

Planning Act 2008

Infrastructure Planning (Applications Prescribed Forms and Procedure) Regulations 2009

# North Lincolnshire Green Energy Park

Annex 6 - Rail Report

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## **North Lincolnshire Green Energy Park**

**Rail Capacity Report for Refuse Derived Fuel** 

6<sup>th</sup> February 2025



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#### 1 Introduction

#### 1.1 Background

- 1.1.1 Intermodality has worked in the Energy from Waste (EfW) sector for over a decade, undertaking prefeasibility and full project delivery across a network of sites in Great Britain. Projects include:
  - North Lincolnshire Green Energy Park support for the current Development Consent Order (DCO) application (see below);
  - SUEZ West London waste contract (300,000t per annum) designed the railhead facilities for the Severnside Energy Recovery Facility and helped procure contractors for railhead development and rail service provision. Provided rail service operational support post-contract award;
  - SUEZ Merseyside waste contract (400,000t per annum) scoped the conversion of an existing railhead into a waste transfer station at Knowsley, and designed the railhead facilities for the Wilton Energy Recovery Facility;
  - SUEZ Manchester waste contract (450,000t per annum) provided rail service operational support preand post-contract award;
  - SUEZ Haverton Hill and Darwen sites assessed future scope for rail access into the EfW site;
  - SUEZ North Wales waste contract bid designed end-to-end railheads and rail service options;
  - FCC Lostock Gralam EfW assessed future scope for rail access into the EfW site;
  - Rookery South (Bedfordshire) assessed future scope for rail access into the EfW site;
  - Ferrybridge Multifuel assessed future options for rail transport for feedstock and CO<sub>2</sub>;
  - Melton Energy assessed future options for rail transport for feedstock and CO<sub>2</sub> across multiple sites;
  - Rossington (Doncaster) developed options for expansion of rail-served waste transfer station;
  - Ridham Dock (Kent) developed options for railhead to serve adjacent EfW;
  - Focsa Cornwall waste contract bid designed end-to-end railheads and rail service options.
- 1.1.2 Intermodality has also supported a number of DCO applications, including:
  - West Midlands Interchange Strategic Rail Freight Interchange (SRFI) development of 8 million sq ft of
    industrial floorspace on a 730-acre site with integrated rail freight interchange facilities. Designed rail
    freight interchange, produced rail operations report, attended Examination as expert witness. Consent
    granted on first application in 2020, now working with the developer to implement the scheme;
  - Integrated Logistics Park North (Parkside) SRFI proposed development of 6 million sq ft of industrial floorspace on a 500-acre site with integrated rail freight interchange facilities. Design of rail freight interchange. DCO application being progressed;

- Oxfordshire SRFI proposed development of 6 million sq ft of industrial floorspace with integrated rail freight interchange facilities. Design of rail freight interchange. DCO application being progressed;
- Lighthouse Green Fuels proposed development of a Sustainable Aviation Fuel (SAF) production facility on Teesside. Assessment of rail transport options within SAF supply chain, design of rail freight facilities. DCO application being progressed.
- 1.1.3 The Intermodality team of core and associate personnel each have over 35 years' experience in logistics and transportation, most of this working in the rail sector. Clients include the European Commission, High Speed 1, Network Rail, Getlink (Eurotunnel), Colas Rail, DB Cargo UK, DC Rail, GB Railfreight, Freightliner Marks & Spencer, Sainsbury's, Diageo, Teesworks, Aggregate Industries, Breedon, Cemex and Tarmac.

#### 1.2 **North Lincolnshire Green Energy Park**

- 1.2.1 Intermodality has been retained by North Lincolnshire Green Energy Park Limited (NLGEPL) since January 2020 to provide support to the NLGEP project, areas of scope including:
  - Design of a rail-based supply chain capable of handling multiple commodities / trains per day to and from site, including Refuse Derived Fuel (RDF) and other recyclates, aggregates, "green" low-carbon concrete and concrete products, CO2 and hydrogen, as well as other goods using Flixborough Wharf;
  - Design of rail facilities at the main line interface (Dragonby Sidings), the EfW plant itself, and the proposed reinstatement and operation of the Flixborough branch line;
  - Engagement with Network Rail, Vossloh Cogifer (Dragonby Sidings) and train operating companies;
  - Assessment of main line network capacity with Network Rail, train operating companies and specialist rail timetable planning consultancy Ed Jeffrey Ltd;
  - Drafting of the DCO Rail Operations Report;
  - Attendance at the DCO Examination as an Expert Witness;
  - Ongoing commercial discussions between NLGEPL and rail freight operating company Freightliner.

