



# NORTH LINCOLNSHIRE GREEN ENERGY PARK

Planning Act 2008

Infrastructure Planning  
(Applications  
Prescribed Forms and  
Procedure) Regulations  
2009

## North Lincolnshire Green Energy Park

Volume 8

8.2.12 Final Statement of Common  
Ground with Natural England

PINS reference: EN010116

April 2023

Revision number: 3



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## GLOSSARY

Acronym	Full term / Description
2008 Act	Planning Act 2008
AGI	Above Ground Installations
BNG	Biodiversity Net Gain
CBMF	Concrete Block Manufacturing Facility
CCTV	Closed Circuit Television
CCUS	Carbon Capture, Utilisation and Storage
CEMP	Construction Environmental Management Plan
CO2	Carbon Dioxide
CoCP	Code of Construction Practice
CoPA	Control of Pollution Act
DCO	Development Consent Order
DHPWN	District Heating and Private Wire Network
EA	Environment Agency
EN-1	Overarching National Policy Statement for Energy
EN-3	National Policy Statement for Renewable Energy Infrastructure
EN-5	National Policy Statement for Electricity Networks Infrastructure
ERF	Energy Recovery Facility
ES	Environmental Statement
EV	Electric Vehicle
FGTr	Flue Gas Treatment Residue
FRA	Flood Risk Assessment
H2	Hydrogen
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management

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IDB	Internal Drainage Board
LLFA	Lead Local Flood Authority
LVIA	Landscape and Visual Impact Assessment
NLC	North Lincolnshire Council
NLGEPP	North Lincolnshire Green Energy Park
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PEIR	Preliminary Environmental Information Report
PRF	Plastic Recycling Facility
PRoW	Public Rights of Way
RHTF	Residue Handling and Treatment Facility
RLB	Red Line Boundary
SoCC	Statement of Community Consultation
SoCG	Statement of Common Ground
SoS	Secretary of State
SuDS	Sustainable Drainage Systems
TCPA	Town and Country Planning Act
WSI	Written Scheme of Investigation

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# 1. Introduction

## 1.1 Overview

- 1.1.1 This Statement of Common Ground ('SoCG') has been prepared on behalf of North Lincolnshire Green Energy Park Limited ('the Applicant'). It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under Section 37 of 'The Planning Act 2008' (the '2008 Act').
- 1.1.2 The Proposed Development is an Energy Recovery Facility (ERF) capable of converting up to 760,000 tonnes of non-recyclable waste into 95 MW of electricity and a carbon capture, utilisation and storage (CCUS) facility which will treat a proportion of the excess gasses released from the ERF to remove and store carbon dioxide (CO<sub>2</sub>) prior to emission into the atmosphere. It is described in Chapter 3: Project Description and Alternatives of the Environmental Statement (ES).
- 1.1.3 The Proposed Development meets the criteria to be considered as an NSIP under the 2008 Act as a 'generating station' under section 15(2). Section 15(2) defined an NSIP as a proposed generating station which would be located within England, would not be offshore, and would have a total generating capacity of more than 50MW.

## 1.2 The Proposed Development

- 1.2.1 The North Lincolnshire Green Energy Park (NLGEP), located at Flixborough, North Lincolnshire, comprises an ERF capable of converting up to 760,000 tonnes of non-recyclable waste into 95 MW of electricity and a CCUS facility which will treat a proportion of the excess gasses released from the ERF to remove and store CO<sub>2</sub>. Prior to emission into the atmosphere. The design of the ERF and CCUS will also enable future connection to the Zero Carbon Humber pipeline, when this is consented and operational, to enable the possibility of full carbon capture in the future.
- 1.2.2 The NSIP incorporates a switchyard, to ensure that the power created can be exported to the National Grid or to local businesses, and a water treatment facility, to take water from the mains supply or recycled process water to remove impurities and make it suitable for use in the boilers, the CCUS facility, concrete block manufacture, hydrogen production and the maintenance of the water levels in the wetland area.
- 1.2.3 The Project includes the following Associated Development to support the operation of the NSIP:
- a bottom ash and flue gas residue handling and treatment facility (RHTF);

- a concrete block manufacturing facility (CBMF);
  - a plastic recycling facility (PRF);
  - a hydrogen production and storage facility;
  - an electric vehicle (EV) and hydrogen (H2) refuelling station;
  - battery storage;
  - a hydrogen and natural gas above ground installation (AGI);
  - a new access road and parking;
  - a gatehouse and visitor centre with elevated walkway;
  - railway reinstatement works including; sidings at Dragonby, reinstatement and safety improvements to the 6km private railway spur, and the construction of a new railhead with sidings south of Flixborough Wharf;
  - a northern and southern district heating and private wire network (DHPWN);
  - habitat creation, landscaping and ecological mitigation, including green infrastructure and 65 acre wetland area;
  - new public rights of way and cycle ways including footbridges;
  - Sustainable Drainage Systems (SuDS) and flood defence; and
  - utility constructions and diversions.
- 1.2.4 The Project will also include development in connection with the above works such as security gates, fencing, boundary treatment, lighting, hard and soft landscaping, surface and foul water treatment and drainage systems and CCTV.
- 1.2.5 The Project also includes temporary facilities required during the course of construction including site establishment and preparation works, temporary construction laydown areas, contractor facilities, materials and plant storage, generators, concrete batching facilities, vehicle and cycle parking facilities, offices, staff welfare facilities, security fencing and gates, external lighting, roadways and haul routes, wheel wash facilities, and signage.
- 1.2.6 The overarching aim of the Project is to support the UK's transition to a low carbon economy as outlined in the Sixth Carbon Budget (December 2020), the national Ten Point Plan for a Green Industrial Revolution (November 2020) and the North Lincolnshire prospectus for a Green Future which is currently being developed. It will do this by enabling circular resource strategies and low-carbon infrastructure to be deployed as an integral part of the design (for example by re-processing ash, wastewater and carbon dioxide to manufacture concrete blocks) and capturing waste-heat to supply local homes and businesses with heat via a district heating network.

### 1.3 Parties to this Statement of Common Ground

1.3.1 This Statement of Common Ground is between the Applicant and Natural England.

### 1.4 The Purpose and Structure of this Document

1.4.1 The purpose of this document is to summarise clearly the agreements reached between the parties on matters relevant to the examination of the Application and to assist the Examining Authority in their determination of the Application. It has been prepared with regard to the guidance in ‘Planning Act 2008: examination of application for development consent’ (Department for Communities and Local Government, March 2015).

