NORTH LINCOLNSHIRE GREEN ENERGY PARK

Planning Act 2008

Infrastructure Planning (Applications Prescribed Forms and Procedure) Regulations 2009

North Lincolnshire Green Energy Park

Volume 9

9.33 Applicant's comments on submissions received at Deadline 7

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Glossary

Acronym	Full term / Description
2008 Act	Planning Act 2008
ABP	Associated British Ports
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
CLP	Construction Logistics 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
EP	Environmental Permit
ERF	Energy Recovery Facility
ES	Environmental Statement
EV	Electric Vehicle
FGTr	Flue Gas Treatment Residue
FRA	Flood Risk Assessment
H2	Hydrogen
IAQM	Institute of Air Quality Management
IDB	Internal Drainage Board
INNS	Invasive Non-Native Species
LLFA	Lead Local Flood Authority
LVIA	Landscape and Visual Impact Assessment
NLC	North Lincolnshire Council
NLGEP	North Lincolnshire Green Energy Park
NPS	National Policy Statement

NSIP	Nationally Significant Infrastructure Project
OEMP	Outline Environmental Management Plan
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

CONTENTS

1.0 Introduction

Overview

1.1 This report sets out North Lincolnshire Green Energy Park Limited's (the Applicant's) comments on the submissions submitted at Deadline 7.

The Proposed Development

1.2 The North Lincolnshire Green Energy Park (NLGEP), located at Flixborough, North Lincolnshire, comprises an ERF capable of converting up to 760,000 tonnes of residual 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 CO2 prior to emission into the atmosphere. The design of the ERF and CCUS will also enable future connection to the Zero Carbon Humber pipeline to be applied for, when this is consented and operational, to enable the possibility of full carbon capture in the future.

1.3 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.

1.4 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) refueling 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.

1.5 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.

1.6 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.

The Purpose and Structure of this Document

1.7 This document sets out the Applicant's comments on the answers submitted by other parties to the Examining Authority's second written questions and further submissions received by the Examining Authority at Deadline 6.

1.8 The Applicant notes that there were several of the second written questions directed towards Enfinium, Cadent Gas, Openreach Limited and National Highways but that no response was submitted at Deadline 6. As such, no comment on those responses has been made in this document. Additionally, this document includes a table at Section 8 which address each of the prime development areas of the Project over which compulsory acquisition powers are sought, as requested from CAH1.

1.9 The document is structured as follows:

- Section 2: Environment Agency
- Section 3: AB Agri

- Section 4: UKWIN
- Section 5: Simon Nicholson
- Section 6: Amy Ogman
- Section 7: Carol Richardson

2.0 APPLICANTS' COMMENTS ON ENVIRONMENT AGENCY'S DEADLINE 7 SUBMISSION

2.1 Environment Agency sets out their position to Foul Water Drainage and further WQ responses in REP7-034.

2.2 The Applicant notes EAs confirmation that the updates to ES Chapter 3: Project Description [REP6-018] and Alternatives satisfactorily resolve their outstanding concerns regarding foul water drainage for the proposed development.

2.3 The EAs response to Q2.6.0.2 is also noted and the Applicant would refer the ExA to their response to this question in REP6-032.

3.0 APPLICANTS' COMMENTS ON AB AGRI'S DEADLINE 7 SUBMISSIONS

3.1 AB Agri's submission REP7-036 includes a response to the Applicant's Deadline 5 submission, the Applicants' responses to ExQ2 and a technical review of the proposed ERF.

Deadline 5 submission and ExQ2 responses

3.2 AB Agri raised concerns regarding full access around all buildings including the warehouse at all times, therefore, temporary acquisition of Plot 5-54 could compromise AB Agri's enjoyment of its land.

3.3 The Flood Risk Assessment (FRA) identifies the AB Agri warehouse as the only building in the industrial estate that may be at an increased risk of flooding due to the proposed development. A mitigation option described in the FRA involves the construction of a new flood wall and flood gate in the wharf to the west of AB Agri's site and across First Avenue.