#### 1.3 Structure of this report

- 1.3.1 This report focuses on the following areas of scope undertaken over the last three years:
  - Establishing commercial engagement and discussions with Freightliner, which formally commenced in October 2022, culminating in a Memorandum of Understanding (MoU) between Freightliner and NLGEPL (Appendix A) to provide the commercial rail capacity for the project, with an immediate focus on supply of 350,000 tonnes from the East Midlands region;
  - Mapping of all existing rail-linked sites across Great Britain (Appendix B) to provide a comprehensive view of the available network coverage and connectivity;
  - Developing a minimum railhead footprint (Appendix C) to help with shortlisting from the national map of sites identified;
  - Identifying target sites in and around the region with main line connections (Appendix D), which could be accessed by Freightliner as part of the rail services contract for import and export of products.

#### 1.4 **Executive Summary**

- 1.4.1 The immediate focus for NLGEPL is with potential waste aggregators across the East Midlands region. A network of sites has been identified within the region, as well as the adjoining regions of Yorkshire & Humberside and the East of England (Appendix D). These are strategically located relative to the rail and road networks, predominantly within established industrial / employment areas and with existing main line connections.
- 1.4.2 This network of available sites provides the capability and capacity required to handle a wide range of commodities using rail transport and associated environmental benefits, including low emissions (76% reduction per tonne-km compared to use of HGVs) and mode shift of freight away from long-distance road haulage and the highway network. Each site is capable of providing the necessary space needed for handling of products on and off rail, with most being of suitable scale and location to accommodate waste compaction plant alongside or proximate to the rail freight facilities.
- In terms of capacity, a satellite railhead linked to NLGEP with a notional footprint of 2 x 400m handling 1.4.3 sidings and a 30m x 400m handling apron would, along with suitable main line, highway and processing capacity, be typically capable of handling up to 4 trains per day. With each loaded train carrying around 1,300 tonnes payload, 4 loaded trains per day would carry around 5,200 tonnes, the equivalent of 180 long-distance articulated HGV loads. Some trains could be backloaded with traffic to/from Flixborough Wharf, further increasing daily rail volumes.
- 1.4.4 Thus, a relatively small footprint (3 acres or 1.2 hectares) railhead could make a significant contribution to NLGEP's inbound and outbound capacity, as well as avoiding significant levels of long-distance HGV traffic on the highway network. The satellite railheads could operate alongside adjacent processing facilities and/or be linked by local / internal road vehicle shuttles to nearby sites. Most of the rail-served sites identified are of considerably greater scale than needed for the railhead and/or processing sites, some already co-located alongside waste handling facilities.
- 1.4.5 Due to the delays and ongoing uncertainties over the last 3 years regarding delivery of the infrastructure to enable sequestration of CO<sub>2</sub> under the North Sea, NLGEPL has (alongside other companies in the sector) been considering alternative / interim options for CO<sub>2</sub> movement, including by rail to ports for onward movement to offshore storage locations.
- 1.4.6 The proposed NLGEP project is therefore well-located to address the undercapacity of recovery facilities in the region, providing opportunities for multi-modal transportation, not least access to Flixborough Wharf and an extensive network of rail-linked sites in the surrounding regions (Appendix D) and the rest of the country (Appendix B).