1.4.2 The document is structured as follows:

- Section 2 – sets out the correspondence between the parties up until the submission of the Application;
- Section 3 – sets out the matters agreed and matters outstanding between the parties during the pre-application stage in respect of the Application;

## 2. Summary of Engagement

2.1.1 The below Table 2.1 contains a record of key correspondence between the Applicant and Natural England pertinent to this SoCG.

**Table 2.1: Summary of Engagement**

DATE	ATTENDEES	TOPICS COVERED
26/09/2019	PINS, Natural England, Marine Management Organisation, Environment Agency, NLC, On behalf of S21: Northern Planners, Solar 21, WBD, ERM	<p>The Project Team arranged an informal site visit with pre-meeting to update statutory consultees with progress/changes to the project.</p> <p>Colin Hammond outlined the project in terms of the core development, associated developments and development subject to the S35 direction request and confirmed the removal of the housing proposal.</p> <p>The EA noted that the site was within functional floodplain and that the Applicant would need to demonstrate that the proposal is robust against flood risk and that essential infrastructure would remain operational in a flood event.</p> <p>The Project Team confirmed the anticipated programme for a S35 direction request and initial formal community, stakeholder</p>



		<p>consultation and EIA Scoping submission.</p> <p>The Project Team also confirmed that they are reasonable progressed in their land referencing and have a good understanding of who their land rights are.</p>
18/06/2020	ERM [on behalf of the applicant], Peter Gray (Natural England)	ERM contacted NE to secure permission to fly the drone survey over the River Trent SSSI, SAC and Ramsar. NE confirmed this is permissible
07/09/2020	Natural England, Bowland Ecology	Confirmation from NE that they were happy with applicant's intent to use ecological survey data collected over 12 months ago (as long as site conditions had not changed).
06/05/2021	Northern Planners; Bowland Ecology (on behalf of Applicant), Natural England	Discretionary Advice Meeting; ecology survey results; aquatic surveys
24/11/2022	Natural England, Bowland Ecology, Northern Planners, ERM, LDA Design	Discussion around SOCG topics and responses.
15/12/2022	Northern Planners on behalf of the Applicant	First draft of the SoCG sent to NE.
06/02/2023	Natural England, Bowland Ecology, ERM, LDA Design, DWD, Applicant, North Lincs Council	HRA/ES issues on effects of air emissions, noise and vibration including piling, precautionary modelling and reasonable operating case and SoCG.
17/03/2023	Natural England ERM Applicant	<p>Continued discussion about reasonable operating case air modelling outputs and effects on habitats, noise effects on birds and piling.</p> <p>Latest version of the SoCG sent to NE with updated sections on HRA and air emission effects on SSSIs.</p>



04/04/2023	Natural England ERM Bowland Ecology Applicant	Update from NE after their review of the updated HRA and their updates to the SoCG. Further discussion about the way to address the residual significant effects on Risby Warren SSSI.
17/04/23	ERM on behalf of the Applicant	A summary note about construction noise levels and likely effects on wintering / migratory birds from SPA/Ramsar sent to NE for information.
18/04/23	ERM on behalf of the Applicant	Updated Appendix 1 of Chapter 10 on the Effects of Air Quality on Nationally and Locally Designated Sites sent to NE for review
20/04/2023	ERM on behalf of the Applicant	Additional information sent to NE regarding percussive piling
24/04/2023	DWD on behalf of the Applicant	Draft Soil Management Plan, Economic Chapter and updated SoCG sent to NE for review
26/04/2023	Natural England ERM DWD Applicant	Continued discussion about opportunities to mitigate compensate for effects at Risby Warren SSSI
04/05/2023	Natural England ERM DWD	Discussion about percussive piling and Risby Warren SSSI way forward.
09/05/2023	Natural England ERM Applicant	Mitigation / Compensation options for the effects at Risby Warren SSSI.  Updated Chapter 18: Cumulative Effects sent to NE for information.  Additional information sent to NE regarding percussive piling
11/05/2023	ERM on behalf of the Applicant	Updated HRA sent to NE
12/05/2023	ERM on behalf of the Applicant	Updated preliminary Construction Ornithological Management Plan and Outline Piling and Foundations Management Plan sent to NE.  Letter of Intent from tenant farmer on land relating to the effects on Risby Warren SSSI sent to NE
15/05/2023	Natural England ERM Applicant	Discussions on SoCG and signing

### 3. Matters

- 3.1.1 Table 3.1 and Table 3.2 contain a list of 'matters agreed' as of 15 May 2023 along with a concise commentary of what the item refers to and how it came to be agreed between the two parties.

**Table 3.1: Table of Matters Agreed – Ecology, Habitats and Nature Conservation**

NATURAL ENGLAND POSITION	APPLICANT POSITION	RAG STATUS
<b>ECOLOGY, HABITATS AND NATURE CONSERVATION</b>		
<b>THE APPLICANT’S HABITATS REGULATIONS ASSESSMENT REPORT AND EFFECTS ON EUROPEAN SITES AND AIR EMISSION EFFECTS ON SSSIS</b>		
<p><b>Refs 2 and 3 - Humber Estuary SAC/SPA/Ramsar site (Alone and In-combination)/SSSI</b> <b>Impacts from Ammonia and Nitrogen Deposition (Operation)</b></p> <p>Natural England are satisfied that no adverse effect on integrity (AEOI) can be determined for air quality impacts on Humber Estuary SAC/SPA/Ramsar following the additional information in the Habitats Regulations Assessment submitted for deadline 6 (dated March 2023).</p> <p>Our advice in relation to air quality impacts to the Humber Estuary SSSI is the same as for the European sites.</p>	<ul style="list-style-type: none"> <li>• The original prediction of levels of ammonia and deposited nitrogen from the Project (in the HRA report submitted with the application) showed the process contribution (PC) was over 1% of the critical level / load (CL) at the Humber Estuary SAC/Ramsar, both alone and in-combination and on the SSSI.</li> <li>• The modelling approach used included several worst-case scenarios (<i>e.g.</i> use of emission limits, minimum end of critical load ranges only, no modal split, worst case meteorology) and hence the effects were overstated. Since the submission and in discussion with NE, the air dispersion modelling has been re-run based on a Reasonable Operating Case (ROC).</li> <li>• For the Project alone, the ROC resulted in the PCs being &lt;1% of the CLs for ammonia (SAC 0.65% / SPA 0.28%) and deposited nitrogen (SAC 0.96% (min)- 0.64% (max) / SPA 0.35 or 0.47% (min) – 0.24%(max)) and hence they have now been screened out.</li> </ul>	