3.4 The flood mitigation wall is currently proposed close to the boundary of the AB Agri site. This is to maintain clearance within the wharf area for the movement of vehicles, minimising any potential impact on existing and future operations within the wharf and to minimise the impact on First Avenue. Existing Open Reach telecommunication cables are also located within First Avenue and the area west of the AB Agri site (as shown in APP-074 Indicative Utility Diversion Drawings, Drawing No. NLGEP-BHE-XX-XX-DR-C-9105 Sheet 5). It is intended that an appropriate set-back of the proposed flood wall sub-base footing from these cables is allowed for. The wall and gate would likely need to be situated directly along the boundary in the location of First Avenue junction. This is to ensure that no structures impede into the junction and reduce the road width or impede visibility.

3.5 Construction of the flood wall and flood gate would be outside the ownership boundary of AB Agri's site, with the majority of the construction work being undertaken on the wharf side. Temporary access within Plot 5-54 is sought to allow, if necessary, the appropriate access required to construct the wall. The Applicant's understanding is that Plot 5-54 is an area of non-operational grassland, part of which falls within the fence line of AB Agri's land. Temporary occupation of this land should not cause interference to AB Agri's operations. If construction of the flood defence can be secured without the temporary possession of AB Agri land, this option will be taken. This will be confirmed post Decision due to further information required on the detailed design and construction methodology.

3.6 Appropriate measures required to minimise biosecurity and contamination risks during construction will be incorporated. Details of the design will be progressed during the Detailed Design stage and information shared with AB Agri.

3.7 The Applicant is not intending to interfere with or disrupt the ongoing operations of AB Agri's access via First Avenue and Second Avenue.

ExQ2 Responses

3.8 The Applicant has considered the concerns raised by AB Agri and conducted a preliminary biohazard risk assessment of its operations and the potential for causing Salmonella contamination of AB Agri's operations. The risk assessment considered existing AB Agri controls, controls proposed by the Applicant, the existing risk profile and the likelihood that the Project would add to an existing level of risk. The risk assessment considered how potentially contaminated RDF could be exposed to the environment and then took a source-pathway-receptor approach to look at possible transmission from aspects of the Project to the AB Agri facility, including the behaviour of pest species that could be involved in any transmission. The risk assessment considered transport (by road, rail and sea) of RDF as well as its end use in the ERF. The risk assessment also took account of the negative pressure environment in the tipping hall (discussed further below).

3.9 Based on the risk assessment the likelihood of the operating Project compromising AB Agri's biosecurity is assessed to be very small even without the application of a series of proposed measures, above and beyond compliance with the RDF CoP and rerouting RDF deliveries in the vicinity of AB Agri. The Applicant will require its RDF suppliers and hauliers to comply with the RDF CoP and routing requirements. There are no features of the Project that would act to materially increase the populations of avian and rodent pest species in the area. The ability of pest species to gain access to the RDF either in transit or after delivery to the tipping hall will be very limited. The manner in which RDF is transported (baled and wrapped, in sealed containers or in covered trailers) will minimise the possibility of material escaping (or 'leaking') while in transit. In the unlikely event of a spillage of RDF, e.g. in the event of a traffic accident, for AB Agri's operations to be put at risk would require all the following in combination:

- the spilled RDF to become exposed to the environment (less likely for baled/wrapped RDF);
- the spilled, exposed RDF to contain Salmonella contamination;
- no clean up taking place;

- for the contaminated, spilled, exposed RDF to be consumed by a pest species;
- in the event of consumption by rats (considering the size of home range and dispersal distances), for the contaminated, spilled, exposed RDF (left in situ as opposed to cleaned up) to occur in sufficient proximity (i.e. a few hundred metres) to the AB Agri facility (the majority of RDF movement is a much greater distance away); and
- in the event of consumption by birds, for the consumption of contaminated, spilled, exposed RDF to materially add to the existing level of continuous risk from birds that forage at landfill sites and then potentially transiting to the AB Agri facility.

