



Planning Act 2008

# North Lincolnshire Green Energy Park

Volume 9

9.25 Applicant's Responses to  
Deadline 5 submissions

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## GLOSSARY

Acronym	Full term / Description
AGI	Above Ground Installations
BEIS	Department for Business, Energy & Industrial Strategy
CBMF	Concrete Block Manufacturing Facility
CCS	Carbon Capture and Storage
CCTV	Closed Circuit Television
CCUS	Carbon Capture, Utilisation and Storage
CHP	Combined Heat and Power
CO2	Carbon Dioxide
CPR	Collection and Packaging Reform
DCO	Development Consent Order
DEFRA	Department for Environment, Food and Rural Affairs
DHPWN	District Heating and Private Wire Network
EA	Environment Agency
EfW	Energy from Waste
ERF	Energy Recovery Facility
ES	Environmental Statement
ETS	Emissions Trading Scheme
EV	Electric Vehicle
FRA	Flood Risk Assessment
GHG	Greenhouse Gas
GLNP	Greater Lincolnshire Nature Partnership
H2	Hydrogen
HLCP	Humber Low Carbon Pipeline
NLC	North Lincolnshire Council
NLGEP	North Lincolnshire Green Energy Park
NPS	National Policy Statement
NPS EN-3	National Policy Statement for Renewable Energy
NSIP	Nationally Significant Infrastructure Project
PRF	Plastic Recycling Facility
RAIN	Residents Against Incinerators
RHTF	Residue Handling and Treatment Facility
SAF	Sustainable Aircraft Fuel
SoCG	Statement of Common Ground
SuDS	Sustainable Drainage Systems
UKWIN	United Kingdom Without Incineration Network



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## 1. INTRODUCTION

### Overview

- 1.1 This report sets out North Lincolnshire Green Energy Park Limited's (the Applicant's) comments on the responses to Deadline 5 submissions as well as a response to AB Agri Deadline 4 submission. This includes responses to submissions from Simon Nicholson, AB Agri, North Lincolnshire Council (NLC) and Environment Agency.

### 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 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 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 (H<sub>2</sub>) 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.

1.5 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 response to AB Agri's Deadline 4 submission, alongside responses to Deadline 5 submissions where a response is considered necessary. Where the Applicant has responded previously to the points raised at other deadlines, or where the submission is made for information purposes, no response has been provided in this document. As such, this document sets out responses to submissions from Simon Nicholson, AB Agri, North Lincolnshire Council and the Environment Agency.

## 2. SIMON NICHOLSON

- 2.1 The response below specifically addresses Simon Nicholson's submissions at Deadline 5 [REP5-044 and REP5-045].
- 2.2 Submission REP5-044 raised the following matters which are considered below:
- Concerns regarding traffic data and flow.
  - Comments regarding the Air Quality assessment.
  - Concerns regarding the temporary acquisition of AB Agri's land.

### Transport Network

#### *Concerns regarding the traffic data being based on assumptions/computer modelling*

- 2.3 The baseline traffic data used in the transport/environmental assessments is considered robust for assessment purposes and this has been agreed with the local and strategic highway authorities (NLC and National Highways).
- 2.4 Observed traffic counts were undertaken in October 2020 but given the travel disruption during that time as result of the COVID pandemic, this 2020 traffic data was compared to pre-COVID traffic flow data and appropriate adjustment factors were agreed with NLC and National Highways in order to give an uplifted baseline. This approach ensures that a worst case has been adopted for assessment purposes.
- 2.5 A similar approach was agreed as part of the Keadby3 DCO application recently and accepted by the Examiner in December 2022. As part of this Keadby3 examination, NLC confirmed that whilst some traffic flows across North Lincolnshire have reverted to pre-pandemic levels, others are still significantly lower.

#### *Concerns regarding effect on traffic flow and data used*

- 2.6 All approaches / highway links at the Frodingham Grange Roundabout (adjacent to Tesco) have been included in the assessment (A18 East and West plus A1077 North and South) as well as at the Queensway Roundabout situated further east along the A18 (junction with A159 Ashby Road) – this data indicates that during operation the daily increase in traffic on the A18 to the east of the A1077 (which connects towards the Berkey Circle / roundabout) is shown to be 107 total vehicles (two way), which equates to a 0.4% increase when compared to the future 2028 baseline traffic flow

(28,099 total vehicles AADT) – given the moderate baseline traffic flows along the A18, this increase is not considered significant.

- 2.7 The % changes quoted in Para 8.1.1.14 of APP-061 relates to the construction phase. The data used in this assessment is based on the month-by-month breakdown of anticipated construction vehicle trips throughout the anticipated construction programme (as set out in Section 8.1.1 of that document) and the assessment includes all of the construction traffic anticipated. It also includes the implementation of the outline Construction Logistics Plan (Appendix D of Chapter 13 of the ES [APP-061], which includes measures to help mitigate the environmental impact of construction activities. The impact on the local highway network during the demolition and construction phase is shown to result in a temporary adverse effect of negligible to minor significance.
- 2.8 It is noted also that the Applicant seeks to maximise the percentage of materials during construction and operation that would come by river and rail (similarly for transporting operational freight) which has the potential to reduce the number of vehicle trips used as part of the assessment.