- In-combination (with Keadby 2 and Keadby 3), levels >1% of the CL remain at the Humber Estuary SAC/Ramsar. It is likely that loads for K2 will be around or less than 1% of the CL where they overlap with Project (based on a likely operating scenario for that project). Adverse effects are not envisaged, however, as effects are expected to be largely on reedbed habitat, which although part of the Atlantic salt meadows habitat, is known to be more resilient to the effects of ammonia and nitrogen. The reedbed may on occasions be inundated by nutrient laden tidal water. Effects are not expected to undermine the conservation objectives of the SAC/Ramsar.
- The predicted levels of ammonia and loads of deposition nitrogen reported in the ES both exceeded 1% of the CL at the SSSI (1.61% for ammonia) and 2.3% (min) for deposited nitrogen).
- The modelling based on the ROC predicted 0.65% for ammonia and 0.96% (min) – 0.64% (max) for two of the saltmarsh and neutral grassland habitats for deposited nitrogen. For fen, marsh and swamp, the deposited nitrogen slightly exceeded 1% for the minimum end of the CL range (1.28%), but was well under 1% for the maximum end (0.64%) and significant effects are considered unlikely.

	<ul style="list-style-type: none"> <li>Cumulatively, levels &gt;1% are predicted, however, the effects are likely to be on similar areas of reedbed which are more resilient, as described above).</li> </ul>	
<p><b>Refs 4 and 5 – Thorne and Hatfield Moors SPA / Thorne Moor SAC (In-combination) / Thorne Crowle and Goole Moors SSSI (Alone and In-combination)</b> <b>Impacts from Ammonia and Nitrogen Deposition (Operation)</b></p> <p>Natural England are satisfied that no adverse effect on integrity (AEOI) can be determined for air quality impacts on Thorne and Hatfield Moors SPA / Thorne Moor SAC following the additional information in the Habitats Regulations Assessment submitted for deadline 6 (dated March 2023).</p> <p>Our advice in relation to air quality impacts to the Thorne, Crowle and Goole Moors SSSI is the same as for the European sites.</p>	<ul style="list-style-type: none"> <li>The original prediction of levels of ammonia and deposited nitrogen from the Project (in the HRA report submitted with the application [REP2-019]) showed the PC was &lt; 1% of the critical level / load (CL) for ammonia and deposited nitrogen at both Hatfield Moors SPA and Thorne Moor SAC for the Project alone. However, in-combination exceedance of 1% of the CL was predicted at the SAC from both ammonia and deposited nitrogen. It was possible that the 1% threshold for both ammonia and deposited nitrogen could be exceeded at the SPA, as there was no information available about the contributions from Keadby 3.</li> <li>PCs predicted in the ES at Thorne Crowle and Goole Moors SSSI, were a lot less than 1% of the CLs based on the original modelling and were screened out at that stage.</li> <li>As noted above (see Refs 2 and 3) the air dispersion modelling was re-run based on a Reasonable Operating Case (ROC).</li> <li>The ROC modelling generated levels / loads that were &lt;&lt;1% for the Project alone for both ammonia (SAC 0.08% / SPA 0.03%) and deposited nitrogen (SAC 0.13%(min)-0.07%9max) / SPA (0.07% (min) –</li> </ul>	

	<p>0.03% (max)). Hence in-combination the PC levels and loads were &lt;1% and both the SPA and the SAC have been screened out now in-combination as well as for the Project alone.</p>	
<p><b>Refs 6 to 9 - Humber Estuary SAC/SPA/Ramsar site (In-combination) /SSSI (Alone and In-combination)</b> <b>Impacts from Traffic Emissions (Construction and Operation)</b></p> <p>Based on the information provided by the applicant that the existing access road to the development site will be closed, and replaced with an access road which is not within 200m of a designated site, we would agree that road traffic impacts during construction and operation can be screened out of further assessment.</p>	<ul style="list-style-type: none"> <li>• The modelling undertaken for the ES and the accompanying report to inform the HRA contained an overestimate of the air emissions from traffic, as no modal split had been identified and the modelling had allowed for a maximum number of ship loads, train loads and truck loads.</li> <li>• The original assessment considered both threshold approaches identified by Natural England. The number of HGVs does exceed the AADT threshold, but the overall contribution is a lot less than 1% of the NOx critical level. This approach was used also in considering in-combination effects.</li> <li>• The original modelling did not include ammonia as the IAQM guidance states that the effects of ammonia on vegetation from road traffic is negligible.</li> <li>• Subsequently, the Applicant has confirmed that the existing access road to the Flixborough Industrial Estate along Stather Road, adjacent to the River Trent embankments on its eastern side, will be stopped up. It will be replaced by a new access road that is located over 200 m east of the designated sites. In accordance with NE's guidance, roads at</li> </ul>	

	<p>such a distance do not present “...a credible risk of a significant effect which might undermine a site’s conservation objectives”.</p> <ul style="list-style-type: none"> <li>Given the above, significant impacts from construction / operational traffic are not predicted either alone or in combination with other project emissions.</li> </ul>	
<p><b>Ref 10 – Risby Warren SSSI (alone)</b> <b>Impacts from ammonia, nitrogen and acid deposition (operation)</b></p> <p>Air quality modelling undertaken by the Applicant has demonstrated that the proposed development will lead to PC exceedances of &gt;1% of the critical load for acid deposition when the project is considered alone, and nitrogen deposition when the project is considered in combination with other plans and projects at Risby Warren SSSI. The existing background levels at the site are currently above the critical load and this has led to loss of sensitive features from the designated site. The land adjacent to unit 5 of the SSSI is currently a working pig farm, and the Applicant has proposed to remove the livestock from the site, and create a habitat management plan. The removal of the livestock from the adjacent land will reduce the background pollutant levels at the SSSI. Whilst the reduction in emissions hasn’t yet been fully quantified, it is expected that this will be significantly more than the process contribution from the development. Therefore, Natural England are satisfied with the Applicant’s proposed solution to mitigate impacts to Risby Warren SSSI.</p> <p>The developer has obtained a Statement of Intent from the current landowner of the land adjacent to the SSSI to remove the current stock of pigs from the site. We are satisfied with this method of securing the</p>	<ul style="list-style-type: none"> <li>The Applicant is committed to exploring mitigation / compensation options with Natural England for the significant residual effects that are reported currently.</li> <li>A key source of effect on the Risby Warren site is ammonia. Fields adjacent to the SSSI support outdoor pigs and have done so for a number of years. Ammonia emitted due to the presence of the pigs has contributed to the background levels of ammonia that have been used in the impact assessment.</li> <li>The Applicant has worked closely with NE to try and deliver an acceptable solution to mitigate the potential impact of ammonia deposition from the Project on the Risby Warren SSSI. The potential identified mitigation falls outside the order limits of the DCO and involves a change to the land management in an area south east of land partially overlapping the Risby Warren SSSI.</li> </ul>	