#### Rail site opportunities 2

#### 2.1 **Overview**

- 2.1.1 Intermodality has worked with Network Rail and other clients over the last 3 years to develop a comprehensive map and database of all existing railheads in Great Britain. This has to date mapped over 630 sites (Appendix B), the majority being operational but extending to include other "windfall" sites with existing but unused (or former / potential) main line connections into the national rail network.
- Those sites of particular relevance to the EfW sector include the following: 2.1.2

**Table 1 Power station sites** 

Site	Status	Rail access operational	Rail services operational
Cardiff	Operational	Yes	No (IBA export ceased 2023)
Ferrybridge Multifuel 1 & 2	Operational	Yes	No (proposed import/export)
Haverton Hill	Operational	Yes	No
Lostock Gralam	Under construction	Yes	No (proposed import/export)
Newhaven	Operational	Yes	Yes (IBA export)
NLGEP	DCO application	No	No (proposed import/export)
Oxwellmains	Operational	Yes	No
Rookery South	Operational	No	No (proposed import)
Runcorn Folly Lane	Operational	Yes	Yes (RDF import)
Severnside ERC	Operational	Yes	Yes (RDF import)
Southmoor Energy Centre	Consented	No	No
Wilton EfW	Operational	Yes	Yes (RDF import)

Table 2 Railheads with waste handling facilities

Site	Operator	Status	Rail services operational
Barking	BIFFA	Disused	No
Bredbury (Manchester)	SUEZ / Freightliner	Operational for Greater Manchester contract	Yes (1 train per day)
Brentford (West London)	SUEZ / DB Cargo	Operational for West London contract	Yes (1 train per day)
Brindle Heath (Manchester)	SUEZ / Freightliner	Operational for Greater Manchester contract	Yes (1 train per day)
Bristol	Bristol City Council	Disused	No
Knowsley (Merseyside)	SUEZ / DB Cargo	Operational for Greater Manchester contract	Yes (2 trains per day)
Leeds Whitehall Sidings	GB Railfreight	Latterly used by BIFFA for moving waste to Roxby Gullett landfill	No
Neasden (West London)	London Waste	Operational for North London Waste contract (to 2028)	No
Newton Heath (Manchester)	SUEZ / Freightliner	Operational for Greater Manchester contract	Yes (1 train per day)
Northenden (Manchester)	SUEZ / Freightliner	Operational for Greater Manchester contract	Yes (1 train per day)
Northolt (West London)	SUEZ / DB Cargo	Operational for West London contract	Yes (1 train per day)
Powderhall (Edinburgh)	None	Disused, rail link retained	No
Protos (Ince)	Peel	Energy park with proposed rail link	No
Rossington (Doncaster)	Eco-Power	Operational for commercial / industrial waste	No
Willesden	Powerday	Operational for commercial / industrial waste	No

Table 3 Railheads previously used for exporting RDF

Site	Status
Bredbury (Manchester)	SUEZ / Freightliner
Bath	Disused container terminal and gantry crane, adjacent to residential development
Appley Bridge (Wigan)	Site now used for aggregates, railhead disconnected from main line but under consideration for reinstatement
Westerleigh (NE Bristol)	Disused railhead (gantry crane removed), adjacent to oil storage terminal

- 2.1.3 Beyond these sites, other options which could be considered for rail movement of RDF include:
  - Other existing railheads to use for transfer of containerised / baled RDF from off-site Material Recovery Facilities (MRF);
  - Other existing railheads with new MRFs and/or facilities for transfer of baled / compacted RDF to rail;
  - Former railheads which could be reconnected to the rail network;
  - New greenfield sites proximate to the rail network.
- 2.1.4 Of the existing railheads (see Appendix B), more than 30 currently handle containerised traffic. Another 132 sites are unused at present, and some of the remaining 468 sites may also offer scope to accommodate MRF / container / baling facilities in addition to the core use (e.g. quarries and aggregate distribution sites, refineries and petrochemical distribution sites). It is therefore apparent that considerable scope exists to supply RDF by rail from across the country to the NLGEP site, as well as export products from site to the rest of the country.
- 2.1.5 Examples of sites which Intermodality has worked on include:





We conceived the proposals developed by SUEZ at Knowsley, to convert an existing rail-linked warehouse (the rail link being disused for many years) to a fully-enclosed waste transfer station for containerised RDF. The site now exports 2 trains per day of RDF to the receiving railhead at Wilton on Teesside which we also designed, on part of the former Wilton petrochemicals complex.