## Air Quality

- 2.9 The air quality impact assessment considered the impacts to air quality arising from traffic accessing the Project during operation. A tiered screening approach was used that considers a range of factors including: the Project traffic numbers; the existing baseline traffic numbers; baseline air quality and the proximity of receptors. These factors are considered together against screening thresholds to determine the possibility of significant impacts arising. The screening thresholds used are set out by the Institute of Air Quality Management (IAQM) and the UK Government Department of Environment, Food and Rural Affairs (Defra). These are designed to allow projects to consider traffic related impacts and identify where the traffic generated by a Project is sufficiently small as to pose no significant risk of the emissions resulting in air quality standards being exceeded at receptors. This approach is taken to allow Projects a pragmatic means of excluding roads where traffic impacts are not important to avoid unnecessary assessment work. When considering locations where traffic related emissions are exceeding air quality standards in the UK these are characterised by heavily trafficked roads, congested urban areas, and areas with high baseline, none of which are the case for the Project.
- 2.10 The air quality impact assessment does consider PM10 and PM2.5 emissions from the ERF and this is clearly stated. In the assessment the worst assumption is made that the emitted particles are all within the PM10 and PM2.5 size range. The dispersion modelling and impact assessment predicts the potential impacts of these off-site and compares the predicted impacts to the air quality



standards for PM10 and PM2.5 in light of the baseline conditions. The assessment concluded negligible impacts using guidance from both the IAQM and Environment Agency. In terms of PM1, the regulatory position is such that the air quality standard for PM2.5 is sufficient to protect human health from the effects of PM1 (PM1 being a subset of PM2.5) and that there is no need for a separate air quality standard specifically for PM1. PM10 and PM2.5 are not considered to be a pollutant of interest for sensitive ecology, as plant respiration and transfer of essential gases is passive, rather than in humans where exchange is active (breathing), and as such the opportunity for PM10/PM2.5 to cause harm to plants at concentrations that are typically encountered in the environment is negligible.

### Proximity Principle

2.11 The proximity principle is implemented in regulation through Schedule 1 of the Waste (England and Wales) Regulations 2011 (the 'Regulations'), of which Part 1 relates to the objectives of waste prevention programmes and waste management plans. Those relating to the principles of self-sufficiency and proximity are set out as follows, where the Applicant has underlined key text relating to RAIN's submission.

*"4. - (1) To establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including, where such collection also covers such waste from other producers, taking into account best available techniques.*

*(2) The network must be designed to enable the European Union as a whole to become self-sufficient in waste disposal and in the recovery of mixed municipal waste collected from private households, and to enable the United Kingdom to move towards that aim taking into account geographical circumstances or the need for specialised installations for certain types of waste.*

*(3) The network must enable waste to be disposed of and mixed municipal waste collected from private households to be recovered in one of the nearest appropriate installations, by means of the most appropriate technologies, in order to ensure a high level of protection for the environment and human health.*

*(4) This paragraph does not require that the full range of final recovery facilities be located in England or in Wales or in England and Wales together."*

2.12 The key text underlined emphasises that whilst self-sufficiency is an objective for the European Union, and now the United Kingdom as a whole, it is not a principle to be applied at the local, the

regional nor the Devolved Administration level. The proximity principle can be seen in paragraph 3 to require that waste is recovered in one of the nearest appropriate installations and by means of the most appropriate technologies.

- 2.13 There is no obligation for waste to be managed as close as possible to its origin, since that might be inefficient, stymie competition and there is unlikely to be common ground on the precise definition of proximity. At the same time, waste should be managed by an appropriate technology in an appropriate installation, which demands consistency with the waste hierarchy, the duties of waste producers in respect of which are also laid down in the Regulations. As technology develops, one can expect the understanding of what is appropriate also to evolve, supporting the need for waste to travel to more efficient and lower carbon facilities.
- 2.14 Examples of long-distance transport of waste by rail for appropriate management, for example West London's waste carried by train to the Suez Severnside EfW plant, have been presented by Mr Gallop.

#### **Submission REP5-045**

- 2.15 Submission REP5-045 included plumes created for Mr Nicholson by a third party alongside a cover note which set out details of the data used, and questions areas of the model used by the Applicant. Below are the Applicants responses to and comments on Mr Nicholson's submission REP5-045.
- 2.16 The Applicant confirms that the air quality impact assessment undertaken for the DCO application was undertaken on the basis of 760,000 tonnes/annum RDF usage. It is noted that Mr Nicholson's submission provides contour plots created by a tool called 'Plumescape' (as noted on the contours themselves). There is no reference online to this model or simulation tool. As such, the validity of the model cannot be verified. The Environment Agency do not advocate any one dispersion model and will accept any validated model; in practice this is the USEPA Aermom model or UK developed ADMS model. As 'Plumescape' cannot be reviewed, confirmation that is suitable for use cannot be made. No details of the model set up have been included in the submission and therefore whether the model has been correctly set up cannot be verified. There are multiple inputs required to the model and how these are treated in the model will substantially affect the outcome, noting the comment on needing to use a validated model. Data required to be correctly entered includes:
- stack emission parameters
  - pollutant emission rates
  - terrain effects

- building downwash
- suitable meteorological data

NOTE: Of note is that the ERM model also included wind turbine wakes as these are present to the north

2.17 On the contour plots the pollutant of interest shown is 'nitrogen oxides'. The human health air quality standards are for 'nitrogen dioxide'. Not all 'nitrogen oxides' converts to 'nitrogen dioxide' in the atmosphere and a conversion factor needs to be applied.