<p>mitigation measures. We also welcome the potential for enhancement of the SSSI.</p>	<ul style="list-style-type: none"> <li>The Applicant has secured a signed letter of intent (see attached) with the tenant farmer with a view to reaching a long-term contractual arrangement over the coming months. The management will result in pigs being relocated so the emissions of ammonia associated with them no longer affect the SSSI. And in addition, the area of land that lies within the SSSI will be managed in a way that aligns with the objectives of the SSSI. Such mitigation will more than mitigate the identified adverse effects of the Project and have the potential to deliver enhancement of the SSSI.</li> </ul>	
<p><b>Ref 11 – Messingham Heath SSSI (Alone) Impacts from Acid Deposition (Operation)</b></p> <p>The applicant has provided an updated SSSI impact assessment for deadline 7 which demonstrates that the PC from the project alone is &lt;1% of the CL using the reasonable operating case.</p> <p>The updated Cumulative Impacts chapter, which will be submitted to deadline 9, demonstrates there is an exceedance of 1% PC when impacts are considered in combination with other plans or projects. However, while there is an existing small exceedance of the acid deposition critical load at this site, based on the current SSSI condition we agree that significant effects are not predicted. Therefore, we agree that the development will not damage or destroy the interest features of Messingham Heath SSSI.</p>	<ul style="list-style-type: none"> <li>The original prediction of acid deposition loads levels of ammonia and deposited nitrogen from the Project (in the ES submitted with the application) showed the PC was marginally over 1% of the critical level / load (CL) (1.1%).</li> <li>As noted above (see Refs 2 and 3) the air dispersion modelling was re-run based on a Reasonable Operating Case (ROC).</li> <li>For the Project alone the ROC resulted in the PC for acid deposition being &lt;1% of the CL (0.64%) and hence it has now been screened out.</li> <li>In-combination it is likely that the acid deposition load will remain just above 1% of the CL (1.24%), however, given the current favourable condition of the main habitats and the continued presence of</li> </ul>	

	<p>lichens, significant effects are not predicted. The updated Cumulative Impacts chapter was submitted at Deadline 9.</p>	
<p><b>Refs 12 and 13 - Humber Estuary SAC/SPA/Ramsar site/SSSI (Alone) Impacts from Dust Emissions (Construction)</b></p> <p>We note the additional clarifications provided on the potential for dust impacts in the revised HRA submitted for deadline 6 (dated 2023) (paragraph 5.2.2.3). We agree that this matter is now resolved and mitigation via the measures to be outlined in the Construction Environmental Management Plan will be suitable to prevent impacts to designated sites.</p>	<ul style="list-style-type: none"> <li>• The final CEMP will contain best practice measures that will be implemented by the site contractors to control dust, so that there is negligible effect beyond the Red Line Boundary.</li> <li>• These measures will prevent any significant effects on ecological features (e.g. the designated areas along the River Trent) within 200 m of the Red Line Boundary and hence comply with Natural England’s guidance.</li> </ul>	
<p><b>Refs 14 and 15 - Humber Estuary SAC/SPA/Ramsar site/SSSI Potential Disturbance to Migration Route of River and Sea Lampreys – Noise and Vibration (Construction)</b></p> <p>Natural England are satisfied that no adverse effect on integrity (AEIOI) can be determined for disturbance to migrating river and sea lamprey following the additional information in the Habitats Regulations Assessment submitted for deadline 6 (dated March 2023) if bored piling is to be utilised.</p>	<ul style="list-style-type: none"> <li>• The Applicant has confirmed that there will be no piling in the River Trent, only on land. This will be bored piling to enable construction of the building foundations. The nearest building constructed to the River Trent as part of the Project (the carbon capture building), is over 40 m from the river.</li> <li>• There is no specific information about the effects of piling on lamprey species, and hence reference has been made to human perceptions. BS 5228 (Code of Practice for Noise and Vibration Control on Construction and Open Sites, Part 2 Vibration) suggests for humans the threshold of perception of vibration is between 0.14 <math>\text{mms}^{-1}</math> (just perceptible in most sensitive situations) and 0.3 <math>\text{mms}^{-1}</math> (just perceptible in a residential environment).</li> </ul>	

Measurements undertaken by ERM close to bored piling activities on another project (for DLR in London) recorded vibration levels of between 0.4 and 1.4  $\text{mms}^{-1}$  at a distance of 3 m. Using the method in BS 5228 the highest measurement is estimated to reduce to below 0.14  $\text{mms}^{-1}$  at a distance of 20 m.

- Whilst acknowledging that these figures / distances relate to human perception, the River Trent (at its closest point) is located at a considerably greater distance from the piling source. The river currently experiences vibration from existing industrial activities in the area, including the loading and unloading of steel that currently takes place at Flixborough Wharf. Hence, it is considered that the River Trent and the lamprey species it supports are unlikely to be affected significantly by the bored piling.
- Driven piling is not proposed, or expected, unless there are exceptional circumstances (*e.g.* if it was the only way to clear a blockage during sheet piling). But even then, it would only be likely for a short duration to allow the blockage to be cleared.
- Of note also is the technical guidance issued by the California Department of Transportation (Technical Guidance for the Assessment of the Hydroacoustic Effects of Pile Driving on Fish, 2020) which highlights

	<p>the benefits of undertaking piling on land to avoid effects on fish in water:</p> <ul style="list-style-type: none"> <li>○ <i>“The most effective option for avoiding and minimizing underwater sound pressure during construction of deep-water foundations for new bridge construction is designing the new foundations to span the wet channel.....where it is feasible, land-based pile driving is an excellent approach to avoid and minimize impacts on the environment and greatly reduces the potential for additional mitigation under the CESA that might result from driving within the wet channel. The further away the pile is from the wet channel during construction, the more attenuation would be achieved through transmission loss as the energy from the pile moves through the land toward the wet channel. Although designing a longer bridge span to avoid placing piles in the water may prove more expensive, such a design also reduces off-site mitigation requirements and associated costs often associated with impacts to listed species that may occur when driving in the wet channel.”</i></li> <li>● Effects from percussive piling are discussed below.</li> </ul>	
<p><b>Refs 16 and 17 - Humber Estuary Ramsar site/SSSI</b></p>	<p><b>1% Threshold Use</b></p>	

**Impacts from Noise, Vibration and Visual Disturbance (Construction and Operation) for construction activity including bored piling.**

We note the additional information provided in the HRA submitted to deadline 6. The AA states that within the Humber Estuary Ramsar/SSSI the noise levels due to construction activity will be within the current background levels, with the implementation of acoustic barriers.