We have also undertaken work on the LondonWaste site at Neasden, which provides a similar fullyenclosed rail-linked building, where baled waste could be loaded into rail wagons, but which makes no use at present of the rail facilities or main line connection.

Figure 2 Severnside



The site at Severnside was a former ICI chemical works which had last seen a train in 1990 and the main line connection subsequently removed. From 2011 we worked with SUEZ and Network Rail to design a new railhead for RDF import, linked into the remains of the former ICI main line connection and main line exchange sidings, the new main line connection and railhead becoming operational within 5 years. The site now has a daily train service importing RDF from West London.

**Figure 3 Scunthorpe** 



In advance of the commissioning of the SUEZ EfW plant at Severnside, an interim solution was required for the mobilisation of the West London Waste contract. Working with SUEZ, DB Cargo UK and Network Rail, a temporary "pop up" railhead was created in a matter of weeks, using a disused yard at Scunthorpe. An area of hardstanding alongside existing sidings was surfaced with tarmac and mobile container handling equipment delivered to site. The railhead operated for several months from 2014 until the Severnside plant was ready to receive the first train of feedstock

#### 2.2 **Target site opportunities**

2.2.1 Of the 630 sites available as shown in **Appendix B**, suitable sites within a 100 mile radius of the NLGEP site, based on location / size (based on notional footprint in Appendix C) / current use / proximity to industrial areas / onward road access, include the following 35 sites listed in Table 4 below and shown on the accompanying map in **Appendix D**:

Table 4 Target rail site opportunities, East Midlands, Yorkshire & Humberside, East of England

Site		Owner / Operator	Status (*main line connection)	Rail services operational
1.	Eaglescliffe	Network Rail	6-acre disused railway lands alongside industrial estate*	No
2.	Bradford	Network Rail	12 acres including a metals recycling facility and adjacent unused brownfield land. Adjacent to household waste recycling facility*	No
3.	Leeds Whitehall Road	Network Rail	5 acres of brownfield land and sidings, last used for soils export*	No
4.	Leeds Hunslet	Network Rail / GB Railfreight	29 acres of vacant brownfield land and sidings*	Yes
5.	Selby	Potter Space	15 acres of land and sidings within existing business park, last rail use for handling containerised traffic*	Yes
6.	Ferriby	Omya UK	10 acres of disused brownfield land. Adjacent to waste reprocessing facilities*	No
7.	Monk Bretton	Unknown	20 acres of former railway land north of existing rail-served glassworks, alongside freight-only branch line	Yes (to glassworks)
8.	Widnes	LondonMetric / L&G / Culina	Up to 50 acres within / around the Mersey Multimodal Gateway site. Adjacent to 2 container handling railhead facilities	Yes
9.	Fiddlers Ferry	Peel NRE	800-acre brownfield former power station site retaining extensive rail sidings within established industrial area*	No
10.	Rossington (Doncaster)	Network Rail / EcoPower	27-acre established waste processing site with adjacent land*	Yes
11.	Former Maltby Colliery (Rotherham)	Ritchie Brothers	400-acre brownfield site with rail sidings retained*	No
12.	Gainsborough	TBC	5-acre brownfield former rail-served oil distribution terminal*	No
13.	West Burton	EDF	410-acre brownfield former power station site retaining extensive rail sidings*	No