2.18 The contour plots are not labelled in a manner to understand what is being shown. It is unclear whether these are the 1 hour maximum, 1 hour 19<sup>th</sup> Highest or Annual Mean. Looking at the shape of the contour plots, the Applicant would assume that this is the Annual Mean. Assuming that the plots are the Annual Mean, then the 'nitrogen oxides' value shown needs to be multiplied by a factor of 70% to calculate the nitrogen dioxide.

2.19 As noted in Chapter 5, Table 8 of the Environmental Statement [REP4-009] the significance criteria for annual mean nitrogen dioxide are as follows, noting that baseline nitrogen dioxide in this area is 10.2µg/m<sup>3</sup>, and therefore <75% of the air quality standard. These criteria are based on those in the Institute of Air Quality Management 2017 Planning Guidelines:

- Where Baseline <75% of the air quality standard:
  - Process Contribution <1% of the air quality standard = Negligible
  - Process Contribution 2% to 5% of the air quality standard = Negligible
  - Process Contribution <6% to 10% of the air quality standard = Minor
  - Process Contribution > 10% of the air quality standard = Moderate
  - Process Contribution > 10% of the air quality standard AND PEC >95% of the air quality standard = Major
- In plot 1 PC = 0.82 µg/m<sup>3</sup> nitrogen oxides = 2.1% of the air quality standard (1.4% if converted to nitrogen dioxide)
- In plot 2 PC = 0.72 µg/m<sup>3</sup> nitrogen oxides = 1.8% of the air quality standard (1.3% if converted to nitrogen dioxide)
- In plot 3 PC = 0.75 µg/m<sup>3</sup> nitrogen oxides = 1.9% of the air quality standard (1.3% if converted to nitrogen dioxide)

- In plot 4 PC = 0.98  $\mu\text{g}/\text{m}^3$  nitrogen oxides = 2.5% of the air quality standard (1.7% if converted to nitrogen dioxide)

2.20 For context, ES Chapter 5 – Air Quality [REP4-009] Table 12 presented a predicted nitrogen dioxide annual mean PC = 1.91  $\mu\text{g}/\text{m}^3$ , 4.8%, noting that this also includes emissions from shipping, rail, road traffic back-up boilers and back-up generators.

2.21 Therefore, if the modelling provided in REP5-045 has been done correctly:

- The plots indicate that impacts are negligible with all of the different meteorological datasets considered.
- If the 'nitrogen oxides' presented is actually already converted to 'nitrogen dioxide' the impacts remain negligible.
- The impacts are lower than the nitrogen dioxide annual mean presented in the EIA (notwithstanding that the contour plots in the letter are likely to be only the ERF emissions).

### 3. AB AGRI

- 3.1 At Deadline 5, AB Agri provided a statement that they wouldn't be attending the Compulsory Acquisition Hearing and that their position is set out in the Post-Hearing Statement submitted at Deadline 4 of which they await the Applicant's response. A response to AB Agri's Deadline 4 submission was not provided at Deadline 5 as the Applicant had a meeting with them the following week to discuss various points within their submission. Following that meeting, the Applicant is now responding to this submission.
- 3.2 At Deadline 4, AB Agri provided a post hearing submission which set out the written submission of the oral case made and post-hearing notes requested at the hearing held on 26 January 2023. The issues raised included the following:
- Concerns regarding waste and the lack of control over the space between the two plants which gives rise to the risk of transmission of salmonella;
  - Concerns regarding the flood model use to inform the Flood Risk Assessment;
  - Concerns regarding the temporary acquisition of AB Agri's land.
- 3.3 NLGEP's response is set out under these subheadings below.

#### Responses to issues relating to RDF

- 3.4 AB Agri has expressed concern that the raw materials intake of their plant is located in close proximity to the proposed ERF and the RDF delivery route. Risks to the biosecurity of AB Agri's plant, particularly potential salmonella contamination from waste handling (with potential transmission by rats and birds), are of significant concern to them. AB Agri has stated that the following mitigation measures are necessary:
- A condition requiring RDF to exclude material of animal origin;
  - A condition requiring all RDF to be delivered in sealed containers and wrapped/sealed bales;
  - A condition requiring an Operational Environmental Management Plan to include wheel washing and disinfectant regime for RDF delivery vehicles, and
  - A routing agreement that HGVs do not drive past AB Agri.
- 3.5 Without these measures it is AB Agri's view that their operations will be substantially prejudiced unless wide ranging and costly measures are applied on their own site to mitigate a possible increased biosecurity risk during operation of the NLGEP Project.