3.10 The likelihood of the above sequence of already low-likelihood events all coming together is considered to be a very low risk. The movement of sealed or covered RDF on roads is therefore a low-risk activity for Salmonella transmission in the first place; the Applicant's proposed re-routing will reduce a low risk further.

3.11 It is the view of the Applicant that compliance with the RDF Code of Practice and the routing change to avoid proximity of transported RDF to AB Agri, will minimise any risks to AB Agri involved in transporting RDF. These commitments have been included in the Operational Environmental Management Plan and will therefore be secured by the DCO. In addition, the Applicant has committed to certain design considerations (regarding building design and external structure finished) in the Design Principles and Codes Document that will be secured within the DCO. The operation of the Project within the installation boundary will be regulated by the terms of the Environmental Permit from the Environment Agency and a more detailed risk assessment will be undertaken as part of the permit application, which may lead to additional measures as well as a formal Pest Management Plan. It is anticipated that all aspects of the delivery and handling of RDF set out in the RDF CoP that take place within the installation boundary will be covered by the terms of the permit, thus becoming a legal compliance matter for the Applicant. Any operational environmental management requirements that fall outside the remit of the Environmental Permit will be addressed by an Operational Environmental Management Plan (OEMP) (which will be approved by North Lincolnshire Council, with input from the Environment Agency) and is secured by DCO Requirement 4.

3.12 Having considered all relevant aspects of risk, the Applicant considers that its operation will not result in any material change to the current Salmonella contamination risk profile for the AB Agri facility.

Comments of technical review of the proposed ER

3.13 The Applicant has considered the technical review of the proposed ERF provided by AB Agri and Deadline 7. It is noted that the report is speculative and does not quantify any risk directly, but broadly states that there may be issues when the Project's controls fail. The main points of the report and the Applicant's response to these are set out below.

3.14 The technical review raises that the ERF could have an inability to maintain negative pressure due to two points. Firstly, that this could be an issue should the fast-acting doors be left open. The Applicant notes that the tipping hall for the project has a single door which is easier to maintain closed. The door would operate automatically, reducing the likelihood of an operator error. A second manual door may be provided to ensure closing of the door should the fast-acting door fail to ensure the sealed building is maintained. Secondly, the report set out that maintaining negative pressure could be an issue due to failure of the combustion air fans or failure of a combustion line. The Applicant notes that preventative maintenance would be carried out to ensure operation of the primary air fans, which would increase the resilience of the facility. The facility cannot operate without the primary air fans, as such maintenance of this equipment is crucial for commercial operation, not just from an environmental perspective. Additionally, the facility has three combustion lines. Co-incident failure of all three lines is unlikely. An extended common outage, for a turbine outage for instance, as discussed in the technical report can be accommodated by planning in advance and gradually reducing the bunker volume over a period of weeks, minimising the risk of stored fuel. During a prolonged outage, the fast-acting door/manual door can be closed to ensure the sealed building is maintained.

3.15 The technical report considers that spilling of waste into the tipping hall would introduce an increased risk of vermin. In response to this the Applicant sets out that the Project's bunker is sufficiently sized to allow for 5 days of storage without stacking of waste. Space for a trench in the waste, between the stored waste and the tipping face, has been allowed for to ensure that space is always available for tipping of waste. A section of inaccessible waste at the base of the bunker, as noted in the technical report, has also been allowed for in the bunker sizing (such that this volume does not constitute any of the 5 days of storage).

3.16 Finally, the technical report notes that spilling of waste from vehicles carrying loose material could occur. The Project has always discussed using sealed containers or bales to transport material, would reduce the risk of spillages of this kind occurring.