We also note and welcome the statement that the CoCP, which will include the COMP, will be implemented to further reduce potential for impacts.

Therefore, we would consider that for construction including bored piling, the matter is resolved, subject to the securing of use of the acoustic barriers within the DCO. This could be stated within the DCO document itself, or stated within the CEMP/COCP.

- Reference to the 1% threshold has been used in the HRA as part of the screening process of likely significant effects on the functionally linked land for the Humber Estuary SPA, but not for the assessment for the Ramsar site.

**Noise**

- Background noise levels were measured at residential receptors, as part of the data collected for the Environmental Statement (ES). Daytime noise levels recorded in the area around the Project site ranged from 46-62 dB  $L_{Aeq,12hr}$  and maximum noise levels ranged from 51-97 dB  $L_{Amax,15 min}$ .
- Some elevated noise levels are expected as part of the construction works, for example due to concrete breaking. Unmitigated levels of approximately 75 dB  $L_{Aeq}$  (72 dB  $L_{Aeq}$  without the façade effect) at 100 m from the source.
- 55 dB has been used as a reference level based on published reviews of the effects of noise on coastal bird species (like those species recorded during the Project surveys). Noise of less than 55 dB (at a bird) were a low-level disturbance stimulus and unlikely to cause a response in wetland bird species in intertidal areas<sup>1</sup>.

<sup>1</sup> Cutts N, Hemingway K & Spencer J (2013) *Waterbird Disturbance Mitigation Toolkit Informing Estuarine Planning & Construction Projects (Version 3.2)*, University of Hull.

- The predicted distances for construction noise to reduce to 55 dB,  $L_{Aeq,12\text{ hr}}$  around the construction of the main buildings and during concrete breaking are listed below. These figures include noise levels associated with bored piling.
  - Main Building Construction
    - Unmitigated<sup>2</sup>
      - Northern Buildings - 359 m
      - Southern Buildings - 275 m
    - Mitigated - both 159 m.
  - Concrete Breaking
    - Unmitigated – 489 m
    - Mitigated – 224 m.
- Levels of 55 dB $L_{Aeq\ 12\text{ hr}}$  are predicted to occur approximately 160 m from unmitigated railway construction work, as it has yet to be determined if mitigation is practical.
- Most of the bird records lie in areas where the predicted noise levels are less than 55 dB $L_{Aeq\ 12\text{ hr}}$ ,

<sup>2</sup> More soft ground has been assumed in the location of the southern buildings and more hard standing assumed in the northern building location. Noise attenuates quicker in areas of soft ground, hence the smaller zone to achieve 55 dB for the unmitigated situation at the southern buildings. In terms of mitigation, it has been assumed that there is hard ground throughout as, should noise barriers be used, this would raise the effective source height and lessen the attenuation effect of the soft ground.

especially to the north, west and south / south-east. Significant effects on these birds are not predicted.

- The main effects are likely to be on small numbers of mallard along the River Trent to the west / south-west of the Project area. Whilst unmitigated, levels much higher than 55 dB  $L_{Aeq,12\text{ hr}}$  are likely to result in these areas, it is expected that mitigation will bring actual levels closer to 55 dB  $L_{Aeq,12\text{ hr}}$ . Most of the bird records in this area were on the riverbanks on the western side, or on the water. If a reduction of 10 dB is achieved, it is predicted that the western riverbanks and the western parts of the river would experience noise levels of <55 dB  $L_{Aeq,12\text{ hr}}$ .
- Wherever possible, the timing of construction activities that are likely to generate higher levels will be undertaken to avoid the risk of effects on birds associated with the designated areas (*e.g.* avoiding October to March).
- In addition, there is an preliminary Construction Ornithology Monitoring Plan (COMP) included as part of the Code of Construction Practice (CoCP). This will be taken to a detailed form as part of the Construction Environmental Management Plan (CEMP) that will be prepared by the contractor prior to works commencing and agreed with Natural England. This will be implemented by a condition of the DCO.



- The COMP will contain a series of measures to monitor for signs of any disturbance to qualifying interest bird species of the designated sites during construction. Specific construction activities that require it to be implemented will be agreed with Natural England as part of its detailed development. For example, piling is an activity that is expected to trigger the need for the COMP to be implemented. Whilst percussive piling is not proposed, or expected to be required, the COMP will contain measures if as part of some exceptional circumstances (*e.g.* to break through a blockage) it is required. This could include a soft start approach to avoid adverse effects to bird species.
- The COMP will be overseen by an Ecological Clerk of Works (ECoW) and should any significant disturbance events be recorded, the COMP will outline additional measures that the ECoW will be able to implement to prevent significant effects to qualifying interest bird species and avoid adverse effects on the integrity of the designated sites. Such measures could include stopping work, pausing of work, retiming of work, or alterations to the methods of working.
- Effects from percussive piling are discussed below.

- Given the above, adverse effects on the integrity of the designated sites from construction noise are not expected.
- Once operational, noise levels are predicted to be much lower than those during construction and hence significant effects on birds are not predicted.

**Visual Disturbance**

- Measures to reduce the risk of disturbance effects from lighting from the project have been drawn up as part of an Indicative Lighting Strategy. The measures it contains specifically focus on avoiding light spill onto the River Trent from the Project. These measures will be secured via the DCO. Natural England has indicated already that they are broadly satisfied with these measures.
- As described above most of the birds are located some distance away from the proposed works, even where they occur within the redline boundary. Where they occur outside the red line boundary, they are likely to be screened from the main works by hoarding / noise barriers installed to control noise dispersal during construction. Birds along the River Trent will be screened visually from the works by the existing river embankments that are approximately 2-3 m high.