- 3.6 It is firstly important to note that the Project is not a 'waste handling facility'. RDF will be delivered to the Project and only be exposed once inside a controlled negative pressure environment, soon after which it will be combusted at high temperature in the process.
- 3.7 RDF will arrive from contracted suppliers and be delivered to the ERF tipping hall. RDF will arrive at the site via three transport modes:
- via road transport on the new access road entering the site from the south;
  - via rail to the new rail sidings and thence to the tipping hall transported in containers on internal Project roads and drawn by 'slave' vehicles (which do not leave the Project site and use public roads); and
  - via the existing wharf and thence to the tipping hall transported via internal ERF roads by the same slave vehicles that move the rail transported RDF.
- 3.8 For any of the above transport modes the RDF could be delivered in two forms:
- baled and wrapped in multiple layers of polythene or other plastic wrapping; or
  - bulk RDF compacted into covered/fully-enclosed containers.
- 3.9 In addition, by road from the south only, some RDF will arrive carried in covered trailers e.g. with a walking floor.
- 3.10 Therefore in summary; deliveries via rail will be in closed containers, by ship will be in closed containers or baled, and by road either of the aforementioned or in covered trailers.
- 3.11 The Applicant will contractually require its suppliers to adhere to the Refuse Derived Fuel - Code of Practice. As set out in Document 9.17 in response to AB Agri's Written Representation, where the transport and handling of RDF is concerned, the Applicant will operate the Project in accordance with the Refuse Derived Fuel - Code of Practice (RDF CoP) (Version 1, October 2017) prepared and published by the RDF Industry Group. The purpose of the RDF CoP is to share good practice across the industry and provide confidence to regulators regarding the various aspects of producing, handling and transporting RDF. In the course of preparing the RDF CoP, inputs were provided by the Environment Agency (EA), Department for Environment, Food and Rural Affairs (Defra), Natural Resources Wales (NRW), Scottish Environment Protection Agency (SEPA), the Food Standards Agency (FSA) and the Advisory Committee on Animal Feedingstuffs (ACAF).
- 3.12 The RDF Code of Practice covers all aspects from the waste arriving at a waste transfer station through to it being received at an energy recovery facility, i.e. its scope covers the full range of

activities involved in RDF being transported by river, rail, or road to the NLGEP and its unloading at the facility.

- 3.13 It is worth emphasising the role of 'Duty of Care' in the whole process. All operators in the waste supply chain must comply with Duty of Care (DoC) requirements. In England DoC is based on Section 34 of the Environmental Protection Act (EPA) 1990 and regulated by the Environment Agency and local authorities. Operators have a legal responsibility to ensure that waste is produced, stored, transported and treated/disposed of without harming human health or the environment.
- 3.14 The transportation of RDF within England must therefore be undertaken in compliance with DoC, and this includes specific requirements for waste carriers. Waste carriers must be registered, and all movements of waste must be covered by a written description of the waste, e.g. waste transfer note, which can be a paper copy or an electronic DoC certificate.
- 3.15 The main elements of DoC that relate to RDF transportation of RDF include:
- preventing the escape of waste, especially regarding the careful transportation of wrapped bales of RDF to prevent damage to the wrapping; and
  - describing the waste accurately to ensure it is handled in an appropriate manner.
- 3.16 The number of layers of plastic wrapping required to meet these recommendations will vary depending on the quality of the wrapping process, the thickness of the plastic film and the amount of handling that the bales will be subjected to. A minimum of six layers is typically applied for non-containerised RDF that is being handled multiple times through the supply chain; however, the precise number of layers will be ultimately determined by the requirements of the hauliers and the off-takers involved. The Applicant is therefore able to specify such requirements to its suppliers.
- 3.17 To reduce the potential for nuisance (litter and odour), operators are required to ensure that RDF is wrapped or containerised:
- sufficiently to prevent the loss of waste materials and littering during storage and transport;
  - sufficiently to prevent the leaking of leachate;
  - sufficiently to prevent fly infestation and access by vermin;
  - in a way that meets any conditions and specifications set out in the contract with the off-taker; and

- in a way which makes it easy to handle and store.

- 3.18 The risks involved in the transportation of RDF are therefore considered minimal. The RDF will be sealed or covered against contact with water (i.e. rainfall). RDF material will not be able to 'escape' from a transported load. Transported RDF, even if a vehicle is momentarily stationary, will not be accessible to rats or birds.
- 3.19 Once the RDF arrives at the Energy Recovery Facility it will be delivered into the tipping hall and then moved to the bunker prior to being combusted. Only at this point will it be exposed to the elements. The tipping hall will be maintained at negative pressure meaning that dust, aerosols or even odorous gases cannot be emitted but will instead be drawn through the ERF into the combustion process. Any pathogens, such as salmonella, present in the RDF will not survive the combustion process.
- 3.20 To seek to further address AB Agri's concerns, the Applicant is in the process of undertaking a preliminary risk assessment to assess the possible risks of rats and birds entering the tipping hall, contacting RDF material containing salmonella and then transmitting the contamination to AB Agri. The assessment is based on the assumption that RDF could be a significant source of salmonella. However, it should be noted that based on a review of the readily available scientific literature by the Applicant there is little evidence to suggest that this is the case. Salmonella has been measured in soils around landfills and in municipal wastewaters so it is prudent to assume its possible presence in RDF. However, it is reasonable to state that RDF is probably at the lower end of the scale of significant sources of this pathogen.
- 3.21 Regardless, the Applicant has reviewed a number of mitigation/risk reduction measures relating to vermin control at the tipping hall that could be applied and these are summarised below.
- 3.22 The Applicant will contract a specialist pest management company. The precise methods of pest control will be determined by local circumstances and a risk assessment undertaken as part of the Environmental Permit application to the Environment Agency. A standard condition on a permit deals with pest control and provides that 'the activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site'. If necessary, the operator of the ERF will need to put in place a pest management plan under the permit to meet this condition. At this stage it is thought the measures are likely to be based on the following three principles.



- Physical: physical pest control is the process of trapping and exterminating or removal of pests to eliminate them from an environment or excluding them through design of buildings etc.
- Chemical: chemical pest control is widespread and includes targeted baited poisons
- Biological.

3.23 More specifically for birds there are a number of approaches such as the following.

- Falconry, which is still considered the gold standard.
- Lasers, using green laser beams unsettles birds and, while harmless dissuades them from using an area. Laser bird deterrents can be used to scare and repel all types of pest bird species including pigeons, gulls, starlings and Canada geese.
- Propane cannons are effective but not recommended here due to noise sensitivity.