4.0 APPLICANTS' COMMENTS ON UKWIN'S DEADLINE 7 SUBMISSION

4.1 UKWIN has submitted their comments on responses to the ExA's ExQ2 [REP7-037] alongside a number of extracts from documents including Draft EN-1 [REP7-038], Draft EN-3 [REP7-039], Government Consultation Response on Draft Energy NPS [REP7-040], Keadby 3 Carbon Capture Equipped Gas Fired Generating Station Order 2022 [REP7-041] and Stoke on Trent Live incinerator article [REP7-042].

Policy

4.2 UKWIN has made a number of comments in its Deadline 7 submission [REP7-037] relating to the Applicant's position on the status of policy and any policy requirement to demonstrate need for EfW. The Applicant stated its position on the status of revised draft NPS EN1 and EN3 in its response to the Deadline 6 submissions (paragraph 6.13) [REP7-032].

4.3 There is a fundamental disagreement between the Applicant and UKWIN on the status of policy and the requirement to consider whether there would be any 'overcapacity' and so it is not considered helpful to reiterate points already made to the Examination. The Applicant's position is however summarised as follows:

4.4 As an NSIP, the project falls to be considered under the policies in the relevant NPSs (EN1 and EN3) – other policies can be important and relevant but are not determinative.

4.5 The Project is both an energy generator and treater of waste. The need for renewable and low carbon energy generation has never been clearer and NPS EN1 states that it is not for this examination to test this need, however it is an important and relevant consideration that this need has grown even stronger as a result of growing concerns about progress against legally binding commitments to reach Net Zero and energy stability and security issues (something which the Applicant has sought to demonstrate through its submissions).

4.6 There is no adopted policy requirement in NPS EN1 or EN3 to demonstrate a need for the waste treatment element of EfW, however, the Applicant has recognised that draft NPS EN3 is now relatively well advanced and so has provided significant levels of information to demonstrate that there will be no overcapacity in waste treatment through EfW.

4.7 UKWIN in REP4-042 draw attention to paragraph 2.5.70 of adopted NPS EN3, which states: *"The IPC should be satisfied, with reference to the relevant waste strategies and plans, that the proposed waste combustion generating station is in accordance with the waste hierarchy and of an appropriate type and scale so as not to prejudice the achievement of local or national waste*

management targets in England and local, regional or national waste management targets in Wales. Where there are concerns in terms of a possible conflict, evidence should be provided to the IPC by the applicant as to why this is not the case or why a deviation from the relevant waste strategy or plan is nonetheless appropriate and in accordance with the waste hierarchy."

4.8 This is not the same as requiring demonstration of need. The Applicant has demonstrated on a number of occasions that the Proposed ERF is compatible with the waste hierarchy and it has taken a very robust position that recycling targets will be achieved (notwithstanding that a massive step change would be required to meet them). The ERF is also located in an area which has been identified as a suitable broad location for waste treatment in the relevant Waste Local Plan (the North Lincolnshire Core Strategy).

4.9 The Applicant's position is therefore that it is fully compliant with NPS EN3 and the Waste Local Plan. This position is not disputed by NLC, who accept the principle of the need for an ERF on this site and that the development plan is not discouraging of this. Furthermore, NLC agree that the project will reduce the level of waste currently going to landfill in the North Lincolnshire area. The only ongoing areas of discussion relate to effects on the historic environment and operational noise, rather than the principle of compliance with local policies relating to waste (see final draft SoCG with NLC [REP6-026]).

4.10 It is clear that there is no moratorium on EfW and this is restated in the Government's response to consultation responses to draft EN3 (see REP7-032).

4.11 In any case, the Applicant has been very clear that it will accept binding requirements that the Proposed Development will only accept RDF. It will therefore not divert waste from recycling, reuse or prevention. Further information on this is provided in the Applicant's response to ExA's third written questions [PD-015] Q 17.0.1.

4.12 For clarity, UKWIN also dispute that RDF would otherwise go to landfill. To be clear, the Applicant's position is that RDF is comprised of waste that would otherwise go to landfill which has subsequently been processed so that it is compatible as fuel. RDF is comprised of material remaining following prevention, reuse and recycling (see Applicant's response to Q17.0.1).