<p><b>Refs 18 and 19 - Humber Estuary SPA / Ramsar site/SSSI</b> <b>Impacts from Potential Loss of Functionally Linked Land (Construction)</b></p> <p>Natural England notes the provision of the additional survey information within the updated HRA which was submitted to deadline 6 (dated March 2023). The bird results demonstrate that there will not be a permanent loss of land which supports significant numbers of birds associated with the designated sites. Therefore, we are satisfied with the conclusion that the development will not lead to a significant loss of functionally linked land associated with the Humber Estuary SPA/Ramsar, and it can be concluded that there is no adverse effect from this impact pathway.</p>	<ul style="list-style-type: none"> <li>• Effects on functionally linked land were screened in and included as part of the Appropriate Assessment (Section 5.3). No adverse effects were concluded.</li> <li>• Section below provide some information about use of land by birds associated with the SPA. Locations of migratory and wintering birds are shown on figures in the updated HRA. These figures summarise information contained in the ES and submitted with the application.</li> </ul> <p><b>Pink-footed Goose</b></p> <ul style="list-style-type: none"> <li>• Pink-footed goose was considered, but it was recorded in flight across the Project area and along the River Trent only. None were recorded using the Project site, or the immediate surrounds and no functionally linked land was identified for this species. This has been added to the updated HRA.</li> </ul> <p><b>Redshank</b></p> <ul style="list-style-type: none"> <li>• Only one redshank was recorded within the red line boundary (March 2022 where loss of land will occur - where the Project runs north of the Flixborough Industrial Estate).</li> <li>• Small numbers (mostly single birds with one group of four) were recorded along the eastern part of</li> </ul>	

Lysaght's Drain close to the Skippingdale Retail Park or in flight along the drain. It will not be developed (*i.e.* lost) despite being within the Red Line Boundary.

- Other records of passage / wintering redshanks were outside the Project boundary, mostly in areas that will be largely unaffected by the Project:
  - individuals seen approximately 100 m and 150 m north of the Flixborough Industrial Estate towards and along the Burton and Flixborough Drain;
  - small numbers (1 to 8 individuals) further north on the Burton and Flixborough Drain, approximately 600 m from the Project Red Line Boundary;
  - one bird seen on the west banks of the River Trent;
- No breeding redshanks were recorded during any breeding bird surveys.
- Whilst there were records of redshank in the Red Line Boundary during the surveys, only one record was made in land that will be developed.

	<p><b>Mallard</b></p> <ul style="list-style-type: none"> <li>• Passage / wintering mallard were seen predominantly outside the Project Red Line Boundary in the River Trent.</li> <li>• Birds within the Red Line Boundary were typically records of only single birds, especially in Lysaght’s Drain.</li> <li>• A group of 14 mallard was seen in the Red Line Boundary in the landward side of the embankments east of Stather Road. However, this road is to be stopped up and replaced with a new access road to the Flixborough Industrial Estate created approximately 250 m further east from where the mallards were recorded.</li> <li>• The majority of mallard records were in habitat outside the Project Red Line Boundary and will not be lost, or in areas within it that will remain undeveloped (<i>e.g.</i> part of the land that will remain in agriculture, or will form part of the new wetland / SuDs habitat that will be created with a nature conservation focus).</li> </ul>	
<p><b>Refs 20 and 21 - Humber Estuary SPA / Ramsar site/SSSI Impacts from Noise, Vibration and Visual Disturbance on Functionally Linked Land (Construction and Operation) (construction work including bored piling)</b></p>	<ul style="list-style-type: none"> <li>• Refs 18 and 19 above highlight the locations of important bird species of functionally linked land in and around the red line boundary.</li> </ul>	

<p>Natural England note the additional information provided in the HRA submitted to deadline 6 which demonstrates that there will not be a likely significant effect due to noise disturbance impacts on birds associated with the Humber Estuary Ramsar, with the exception of mallard, which are present in numbers &gt;1% within the redline boundary, and on the river adjacent to the boundary.</p> <p>Visual disturbance is ruled out due to the height of the embankment, and the implementation of the inductive lighting strategy to reduce light spill, we concur with this conclusion.</p> <p>Due to the River Trent acting as functionally linked land for the Humber Estuary SPA it was determined that there was potential for noise and visual disturbance impacts to functionally linked land for mallard during construction of the proposed development. However, at the AA stage it was demonstrated that with the implementation of noise barriers the mallard will experience noise levels within the current background range at the location (&lt;55db). The COMP will also be implemented as further mitigation, and will detail that the activity will be overseen by an ECoW. Therefore, we advise that with the implementation of this mitigation, no AEOI for disturbance impacts to functionally linked land can be demonstrated for construction activity including bored piling. The use of the acoustic barriers could either be secured within the DCO document itself or within the CoCP.</p> <p>During operation, noise levels are not predicted to be at a significant level (5.3.1.5) and will be within current baseline levels.</p>	<ul style="list-style-type: none"> <li>• Refs 16 and 17 describe the effects of noise and vibration and visual disturbance on birds associated with the Ramsar site and SSSI and land used by species that are qualifying interests of the SPA. The effects take account of piling, the effects of mitigation and provides information about background noise levels that were recorded at human receptor locations (including isolated properties) around the site. Further details are now contained in the updated HRA.</li> <li>• Adverse effects on the integrity of the SPA/Ramsar site and / or significant effects on the SSSI are not predicted.</li> <li>• Effects from percussive piling are discussed below.</li> </ul>	
<p><b>Refs 22 and 23 - Humber Estuary SPA / Ramsar site/SSSI Recreational and Disturbance Impacts Due to Accessibility of Wetland Habitat (Operation)</b></p>	<ul style="list-style-type: none"> <li>• The embankments along the River Trent are between 2 and 3 m high. They provide effective screening for birds on the River Trent from</li> </ul>	

<p>Natural England note the additional information provided in the HRA submitted to deadline 6 which demonstrates that there will not be a significant effect due to disturbance impacts on the River Trent due to recreational access to the wetland habitat. The HRA advises that the embankments are 2-3m high, and the access road is to be rerouted 200m East of the designated sites, and so has screened out significant effects. Natural England concurs with this conclusion.</p>	<p>operational activities on the Project site and visitors to the new visitor centre and wetland areas. The new access road to the Flixborough Industrial Estate and the visitor centre will be moved further east (over 200 m) from the River Trent (see Ref 18 and 19).</p> <ul style="list-style-type: none"> <li>Measures to reduce the risk of effects from lighting have been drawn up as part of an Indicative Lighting Strategy and will be secured via the DCO. Natural England has indicated already that they are broadly satisfied with these measures.</li> </ul>	
<p><b>Supplementary to Refs 14 -17,20 &amp; 21 -Humber Estuary SPA/Ramsar/SSSI - Percussive Piling Impacts (on designated sites and functionally linked land) (construction)</b></p> <p>The applicant has provided additional information in the version of the HRA which was submitted to deadline 10 on the potential impacts due to percussive piling on designated birds and lamprey.</p> <p>The applicant has also submitted a revised version of the CoCP, namely the following sections;</p> <ul style="list-style-type: none"> <li>Appendix K - Outline Piling and Foundation Works Management Plan;</li> <li>Appendix L - Outline Construction Noise and Vibration Management Plan; and</li> <li>Appendix M – Preliminary Construction Ornithological Management Plan (updated version to be submitted).</li> </ul>	<ul style="list-style-type: none"> <li>An updated version of the HRA has been submitted at Deadline 10. This incorporate further information about percussive piling, something that will only occur if the silent hydraulic approach to sheet piling (at the Bunker Hall) meets a blockage. It explains also the options for mitigation, the processes to determine what is needed and likely levels of effect. The approach (including mitigation) set out in the COMP will be implemented to avoid adverse effects on mallard.</li> <li>The HRA has been updated to include further information about the effects of percussive piling on lamprey.</li> <li>As discussed above, such driven /percussive piling will only occur if the silent hydraulic approach to sheet piling (at the Bunker Hall) meets a blockage. If</li> </ul>	