3.24 For rats there are also a number of approaches. Most importantly is to exclude rats from buildings through design, including the following approaches all of which can be included in the detailed design of the Project:

- eliminate any gaps around pipes etc, as rats only need a gap of 15mm to gain entry to a structure;
- post-construction search for any potential entry points and seal these up with wire wool embedded in quick-setting cement;
- focus on low level gaps first as these are the most likely areas for rats to enter;
- maintain checks around pipes and windows;
- ensure that drain inspection covers are in a good state of repair and any disused pipes are sealed off;
- paint walls in high gloss to prevent scaling walls with rough surfaces.

3.25 Other deterrent and control measures for rats include:

- sonic noise deterrent; and
- baited traps and poison.

3.26 In addition to the above further controls include the following:

- regular monitoring of boundary fences and building exteriors;
- camera surveillance;
- spiked surfaces to prevent bird roosting; and
- good site housekeeping and domestic/office refuse control outside the tipping hall and across the site in general.

3.27 All pest control measures will be incorporated into the Environmental Management System for the Environmental Permit and the Operational Environmental Management Plan as required. In addition to the controls the Project site HSE function will have responsibility for ensuring that staff are appropriately briefed and trained, and that monitoring and inspection take place on a daily basis.

3.28 The preliminary risk assessment will consider the various measures noted above, committed to as required in an update to the Operational Environmental Management Plan, together with the stringent controls that AB Agri already adopts at their operation.

3.29 In regard to the mitigation matters specifically raised by AB Agri, the Applicant's position is set out below.

<b>Matter raised by AB Agri</b>	<b>Applicant response in brief</b>
A condition requiring RDF to exclude material of animal origin.	This is not practicable as material of animal origin cannot be excluded from RDF. Since RDF is exposed to the environment for the first time in the tipping hall and with other controls in place the possible presence of material of animal origin in the RDF would not change the risk profile.
A condition requiring all RDF to be delivered in sealed containers and wrapped/sealed bales.	RDF will be delivered to the tipping hall in wrapped/sealed bails and sealed containers with the exception of some road deliveries by covered trailer with walking floors. The latter will only arrive from the south via the new access road, will not attract or contact pest animals while in transit and as the first time the RDF they carry is exposed to the environment is in the tipping hall using such vehicles will not change the risk profile. This will be secured in the OEMP and requirement 4 of the dDCO.
A condition requiring an Operational Environmental Management Plan to include wheel washing and disinfectant regime for RDF delivery vehicles.	A wheel washing and disinfection regime will be considered in the course of the Environmental Permitting process and based on a risk assessment. It should be noted that no vehicles will pass the AB Agri facility and the only

Matter raised by AB Agri	Applicant response in brief
	vehicles to use public roads will be those accessing the ERF via the new access road to the south.
A routing agreement that HGVs do not drive past ABN.	The Applicant has committed to no vehicles carrying RDF using First Avenue. This will be secured in the OEMP

3.30 At this stage it is the view of the Applicant that compliance with the RDF CoP, and the routing change, will minimise any risks to AB Agri involved in transporting RDF. The operation of the Project will be regulated by the terms of the Environmental Permit from the Environment Agency, specifically through a Pest Management Plan. It is anticipated that in addition to a Pest Management Plan, aspects of the delivery and handling of RDF set out in the RDF CoP will be covered by the terms of the permit where they take place within the permit 'installation boundary', thus becoming a legal compliance matter for the Applicant. Any operational environmental management requirements that fall outside the remit of the Environmental Permit, including the manner in which RDF is transported to the site, will be addressed by an Operational Environmental Management Plan (OEMP) (which will be approved by North Lincolnshire Council, with input from the Environment Agency) as secured by DCO Requirement 4. The OEMP will also incorporate relevant aspects of the RDF CoP as well as specifying the routes to be adopted by vehicles transporting RDF in the vicinity of the Project Site and AB Agri, see proposed plan at Appendix A.

### Response to issues relating to the flood model

3.31 AB Agri have also raised concerns regarding the resolution (coarseness) of the flood model used to inform the Flood Risk Assessment (FRA) and it not appropriately picking up flood routes through the industrial estate, reporting flood levels to an accuracy of only +/- 25mm rather than a typical acceptance of +/-5mm by the Environment Agency (EA). Similarly, it is considered by AB Agri that the model is not picking up potential overtopping at the wharf and therefore underestimating the flood risk caused by the proposed development to the AB Agri site.

3.32 The hydraulic model used in the FRA 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. This data was included in the North Lincolnshire Council (NLC) model that the NLGEP model was based upon, and alterations to this base data was not made. The purpose of the NLGEP flood model was to ascertain the key flood mechanisms across the wider site to establish

the overall impact of the proposed development with the model being developed and agreed in consultation with the EA.