Projections for residual waste arising and EfW capacity

4.13 UKWIN has made a number of comments in its Deadline 7 submission [REP7-037] relating to the Applicant's projections of residual waste as fuel arising and energy from waste capacity available, as provided in REP6-032. It is not considered helpful to reiterate points already made to the

Examination, and in this section the Applicant restricts its comments to a small number of areas where it feels a response is needed. This does not imply agreement the other points made by UKWIN.

4.14 The Applicant rejects UKWIN's claim that the 'base case' presented in REP6-032 is not consistent with UK Government waste targets. Our approach to projecting residual waste as fuel has been set out in REP6-032 (page 47) and further detail is provided in REP7-032 (paragraph 6.4). The Applicant's projection of residual waste as a fuel per capita in 2042 is 0.253te/capita. This compares with the Government target based on all residual waste of 0.287te/capita.

4.15 In response to UKWIN's comment on page 10 of REP7-037, the Applicant's projection methodology assumes total household waste generated (including that which is recycled) falls from 0.462te/capita in 2020 to 0.412te/capita in 2042. This is a linear reduction throughout and does not stop at 2030.

4.16 UKWIN's point 6 (page 11/12 of REP7-037) appears to confuse Coventry and Stoke. The Applicant assumes this is meant to refer to the Stoke-on-Trent facility, as UKWIN has also submitted a press article in relation to this facility (REP7-047). The press article confirms that the intention is to replace the existing facility at the end of this decade with a brand new facility. Any new facility would require planning consent and then funding in order to be built and will need to be assessed based on planning guidance in force at the time of application. This example reinforces the Applicant's position that it is reasonable to assume older non-R1 facilities will be closed when they are life expired. The Applicant's view is that when considering replacement options, many councils are more likely to wish to send residual waste to facilities equipped with carbon capture given that councils generally have their own climate change goals.

Carbon capture requirements

4.17 The Applicant's submission at Deadline 6 stated that there is likely sufficient space for full capture, in line with the Decarbonisation Readiness Requirements, and a drawing was provided to demonstrate this. However, there is a degree of uncertainty in this estimate, due to differing space requirements of different technology providers. There is much greater confidence in capturing the fossil portion of the carbon dioxide only due to the lower volume of fossil carbon, as stated in the response to the Second Set of Written Questions [REP6-032]. The Applicant compared the greenhouse gas emissions at Keadby 3 with those at NLGEP, noting that all emissions at Keadby 3 are fossil, hence the statement that capturing only fossil CO2 would match the philosophy at

Keadby 3. NLGEP demonstrates a carbon benefit without this expanded carbon capture and storage requirement, as demonstrated in APP-054.

4.18 The opportunity for connection into the Low Carbon Humber pipeline has developed post-submission of the DCO. We have amended our dDCO to include a section of the CO2 pipeline along the access road and are in discussions with the promoters of the Low Carbon Humber pipeline about future connection into their pipeline. If the carbon capture of the Project was expanded beyond its currently assumed size, CO2 would be exported to this pipeline for onward transportation and geological storage, which would be permanent sequestration. This would increase the carbon benefit of the project further, however this is dependent on consenting and construction of the Lower Carbon Humber pipeline which is outside of the project's direct control.

5.0 APPLICANTS' COMMENTS ON SIMON NICHOLSONS DEADLINE 7 SUBMISSION

5.1 Simon Nicholson has provided further comments [see REP7-045] following their submission of REP5-045. Following are comments in response to this document.

Comments relating to the Plumescape model

5.2 Simon Nicholson used the 'Plumescape' package to predict the impacts of emissions of oxides of nitrogen (NO_x) from the ERF stacks. Simon Nicholson confirmed that Plumescape is based on the Aermod dispersion model. Noted is that the EIA used the ADMS dispersion model. The two models are both similarly acceptable to the Environment Agency but will produce slightly different results.

