored. • Reference should be made to the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (available online at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf). • The SHMP should include the type and volume of each soil type to be stripped and stockpiled; the nutrient status of the anticipated surplus soil units to inform the potential suitability for biodiversity enhancement; and where required, the location of soil storage and restoration, derived from the ALC survey. • For areas of temporary development, the ALC grade determined from the soil survey 	
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			<p>proposal site so additional ALC surveys should be undertaken for these areas. This should be at a detailed level, e.g. one auger boring per hectare (or more detailed for a smaller site), supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2m. For more information see Natural England Technical Note TIN049 available online at [REDACTED].</p> <p>In addition we would expect to see a soil resource survey undertaken prior to commencement to inform soil handling.</p>	<p>should be used to inform the restoration criteria, with temporarily disturbed BMV land returned to the same quality as far as practicable to minimise potential loss.</p> <ul style="list-style-type: none"> • The methods by which the applicant intends to restore affected areas to agricultural use after works including excavations and restoration has finished. • An aftercare programme which would enable a satisfactory standard of agricultural after-use to be reached, with regards to cultivating, reseeding, draining or irrigating, applying fertiliser, or cutting and grazing the site. <p>Natural England would advise that commitments are made by the applicant to safeguard soil resources, including the provision of an appropriately experienced soil specialist to advise on and supervise soil handling, including identifying when soils are dry enough to be handled.</p> <p>All soil should be sustainably reused on site, either for reuse during operation or following decommissioning for restoration purposes. No soil should be disposed of. Soil inversion can damage the soil functioning and soil health and should be avoided.</p> <p>Defra has published a Construction Code of Practice for the Sustainable</p>	
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				Use of Soils on Construction Sites which may be helpful when setting conditions (available online at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf).	
25	Soils and best and most versatile agricultural land	Assessment Methodology	<p>Natural England notes that no reference is made to the policy context for soils and agricultural land in the Environment Statement. We would expect National Planning Policy Framework paragraphs 174 and 175 and EN-1 Overarching National Policy Statement for Energy Paragraph 5.10.8 of Section 5 to be referred to as a minimum.</p> <p>We advise that the agricultural land and soils assessment is given its own chapter and that the overall EIA methodology for agricultural land and soils should be clearly set out in this.</p> <p>Natural England notes that, in addition to the 36 ha of potentially best and most versatile agricultural land (BMV) lost to development and 101 ha affected by construction, 103 ha is proposed to be permanently set aside to provide replacement floodplain storage. We do not consider that this has been properly taken into account in the assessment and disagree with the conclusions of para 8.3.6.2. The applicant should undertake an assessment of the potential impact of increased flooding of the land on the ALC grade due to changes to frequency and duration of flooding, which are direct factors considered in the ALC assessment, and</p>	Comments as above in Natural England key issue reference 24.	Amber

			<p>therefore may result in a change of ALC grade and a potential loss of BMV agricultural land.</p> <p>Notwithstanding the absence of data we do not consider that sufficient justification has been included in the assessment in order to conclude that BMV agricultural land is a low sensitivity receptor due to the relative abundance in this area. The sensitivity and scale of magnitude considered should be in line with the thresholds presented in the Institute of Civil Engineers EIA Handbook (2019) and IEMA guidelines (2022). Consideration of the development impacts on the soil resource and soil function should also be considered.</p>		
26	Soils and best and most versatile agricultural land	Loss of agricultural land for biodiversity enhancements	<p>Natural England notes that the Outline Landscape and Biodiversity Management and Monitoring Plan identifies the need for approximately 20ha of topsoil stripping and the development of wetland and woodland habitats on best and most versatile (BMV) agricultural land.</p> <p>We advise that additional information regarding sustainable soil management should be included in the Soil Handling Management Plan (SHMP). Topsoil stripping will result in a surplus of the finite soil resource.</p> <p>In order to both retain the long term potential of this land and to safeguard all soil resources as part of the overall sustainability of the whole development, it is important that the</p>	Comments as above in Natural England key issue reference 24.	Amber