- 3.33 Information on the estimated design flood event level in the River Trent in the location of the dock was shared with AB Agri on 9th January 2023. Further analysis of potential flood routes if the wharf were to overtop was shared with AB Agri on 30th January 2023 following Issue Specific Hearing (ISH) No. 3.
- 3.34 The analysis, based on 2020 LiDAR data, indicated that it is unlikely during an overtopping event (which would occur for less than one hour) to flood to depths that would overtop the grass embankment that currently exists on the north side of First Avenue around the AB Agri site. The breach scenario immediately south of the wharf considers ingress from the river over an approx. 3.5 hour duration and therefore is considered a worst case scenario when informing potential flood mitigation in the vicinity of the AB Agri site.
- 3.35 To confirm the level of the wharf and existing defences along the east bank along the site boundary, the Applicant will undertake a ground topographic survey as part of the next stage of design. This survey data, along with the final proposed finished levels of the railway line across the wharf and development, will then be input into the detailed hydraulic flood model used to carry out the detailed design. This will ensure that the flood mitigation measures being proposed around the AB Agri site are set at the appropriate level and modified where needed. The modelling results will also be used to inform the flood evacuation and management plan. The detailed flood modelling undertaken in the next stage of design will be undertaken in consultation with the EA, based on their latest flood model currently being developed and results and progress will be shared with AB Agri during the process.
- 3.36 During ISH No. 3 and in their Written Response at Deadline 4, the EA confirmed that at this strategic stage of design, the model is acceptable at this resolution. At the more detailed design stage, a finer resolution of the model would be expected, particularly to understand the risks around the wharf area. Based on the high-level assessment undertaken by the Applicant, the EA confirm that there is sufficient level of protection for the AB Agri site at this stage and do not have concerns that the risk cannot be mitigated at the detailed design stage.
- 3.37 AB Agri state in their post-hearing written response dated 7 February that detailed flood modelling/assessment and flood mitigation measures, including physical works, to be informed by the detailed flood risk assessment, are secured by the DCO as a pre-commencement requirement.

As submitted in Deadline 4, the draft DCO Schedule 2 Requirements Part 1 was updated to include the following as discussed and agreed with the EA:

*12.—(1) No part of the authorised development may commence, save for the preliminary works, until a detailed flood mitigation strategy, including the flood defences forming part of Work No. 13, an implementation timetable and long-term maintenance arrangements, has for that part, been submitted to and approved by the relevant planning authority in consultation with the Environment Agency.*

3.38 It is considered that the above requirement addresses AB Agri's concerns.

### **Response to issues relating to Temporary Acquisition of land**

3.39 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. They also raise concerns regarding the construction works and activities within AB Agri's site in extremely close proximity to the raw material intake will significantly increase the biosecurity risk of the site even with a construction environmental management plan in place.

3.40 The 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. The increase in risk would be during a potential 50m wide breach of the existing EA defences during an extreme tidal event (1 in 200 year event, or an event with a 0.5% chance of happening in a given year). As such, the FRA outlines three different flood mitigation options to reduce this potential increase to the site. One of the options includes a Flood Warning and Evacuation Plan that could be developed and managed by the Applicant that could incorporate temporary flood mitigation measures if required but that will allow safe evacuation of any users at the site including the AB Agri site. This option would negate the need to undertake any construction in close proximity. This option can be discussed with AB Agri once the outputs of the detailed flood modelling is undertaken if it is to be preferred.

3.41 The other two options outlined in the FRA include modifications to the land levels along First Avenue or a new flood wall and flood gate to the west side of AB Agri's site and across First Avenue. Modifications to the road could potentially be a very disruptive option and therefore this is the least favoured. Construction of a new 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.

- 3.42 The Applicant is not intending to interfere with or disrupt the ongoing operations of AB Agri's access via First Avenue and Second Avenue. 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, occupation of which should not cause interference to AB Agri's operations. Access along the grass verge in Plot 5-54 may be required to secure any fittings on both sides of the wall and gate. It is unlikely that access would be required beyond the existing fence line (subject to confirmation from the main contractor once appointed) and therefore would not impede the existing access path that surrounds the building. Therefore, access around the warehouse would not be limited at any point due to the proposed works.
- 3.43 The flood mitigation wall is currently proposed close to the AB Agri site to maintain clearance within the wharf area for movement of vehicles, minimising any potential impact on existing and future operations within the wharf and to minimise impact on First Avenue. As shown in APP-074 Indicative Utility Diversion Drawings, Drawing No. NLGEP-BHE-XX-XX-DR-C-9105 Sheet 5, within First Avenue and the area west of the AB Agri site, existing Open Reach telecommunication cables are located (information shared with AB Agri in January 2023). It is intended that an appropriate set-back of the proposed flood wall sub-base footing from these cables are allowed for. It is likely that the wall and gate would 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.
- 3.44 Temporary access within Plot 5-54 is sought to allow, if necessary, the appropriate access required to construct the wall. If construction of the flood defence can be secured without the temporary possession of AB Agri land, this option will be taken. 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.

#### **4. NORTH LINCOLNSHIRE COUNCIL**

- 4.1 North Lincolnshire Council provided a response to the Rule 17 letter at Deadline 5.
- 4.2 Within this they note that it has been agreed with the Applicant that a more refined approach to the designation of operational land will be investigated with the aim of reaching an agreed position. The Applicant has amended Article 43 of the dDCO for Deadline 6 to address this and the Applicant will continue to seek to agree the wording with NLC and reflect it in the SOCG.
- 4.3 Additionally, within this Rule 17 letter response NLC confirmed their acceptance to the Applicant's proposed approach to discharge domestic water to Severn Trent Water and that a packaged treatment plant is no longer required by the Project. NLC notes that ES Chapter 9: Water Resources and Flood Risk should be updated to reflect the updated approach The Applicant has done so at this deadline.