5.3 The Plumescape model used NO_x emissions of 3 x 6.78g/s = 20.34g/s. This is confirmed to be correct.

5.4 The Plumescape model did not include the effects of wind turbines. This is noted, and this is not anticipated to have a material effect on the impacts, as the point of maximum impact occurs closer to the ERF than the wind turbines and in a different direction.

5.5 Simon Nicholson notes that the building orientation is North-South. The point is acknowledged that the EIA model is conceptual. However, the building downwash effects for the ERF stacks are negligible due to the building design versus the stack height, and this will not impact on the results.

5.6 Simon Nicholson noted the discrepancy in base height, with the EIA model being based on 120m, whereas in practice this will be 120m +4m, due to the raised floor height. The EIA model is therefore slightly conservative in this respect.

5.7 Simon Nicholson states that the EIA model does not include terrain effects. This is incorrect. Terrain was included, due to the presence of the river valley and nearby ridgeline.

5.8 Plumescape did not use Doncaster meteorological data, and the weather station used and the year(s) or data is not stated. The EIA model used 5 years of data from Doncaster and this is considered a reasonable weather station due to the proximity and similar land use to the project site.

5.9 The results of the Plumescape model are lower than those in the EIA. This would be expected as the EIA model included the ERF, boilers, back up generators, rail, road and ship sources, whereas Plumescape included only the ERF. Analysis of the Plumescape model results, identified that the Plumescape model identified negligible impacts for annual mean NO_x and nitrogen dioxide (NO_2)

when considering the appropriate significance criteria. This is in line with the EIA model which also identified Negligible impacts.

Other comments

5.10 A site-specific model for the River Trent has been used in the FRA, which takes into account local topography and existing local flood defences. The model incorporates two sources of data to represent the topography: 2011 LiDAR (compared against 2020 LiDAR with no noticeable differences); and 2016 EA survey of defence crest level. The model also takes into account sea level rises based on the EA Humber Extreme Water Level Study. This flood model has been discussed and agreed with the Environment Agency and NLC and confirmed as the most suitable to use for the FRA.

5.11 Additionally, Mr Nicholson provided some additional comments relating to the proximity principle. The proximity principle is implemented in England and Wales through the Waste (England and Wales (Regulations) 2011, Paragraph 4. The meaning of paragraph 4 (2) with respect to self-sufficiency in the UK is not changed by its exit of the European Union. The Government has not indicated that it intends to change its interpretation of the principles of proximity and self-sufficiency and therefore this assertion is entirely speculative.

5.12 The National Planning Policy Framework states that the planning system has three overarching objectives, in order to achieve sustainable development, the first of which is "*an economic objective - to help build a strong, responsive and competitive economy...*" (paragraph 8). Competition is healthy, and provides businesses with opportunities to invest, expand and adapt, and to choose services which are most attractive and fit for purposes. The Applicant cannot see how competition between providers in the waste market would "*encourage a greater volume of waste*", as Mr Nicholson suggests, nor how it would somehow be associated with "*fuel poverty*". 5.13 Referring to Mr Nicholson's requests that the Applicant respond to allegations that Mr Bradley said that 'the river and the rail are just a smoke screen as it [the rdf] will all be delivered by road anyway', the Applicant would reiterate that this was never said and that it is important for the project to have a multi-modal strategy to provide flexibility across river, road and rail. Bat surveys have been undertaken since 2018 and the reports have been submitted through the DCO process. The railway bridges were identified as potential bat roost locations but at that point in time no bat

boxes were recorded. The bat survey was a comprehensive analysis of actual bat activity and was reported within the ES documentation (see Appendix F of ES Chapter 10 [APP-058]).

6.0 APPLICANTS' COMMENTS ON AMY OGMAN'S DEADLINE 7 SUBMISSION

6.1 Further comments were submitted at Deadline 7 from Amy Ogman (REP7-043), outlining a number of concerns. These include concerns relating to operational noise, impacts on the setting of Flixborough Nunnery and outstanding reports on the Historic Environment.