			<p>soil is able to retain as many of its many important functions and services (ecosystem services) as possible.</p> <p>Sustainable soil management should aim to minimise risks to the ecosystem services which soils provide, through appropriate site design / masterplan / Green Infrastructure etc.</p> <p>Natural England advises that, where appropriate, the habitat creation and seed mixes are tailored to the soil resource present on site, avoiding the need for soil stripping or inversion.</p> <p>Finally, we recommend the applicant considers the Botanical Value map available on MAGIC and NE Open Data Portal to understand the suitability of the woodland planting location. When inappropriately sited, tree planting and woodland establishment can damage existing wildlife and carbon-rich habitats.</p>		
27	Protected Species	Impacts to water vole via habitat fragmentation.	<p>In Table 2, ES Chapter 10 Ecology and Nature Conversation, it is stated that water vole are found at the eastern end of the main Lysaght's Drain. The risk of fragmentation exists if the eastern end of this drain is not connected to other suitable habitat. However, fragmentation does not seem to be considered in the overall report.</p>	<p>Natural England note that a protected species management plan will be included within the final CEMP and this has been secured in the DCO within Schedule 2 Requirement 4.</p> <p>We also welcome the commitment to develop the final landscape and biodiversity management and monitoring plan (LBMMP) in accordance with the outline plan, as stated in Schedule 2 Requirement 7.</p>	Amber

28	Protected Species	Impacts to GCN.	Natural England note that in section 6.2.2.9, ES Chapter 10, several GCN surveys of various methodologies have been undertaken, however there are ponds described as inaccessible. Some of these ponds are within 500m of the development order. We advise these ponds must be surveyed to obtain an overall conclusion of the impacts of the development on GCN.	Advice as per Natural England issue reference 27.	Amber
29	Protected Species	Impacts to bat species.	In section 6.2.2.12 of ES Chapter 10, it is not clear how many of the buildings were categorised as having 'negligible' or 'low' potential. The bat survey report only describes two buildings and those having 'low-high- potential (these buildings not impacted by the development). It is also not stated that the buildings with low potential were subject to emergence and/or re-entry bat activity surveys. The Bat Surveys for Professional Ecologists – Good Practice Guidelines states low potential buildings should be surveyed at the ecological consultants discretion. However, there are no building descriptions so therefore Natural England is unable to assess the suitability of the bat surveys with regards to buildings.	Advice as per Natural England issue reference 27.	Amber
30	Protected Species	Impacts to badger setts.	<p>In section 7.2.3.18 of ES Chapter 10, the fifth bullet point states that 'heavy machinery and site access will be planned to avoid coming near badger setts'. This needs to be quantified to a 30m buffer zone around setts for heavy machinery.</p> <p>The eighth bullet point discusses avoiding noise and vibration around setts 'as much as possible' Any activity that has the possibility</p>	Advice as per Natural England issue reference 27.	Amber

			of disturbance badgers must not be undertaken without a licence and any associated mitigation/compensation.		
31	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SAC and Ramsar <p>National Designated sites</p> <ul style="list-style-type: none"> Humber Estuary SSSI 	(C) Water quality impacts due to surface water run off during construction.	<p>Natural England notes the potential for surface water run off to impact on the Humber Estuary designated sites was taken to AA (section 5.2.4). The proposed mitigation is outlined in ES Chapter 9 Water Resources, and the measures will also be detailed within a CEMP prior to commencement of the work.</p> <p>We therefore agree with the conclusion of no adverse effect following the implementation of the proposed mitigation.</p>	The production of the CEMP is secured within Schedule 2, requirement 4. We note in particular the inclusion of the following points; (b) remediation strategy, and (c) spill response plan.	Green
32	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SAC and Ramsar <p>National Designated sites</p> <ul style="list-style-type: none"> Humber Estuary SSSI 	(O) Water quality impacts due to surface water run off and foul sewage during operation.	<p>Natural England note the potential for surface water run off to impact on the Humber Estuary designated sites was taken to AA (section 5.2.4). The proposed mitigation is outlined in ES Chapter 9 Water Resources, and the measures will also be detailed within an Operational Environmental Management Plan (OEMP) prior to commencement of the work. We also note there will be no discharge to or abstraction from the river Trent (section 7, ES chapter 9), and section 8.2.4.9 also clarifies that foul sewage will discharge to the mains system.</p> <p>We therefore agree with the conclusion of no adverse effect following the implementation of the proposed mitigation.</p>	The production of the OEMP is secured within Schedule 2, requirement 4. We note in particular the inclusion of the following point; (c) surface water discharge strategy.	Green