<p>Following submission of these additional documents, Natural England agree that it can be determined there will be no adverse effect on integrity due to percussive piling associated with the proposed development.</p> <p>We have come to this conclusion due to the submission of the additional information on mitigation measures to reduce impacts from noise, which the applicant has outlined in Appendix K, and which has been cross referenced in the HRA. We also welcome the information which has been provided on the circumstances for which percussive piling would be required, and the advice that this would be at most one working day.</p> <p>The final CEMP will be required prior to commencement of development work and will be subject to NE approval, this is secured within the DCO.</p> <p>We do advise that impacts to lamprey have been screened out at the LSE stage of the assessment, we would prefer this to have been taken to Appropriate Assessment stage of the HRA due to the soft-start procedure being advised as a further precaution against effects to lamprey. However, as the implementation of soft-start has been included within the draft CoCP regardless of this, we are satisfied that there would not be a difference in outcome.</p>	<p>required it will occur in a location approximately 110 m to the east of the River Trent at its nearest point (Bunker Hall), with most at distances well over 110 m. Studies reported in 'TRL Report 429. Groundborne Vibration Caused by Mechanised Construction Works. D.M.Hiller &amp; G.I.Crabb. Highways Agency 1995') found that levels of vibration from driven piling fall below the level that may be perceptible in a residential environment within a distance of 100 m. Hence, it is unlikely that lamprey will be affected given the separation distance of the potential piling from the River Trent and that the majority of any percussive piling exceptionally required would be at distances &gt; 110 m.</p> <ul style="list-style-type: none"> <li>• The option for using a soft start approach has been included in the updated HRA as one of the options for mitigating the effects of percussive piling on lamprey if needed. Soft start approaches are used commonly in the marine offshore wind farms.</li> <li>• The measures that relate to controls of noise and vibration will be secured via the Code of Construction Practice (CoCP) / Construction Environment Management Plan (CEMP) and in particular:             <ul style="list-style-type: none"> <li>• Appendix K - Outline Piling and Foundation Works Management Plan;</li> </ul> </li> </ul>	
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	<ul style="list-style-type: none"><li>• Appendix L - Outline Construction Noise and Vibration Management Plan; and</li><li>• Appendix M – Preliminary Construction Ornithological Management Plan (updated version to be submitted).</li></ul> <p>These plans have been updated to incorporate appropriate reference to these specific measures as required.</p>	
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**Table 3.2: Table of Matters Agreed - Soils**

NATURAL ENGLAND POSITION	APPLICANT POSITION	RAG STATUS
<p><b>1. MITIGATION MEASURES AND ENHANCEMENTS, INCLUDING LIKELY EFFECTIVENESS OF MITIGATION, MONITORING PROCEDURES, HOW MITIGATION WILL BE SECURED WITHIN THE DCO AND THE CONTENT OF THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN/ CODE OF CONSTRUCTION PRACTICE</b></p>		
<p><b>SOILS</b></p>		
<p>Natural England requested a summary signposting where different elements were dealt with within the various application documents.</p>	<p>The proposed landscape and habitat creation measures are set out in the <b>Indicative Landscape and Biodiversity Plans</b> [Document Reference 4.10] and their delivery is secured by DCO Requirement 6. Mitigation during construction will be secured through a <b>Construction Environmental Management Plan (CEMP)</b> to be submitted to and approved by North Lincolnshire Council in consultation with Natural England and others. The <b>Code of Construction Practice (CoCP)</b> [Document Reference 6.3.7] sets out the require content of the CEMP which is secured by DCO Requirement 4. The CoCP includes a series of component management plans in outline; detailed plans will be prepared as part of the CEMP for approval etc. The detailed plans will include a <b>Soil Management Plan (SMP)</b>. The outline SMP includes the requirement for a soils resource assessment which will advise the detailed design of the landscape and habitat creation measures, together with the soil protection measures to be contained in the detailed SMP. The detailed design of the landscape and habitat creation measures will be approved by NLC in</p>	<p style="background-color: #92d050;"></p>

	<p>consultation with NE in accordance with DCO Requirement 6. The long-term management of the landscape and habitat creation areas will be undertaken in accordance with a <b>Landscape and Biodiversity Management and Monitoring Plan (LBMMP)</b> to be submitted to NLC for approval in consultation with NE; this plan is secured by DCO Requirement 6. The outline LBMMP [Document Reference 6.3.8] sets out the require content of the detailed LBMMP.</p>	
<p>Natural England requested confirmation that the necessary outstanding soil surveys took place in enough time to inform final design.</p>	<p>The ALC figures have been derived from a combination of Post-1988 ALC surveys and Provisional ALC mapping (for the latter assuming all mapped Grade 3 is Subgrade 3a), this is considered appropriate for the EIA process and this stage of the application. The Applicant will undertake further ALC survey work to determine the grade of land not subject to post-1988 survey results (and some verification sampling of land that was surveyed post-1988) to inform the detailed soil management plan. This information will also inform the final landscaping and habitat creation design, which needs to be approved by NLC, as part of Requirement 6, and the survey will be programmed accordingly to feed into the design process.</p>	
<p>Natural England welcomed that soil would be re-used on site but requested more detail on this.</p>	<p>There will be opportunities for the re-use of topsoil within the Order Limits, which are summarised below:</p> <ul style="list-style-type: none"> <li>• The Project requires the access road and the development platforms to be raised above the flood depths in order to allow for safe operational of the plant as well as access and egress from the Energy</li> </ul>	