6.2 Ms Ogman asks how the moderate adverse effect on the setting of Flixborough Nunnery identified in ES (section 8.1.2) can be mitigated. The main impacts will result from the changes brought about by construction of the new ERF facility at Flixborough Wharf, which will impact on the heritage significance of Flixborough Nunnery scheduled monument. The ES acknowledges that direct mitigation of this – in the sense of screening views of the new facility – is unlikely to form effective mitigation. However, the significance of Flixborough Nunnery to the local community can be greatly improved through a programme of enhancement, as proposed in Section 9.4 of the ES. The former medieval settlement at the site – including the remains of a medieval church - is invisible to the casual visitor. The creation of footpaths and information boards would considerably improve the amenity value of the site. Similarly work can be done to share the results of archaeological and documentary studies of Flixborough Staithe, that would further enhance understanding of the significance of the scheduled monument that overlooks it. Such enhancement would be in line with draft NPS EN-1 which encourages applicants to consider how they 'could make positive contributions to the historic environment' (para 5.9.14).

6.3 Regarding Ms Ogman's concerns relating to the Outstanding Reports on the Historic Environment, the historic environment reports to be submitted will not include any substantive divergence from the findings and proposed mitigation works already reported in the ES chapter. The findings that will be reported and the proposed works, as well as the timetable for delivery, have been discussed at length with NLC.

7.0 APPLICANTS' COMMENTS ON CAROL RICHARDSON'S DEADLINE 7 SUBMISSION

7.1 Carol Richardson has asked the following questions in her Deadline 7 submission [REP7-044]:

- What is the exact height of the perimeter wall?
- What is the extent of the visual barrier?
- When referring to the visual barrier it was once spoken of as a retaining/visual barrier. What is it retaining?

7.2 The Design Principles and Codes Document (REP7-008) was updated at deadline 6 to include the maximum and minimum heights of the visual barriers, these are set out within DC_ARC 5.02.

7.3 The visual barriers will be at least 3m and up to 4.5m and will be installed along the western and eastern edge of the development platform for the ERF. The indicative locations (extent) of the visual barriers are shown on the diagram included at Appendix 1 of the Design Principles and Codes document.

7.4 The exact height of the visual barriers will be determined at the detailed design stage; however, the detailed design must be in accordance with the design process and codes as stipulated by Requirement 3 of the draft DCO.

7.5 The visual barrier will be located on the edge of the development platforms, its purpose being to provide screening of ground level storage and activity rather than performing a 'retaining' function. Subject to detailed design there may be a requirement for a retaining wall to be constructed around the perimeter of the ERF development platform, upon which the visual barrier will be located. A retaining wall will provide the structural support required to raise the ERF development platform and accommodate the change in levels as shown on Figure 5.25 of the Design and Access Statement (REP6-009).

8.0 APPLICANTS' COMMENTS ON BRIAN OLIVER'S DEADLINE 7 SUBMISSION

8.1 A late submission was received by Brian Oliver on the 21st April. This submission set out Mr Oliver's concerns regarding noise and included a number of video clips which sought to give examples of noise currently experienced near to his property from the existing Port operations.

8.2 The environmental statement (ES) includes an assessment of noise (REP7-014) from proposed on-site project activities including loading/unloading at the Port. The assessment follows the methodology in BS 4142:2014, which takes into account existing background sound levels. A baseline sound monitoring survey was carried out as part of the assessment, in April 2021. Baseline sound levels are summarised in Section 6, with full details presented in Appendix B. It is acknowledged that noise from Port activities were the subject of a noise complaint investigated by the local authority in 2021, however, the local authority has confirmed that the baseline sound survey took place prior to the installation of a crane which was the subject of the investigation and that the monitored sound levels are therefore valid for use in the assessment. At Charmaine, a sound level of 39 dB, LA90 has been adopted for the operational noise assessment as the representative background sound level during the day, with a level of 37 dB, LA90 adopted as the representative background sound level during the night (Table 12).