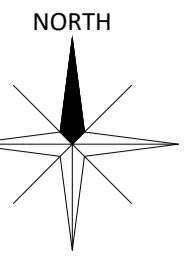
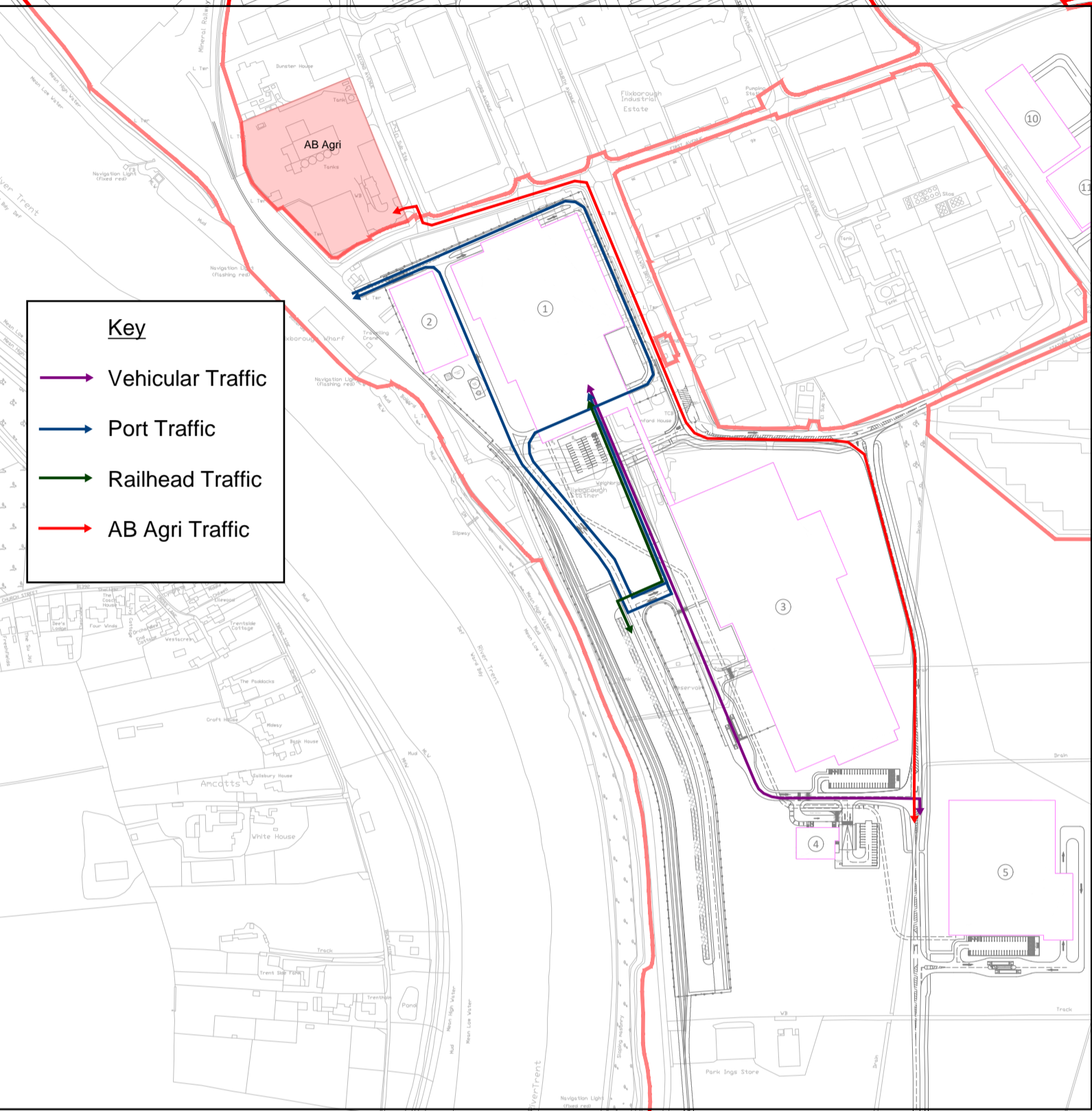
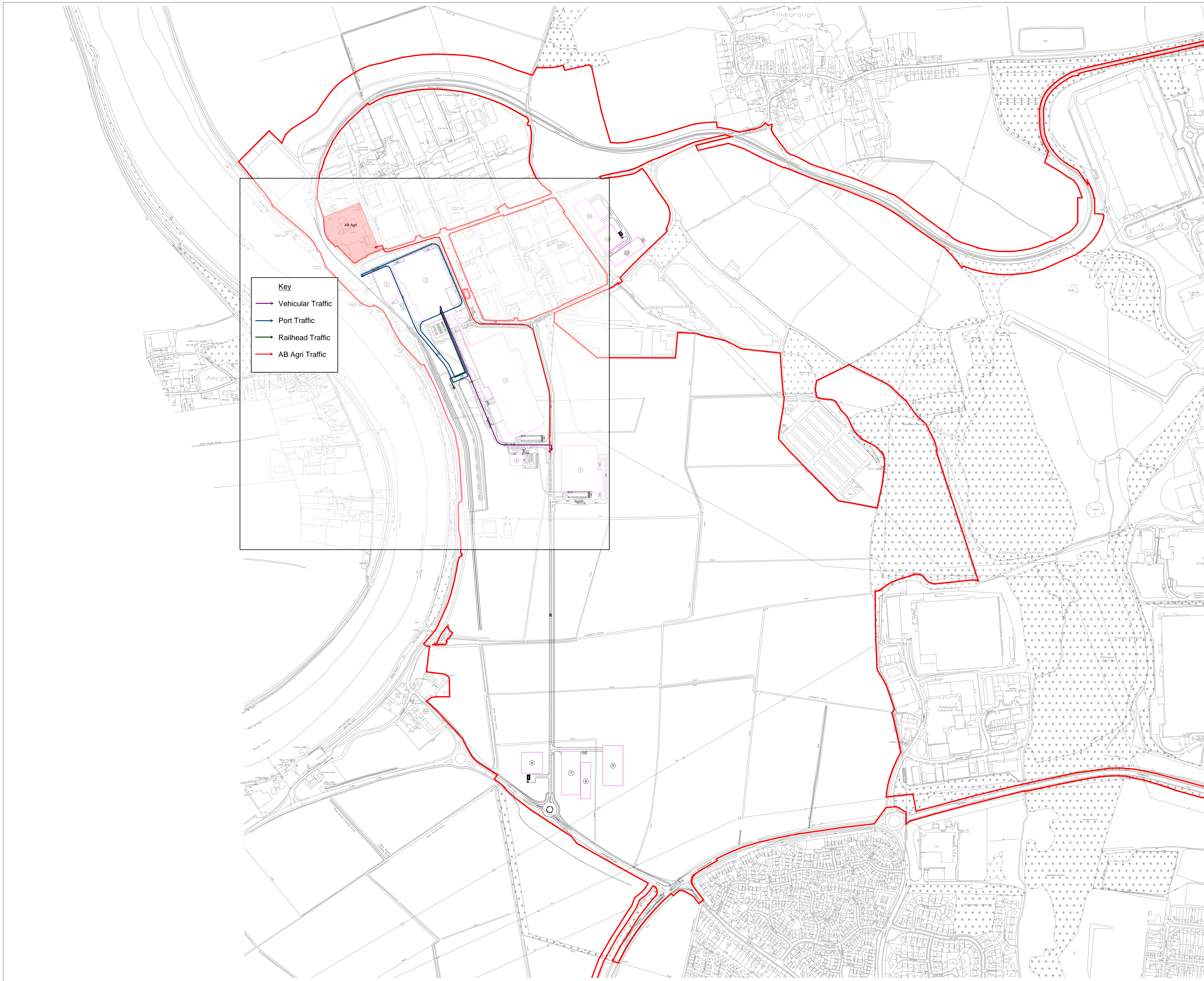
## **5. ENVIRONMENT AGENCY**