	<p>Park. Topsoil will be required to establish vegetation on the embankments of the access road and the development platforms, as shown on the illustrative sections 5.15 and 5.16 within the Design and Access Statement (REP6-009).</p> <ul style="list-style-type: none"> <li>• The Energy Recovery Facility and the Concrete Block Manufacturing Facility are located on areas of existing hardstanding, these areas will be redeveloped and will include landscape planting to create a high-quality place to work. The areas of landscape planting will require the use of topsoil to establish the landscape planting.</li> <li>• The Project includes the creation of flood bunds (to the east and south of the Energy Park Land). These bunds will be vegetated and require the use of topsoil to establish the vegetation.</li> </ul> <p>During detailed design and development of the detailed Soil Management Plan, and as advised by the Soil Resource Assessment, soil balancing calculations will be finalised for top and subsoils with the objective of using all excavated topsoils within the Application Land.</p>	
<p>Natural England requested more information on the use of the land following decommissioning.</p>	<p>Decommissioning of the Project in terms of returning land to its original uses (including agricultural use) has not been considered in technical impact assessment terms at this stage. Where agricultural land is to be occupied by built infrastructure this would be difficult and require the import of suitable soils following removal of buildings etc. On other parts of the Application Land used for</p>	

	<p>landscaping and habitat creation, a return to agricultural use would be feasible with varying degrees of difficulty. In accordance with the Soil Management Plan, and to the extent practicable the landscaping and habitat creation to be located on agricultural land will be designed so that proposed soil profiles reflect current profiles. However, it is worth noting that current policy such as the Environmental Improvement Plan 2023, among other matters, seeks a new balance in the countryside between food production and biodiversity. Where that balance is in some 35 years time will be a key factor to be considered in a decommissioning plan for the Project.</p>	
<p>5. Natural England welcome the commitment to produce a detailed Soil Management Plan (SMP) in advance of construction. However have the following comments:</p> <p>It is noted that a Soil Resource Assessment will be undertaken by the Construction Contractor to inform the detailed SMP (Para 4.1.1.1. Appendix J, CoCP). Natural England advise that the soil assessment includes soil sampling to include SOM, pH, and macronutrients to inform appropriate soil re-use as set out in Defra’s Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. This may be particularly important to firstly identify areas of the Site most appropriate for habitat enhancement. Secondly, this testing will also be important for areas identified for habitat enhancement to inform the most suitable habitats, including the most appropriate seed mix etc., This should be done during the planning stages of the development.</p>	<p>The outline Soil Management Plan has been updated to reference the additional mitigation and good practice that NE has identified. The updates reflect NE’s comments on the scope of the Soil Resource Assessment (of all agricultural land that will be temporarily or permanently used by the Project), appointment of a soils specialist, sustainable use of surplus topsoil, reinstatement of temporary construction areas, together with soil handling and storage matters. The assessment will feed into both the detailed SMP and the detailed design of the landscaping and habitat creation measures; the survey and analyses will be programmed accordingly. Habitat creation plans will be tailored to the soil resource present on site, using site specific data. This will include the peat resource. To the extent practicable the landscaping and habitat creation to be located on</p>	

<p>The references provided in the Appendix B: Soils and Land Assessment, which relate to the embedded mitigation (including the DEFRA (2009) Code of Practice for the Sustainable Use of Soils on Construction Sites; The Institute of Quarrying (2021) Good Practice Guide for Handling Soils in Mineral Workings; the British Society of Soil Science (2022) Benefitting from Soil Management in Development and Construction; and the IEMA Assessing Land and Soils for Environmental Impact Assessments (2022)), are not included in the Outline SMP.</p> <p>For restoration to high agricultural quality, the best practice for soil handling is using the excavator-dump truck combination in conjunction with the sequential 'strip' method (Sheets A – D), Institute for Quarrying 2021 Soils Guidance (quarrying.org).</p> <p>Clarification should be provided in the SMP on the extent of soil movement, storage and reuse across the site during construction and operation.</p> <p>Soil stripping depths should be clearly set out for all temporary and permanent infrastructure, reflecting the soil horizon depths identified from the soil assessment.</p> <p>Consideration is required regarding the soil handling and mitigation measures potentially required for the buried peat soils.</p> <p>We advise that habitat creation is tailored to the soil resource present on site, using site specific data. This includes the peat resource.</p> <p>The SMP should include the restoration criteria for all land to be returned to agricultural use, including the ALC grade and soil properties.</p>	<p>agricultural land will be designed so that proposed soil profiles reflect current profiles. To the extent practicable buried peat deposits will be left undisturbed and in place.</p>	
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A soil balance should be prepared to identify the surplus of different soil types across the Site and identify opportunities for the sustainable re-use of this resource on site.

6. Sustainable soil management should aim to minimise risks to the ecosystem services which soils provide, through appropriate site design. Defra has published a Construction Code of Practice for the Sustainable Use of Soils on Construction Sites which may be helpful when setting planning conditions for development sites. It provides advice on the use and protection of soil in construction projects, including the movement and management of soil resources, which we strongly recommend is followed.

The British Society of Soil Science has published the Guidance Note Benefitting from Soil Management in Development and Construction which sets out measures for the protection of soils within the planning system and the development of individual sites, which we also recommend is followed.

We advise that if the development proceeds, the developer uses an appropriately experienced soil specialist to advise on, and supervise, soil handling, including identifying when soils are dry enough to be handled and how to make the best use of the different soils on site. All soils should only be handled in a dry and friable condition, and it is expected that soil handling will be confined to the drier summer period to minimise risk of soil damage. Soil handling methods should normally be as specified as in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (including accompanying Toolbox Talks).

<p>'Creation (of wildflower grassland), particularly over former arable land may require 'soil nutrient stripping' to remove of the top layer of soil'. This soil removal would prevent this land to be returned to agricultural land of the same baseline ALC grade.</p>	<p>The outline Landscape and Biodiversity Management and Monitoring Plan has been amended to remove references to physical removal of top soils as a means to reduce nutrient load in favour of other less or non-intrusive methods such as repeated cutting and removal of vegetation and cessation of adding fertiliser</p>	
<p>Soil is a finite resource which plays an essential role within sustainable ecosystems, supporting a range of ecosystem services, including storage of carbon, the infiltration and transport of water, nutrient cycling, and provision of food.</p> <p>Natural England welcome the consideration of multiple soil functions, as per the IEMA Guidelines: 'A New Perspective on Land and Soil in Environmental Impact Assessment' (2022). The authors provide a detailed considered approach.</p>	<p>The Applicant will welcome any other comments NE has to make such as the approach that has been adopted in following the IEMA guidance.</p>	

## 4. Signatures

4.1.1 This Statement of Common Ground is agreed:

**On behalf of Natural England:**

Name: Lauren Forecast

Signature:

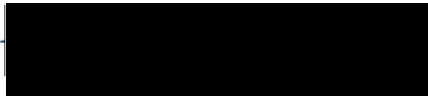


Date: 15/05/2023

**On behalf of the Applicant:**

Name: David Jones

Signature:



Date: 15/05/2023