8.3 Noise levels are predicted for a number of project activities (as described in paragraphs 8.5.1.3 to 8.5.1.7). Mr Oliver raised concerns that his property in Amcotts is not much more than 200 m from the site across a water body (the River Trent) which is acoustically reflective. As detailed in Section 5.3, a noise prediction model was used implementing the ISO 9613-2 prediction method. This method allows prediction points to be added to represent residential receptors at spatially accurate distances. The nearest receptor to the site in the north of Amcotts is Charmaine and this receptor has been included in the model. A further receptor has been added to represent receptors further south in Amcotts (Inglenook). The area of hardstanding surrounding the site as well as the river are modelled as acoustically hard, reflective surfaces. Elsewhere the ground is modelled as partly absorbent. The prediction method also assumes downwind propagation conditions to all receptors.

8.4 A level of 51dB, LAeq is predicted at Charmaine for the noisiest activity (RDF loading and unloading at the quay) which just exceeds the target level from BS 8233 for daytime external amenity space (e.g. gardens) of 50 dB, LAeq by 1 dB which is not a noticeable difference, resulting in a minor significant effect. This activity would occur in the daytime only. This predicted level is lower than the existing baseline level when the average noise level (LAeq) baseline (Table 12) is used. A 3 dB penalty is included to account for audible impulsive noise (i.e. 54 dB, LAr, Table 15), although it is

expected that noise mitigation could avoid this. Typically, averaged over the year, it is anticipated that less than 1 vessels per day (~ 0.8 vessels) will load or unload at the quay as a result of the Project, with an unloading duration of approximately 3 hours.

8.5 The project is committed to investigating noise mitigation measures to reduce noise as far as reasonably practicable, Examples (not exhaustive) of the measures which may be feasible / practicable and which will be explored are listed below:

- Tugmaster (used to move waste between quay/railhead and tipping hall)
  - Electric options are available.
- Reach stacker
  - Hybrid or fully electric options are available.
  - Soft landing systems. Software/sensor-based systems to minimise impact noise by automatically slowing the lowering speed close to a container.
- Crawler crane
  - Management measures – e.g. reduce speed of putting down a container, driver training.
- All above unloading equipment
  - Additional shielding around drive train (often stripped down at ports).
  - Exhaust silencers.
  - Driver training (low noise (eco) driving).
- Container ship
  - Management measures e.g. avoid use of loudspeaker.
  - Investigate use of shore power. Infrastructure could be implemented at quay to enable shore power. However, benefits would depend on 3rd party vessels being able to take advantage of it which is understood not to be widespread at present.

8.6 At night, a noise rating level of up to 42dB, LAr is predicted (Table 19) which includes noise from on-site sources (e.g. the ERF) and a vessel moored at the wharf. This is considered to result in a minor significant effect.

8.7 Noise during construction works on the main site is assessed in Section 8.1 of the ES noise assessment. Noise criteria are derived from BS 5228, using the ABC method which takes into account the existing noise level. In Amcotts, the most stringent category ('A') criteria are used, which results in a criterion of 65 dB, LAeq,12h for works taking place during the daytime. The assessment predicts a noise level of up to 62 dB at Charmaine (Table 13), which does not exceed the daytime criterion. Most construction work is expected to take place during daytime core hours. However, the ES includes an assessment of construction noise continuing into the evening at the same intensity as the daytime works. The evening criterion for category 'A' is 55 dB, LAeq,4h. Therefore, the predicted noise level of 62 dB exceeds this criterion by 7 dB, resulting in a large

impact magnitude. As stated, most construction work is expected to take place during daytime core hours. Any works which need to take place outside of core hours would be discussed and agreed with NLC to identify works unlikely to cause significant effects. The significance of construction effects are therefore assessed as moderate at most.

8.8 Lead contractors will develop and submit a Construction Noise and Vibration Management Plan (CNVMP) as part of the Construction Environmental Management Plan (CEMP) for agreement with the local planning authority. The CNVMP will set out measures to minimise construction noise and vibration.