- 5.1 The Environment Agency provided a response to the Rule 17 letter questions [REP5-039] as well as a response to the information submitted at Deadline 4 [REP5-039].
- 5.2 The Applicant acknowledges the EA's responses to the Rule 17 letter within REP5-039 and note the comment that ES Chapter 3 – Project Description and Alternatives [REP4-007] could be updated to more clearly set out the intention in respect of disposal of domestic and trade effluents for each of the facilities. In response to this the Applicant has added Section 7.13 to ES Chapter 3: Project Description and Alternatives and submitted the revised version at this Deadline.
- 5.3 Regarding REP5-039, the Applicant is pleased to note the EA's satisfaction with the amendments made to Requirement 12 in the dDCO. This position has been captured within the SoCG between the two parties submitted at Deadline 5.





## **APPENDIX A: APPENDIX A: ROUTES TO BE ADOPTED BY VEHICLES TRANSPORTING RDF**



Planning Act 2008  
The Infrastructure Planning  
(Applications: Prescribed forms and Procedure) Regulations 2009  
Regulation: 5(2)(c)

NOTES  
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- LEGEND**
- ORDER LIMITS
  - ELEVATED WALKWAY
  - ① ERF
  - ② CARBON CAPTURE
  - ③ ASH, FGTV REPROCESSING AND CONCRETE BLOCK MANUFACTURING
  - ④ VISITORS CENTRE AND ELEVATED WALKWAY
  - ⑤ PLASTICS RECYCLING FACILITY
  - ⑥ AGI
  - ⑦ VEHICLE REFUELLING STATION
  - ⑧ HYDROGEN PRODUCTION
  - ⑨ BATTERY STORAGE
  - ⑩ ERF SUBSTATIONS
  - ⑪ AGI
  - ⑫ HYDROGEN PRODUCTION

- Key**
- Vehicular Traffic
  - Port Traffic
  - Railhead Traffic
  - AB Agri Traffic

PO	FOR DCO SUBMISSION	17.02.22	AO1	DTW/CAB
Rev	Description	Date	Iss'd	Rev'd

## DCO SUBMISSION

Project Stage

## INFORMATION

Status of Drawing

Client

Level 33, Euston Tower, 286 Euston Road, London, NW1 3DP

LD&DESIGN GSDA FICHTNER ERM

BURO HAPPOLD northern planners bowland ecology

Client: NORTH LINCOLNSHIRE GREEN ENERGY PARK LTD  
 Consultant: FICHTNER CONSULTING ENGINEERS  
 Project: NORTH LINCOLNSHIRE GREEN ENERGY PARK  
 Dwg Title: INDICATIVE SITE LAYOUT

Planning Inspectorate No. <b>EN010116</b>	Scale@A1 1:5000	
Drawn/Designed By: AO1	Checked By: DTW	Approved By: CAB
Drawing No. NLGEP-FCE-XX-XX-DR-Y-5001	Revision PO	