33	Biodiversity Net Gain	Achievement of the Biodiversity Net Gain objective	<p>Natural England welcome the stated commitment within the Environmental Statement (6.1.8 Environmental Statement – Volume 1 – Chapter 8: Ecology) to provide a 10% biodiversity net gain (BNG) from the project and the use of Defra Biodiversity Metric 3.0 to assess the pre- and post-development value of the land.</p> <p>Natural England welcome that the project demonstrates a 10% net in biodiversity for all of the on-site habitat types identified (habitat, hedgerow and river units) (Appendix I: Biodiversity Net Gain Report) and the provision of an outline landscape and biodiversity management and maintenance plan (5.7 Outline LBMMP) detailing measures of habitat creation, enhancement and future management.</p>	<p>Natural England advises that the measures outlined within the Biodiversity Net Gain Report and Outline LBMMP should be secured by the requirements of the DCO.</p> <p>Natural England note that Requirement 7 currently does not make specific reference to commitments to secure a 10% biodiversity net gain, update net gain calculations utilising the Defra Biodiversity metric based on final plans or the 30-year management and monitoring period and relies on solely on principles outlined in the Outline LBMMP.</p>	Green
34	Biodiversity Net Gain	All of the land within the order limits has been included as on-site in the Biodiversity Net Gain Report, and is therefore subject to 10% net gain	<p>Natural England provided advice within the Pre-App Consultation (dated 23rd July 2021) and separately to Northern Planners on 15th September 2021 regarding the project level approach to Biodiversity Net Gain and the land to be included within the on-site baseline calculations. As per Natural England's formal response to the Consultation on Biodiversity Net Gain Regulations and Implementation document issued by the Department for Environment, Food and Rural Affairs (DEFRA), an approach of considering any land within the development boundary (or order limits) as "off-site" would not be supported.</p> <p>As the Biodiversity Net Gain Report states that all of the land within the order area,</p>	Natural England's advice regarding the mechanism for securing relevant BNG measures in the DCO coincides with the above advice (Natural England key issue reference 33).	Green

			including the large areas of arable land to the east of the Energy Park Land, has been included as on-site (and is therefore subject to 10% net gain), Natural England are therefore satisfied that this approach aligns with the advice provided.		
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Natural England's Relevant Representations

PART III: Natural England's detailed comments on the Development Consent Order (DCO) and associated documents

Page	DCO/DML or omission ref	Natural England's comments	Risk (Red/Amber/Green)
32	Schedule 1, Part 2	(hh) Natural England welcome the inclusion of biodiversity mitigation and enhancement measures within Schedule 1, however the DCO does not currently make reference to biodiversity net gain commitments. The DCO should include commitments to secure a 10% biodiversity net gain, and update net gain calculations utilising the Defra Biodiversity metric based on final plans.	Amber
37	Schedule 2, requirement 7	Natural England note that Requirement 7 currently does not make specific reference to commitments to secure a 10% biodiversity net gain, update net gain calculations utilising the Defra Biodiversity metric based on final plans or the 30-year management and monitoring period and relies on solely on principles outlined in the Outline LBMMP. Natural England request to be consulted on the final LBMMP.	Amber
35	Schedule 2, Requirement 3	Natural England notes the inclusion of requirement 3, Detailed Design. Table 1 within ES Chapter 19 Mitigation, states that air quality mitigation measures are secured within this requirement. However, rather than it being included within a statement about adhering to design, we advise that the requirement to include mitigation measures should be explicitly stated. We advise that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites (see table 1 above).	Amber
35	Schedule 2, Requirement 4	(2) We welcome the requirement for Natural England to be consulted on the final CEMP prior to commencement of the development work. (3) We welcome the inclusion of the following points within the CEMP; (a) dust management plan, (g) protected species management plan, (h) invasive non-native species management plan, (i) soil	Amber

		<p>management plan. As stated in Table 1 point 4 above, we advise that the CEMP may also need to include information on fish management.</p> <p>We recommend that measures outlined in Chapter 10, paragraph 7.1.2.2 of the Preliminary Environmental Impact Report (PEIR) are reinstated in a Construction Ornithological Monitoring Plan (COMP) and included in the commitments of the construction environmental management plan. We note that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites (Table 1 above). The requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites (Table 1 above).</p> <p>We also highlight that additional information regarding sustainable soil management should be included in the Soil Handling Management Plan (SHMP) as part of the CEMP (Natural England key issue reference 1 in Table 1 above).</p> <p>(6) We welcome the requirement for submission of an OEMP and highlight that it is essential to the robustness of the HRA.</p>	
36	Schedule 2, Requirement 5	Natural England welcomes Requirement 5 and highlights that it is an essential requirement.	Green
37	Schedule 2, Requirement 8	Natural England welcomes Requirement 8 and highlights that it is an essential requirement.	Green
37	Schedule 2, Requirement 9	Natural England welcomes Requirement 9 and highlights that it is an essential requirement.	Green
37	Schedule 2, Requirement 10	Natural England welcomes Requirement 10 and highlights that it is an essential requirement.	Green