Site		Owner / Operator	Status (*main line connection)	Rail services operational
14.	Staveley Estate (Chesterfield)	Chatsworth Estate	3,400 acres, including the 355 acre former Staveley Works, main line access via adjacent Barrow Hill Up Sidings*	No
15.	Cottam	EDF	620-acre brownfield former power station*	No
16.	High Marnham	JG Pears Group	141-acre brownfield former power station site to be redeveloped as energy hub. Adjacent branch line retained by Network Rail enabling reinstatement of rail access	No
17.	Lincoln	Network Rail	7-acre brownfield former rail-served scrap yard and adjacent land*	No
18.	Newark	Network Rail	5-acre brownfield former railway sidings and goods yard*	No
19.	Stoke-on-Trent (Longport)	Network Rail / Land Recovery Ltd	10-acre railhead site latterly used for spoil handling*	Yes
20.	Chaddesden	Network Rail	16 acres of railway land and sidings*	Yes
21.	New Stanton Park (Ilkeston)	Ward	200-acre brownfield site with sidings, planning consent for 2.2 million sq ft*	No
22.	Bennerley	Harworth	50-acre brownfield former colliery site proposed for redevelopment with reinstated main line connection	No
23.	Rectory Junction (Nottingham)	Unknown	Up to 80 acres of brownfield land alongside industrial estate, including disused former oil terminal*	No
24.	Sinfin (Derby)	Rolls Royce	4-acre plot within aero engine factory adjacent to branch line	Yes
25.	Ratcliffe Power Station	Uniper	655-acre brownfield redevelopment site with main line connection	No
26.	Melton	Network Rail	Land adjacent to Network Rail test track and A46 / A606 interchange	Yes
27.	Burton on Trent	Road & Rail Ltd	6-acre railhead handling bulk materials and containers*	Yes
28.	Cannock	Freightliner	10-acre brownfield container depot within industrial area*	No
29.	Humberstone Road (Leicester)	Network Rail / DC Rail (Cappagh)	8-acre brownfield site within industrial estate (with existing recycling operations) to be linked to adjacent main line sidings	No
30.	Knighton (Leicester)	Network Rail	6 acres of railway land alongside industrial estate*	No
31.	Handsworth	Network Rail / EMR	5-acre railhead last used for scrap metal processing and export*	No
32.	Bedworth	West Moor Holdings Limited	6-acre brownfield former rail-served oil distribution terminal and adjacent land*	No
33.	Corby	Unknown	8-acre brownfield disused former car distribution railhead within industrial area*	No
34.	Wellingborough	Network Rail / GBRf	7-acre railhead within industrial area*	Yes
35.	Ely	Potter Space	30 acres of open land and sidings within business park	Yes

- 2.2.2 In addition, there are several proposals for major Strategic Rail Freight Interchange (SRFI) developments with up to 8 million square feet per site of rail-served industrial floorspace, together with integrated container handling facilities, including:
  - DIRFT phase III (Rugby), DCO made in 2014 and now under construction;
  - Radlett (St Albans): planning consent granted in 2014 and now under construction;
  - Northampton Gateway: DCO made in 2019 and now under construction;
  - West Midlands Interchange (Cannock), DCO made in 2020 and now under construction;
  - Gascoigne Interchange, planning consent awarded in 2024 and now under construction;
  - Hinckley National Rail Freight Interchange: DCO application under consideration;
  - Integrated Logistics Park North (St Helens): DCO application being prepared;
  - Oxfordshire (Ardley): DCO application being prepared;
  - Plus at least 2 other schemes under consideration at present.

#### Conclusions 3

The NLGEP and its proposed main line rail connection can access over 600 operational railheads and other raillinked sites within Great Britain (Appendix B), including major ports and the Channel Tunnel fixed link to mainland Europe.

The immediate focus for NLGEPL is with potential waste aggregators across the East Midlands region. A network of sites has been identified within the region, as well as the adjoining regions of Yorkshire & Humberside and the East of England (Appendix D). These are strategically located relative to the rail and road networks, predominantly within established industrial / employment areas and with existing main line connections.

This network of available sites provide the capacity required to handle a wide range of commodities using rail transport and associated environmental benefits, including lower emissions (a 76% reduction per tonne-km compared to use of HGVs1) and mode shift of freight away from long-distance road haulage and the highway network. Each site can provide the necessary space needed for handling of products on and off rail, with most being of suitable scale and location to accommodate a waste compaction plant alongside or proximate to the rail freight facilities.

In terms of capacity, a satellite railhead linked to NLGEP with a notional footprint of 2 x 400m handling sidings and a 30m x 400m handling apron (Appendix C) would, along with suitable main line, highway and processing capacity, be capable of handling up to 4 trains per day, the equivalent of around 5,200 tonnes (assuming trains are only loaded in the outbound direction, otherwise twice this figure) or 180 long-distance articulated HGV loads. Using the additional rail and river transport opportunities presented by Flixborough Wharf, some of these trains could be backloaded with third-party traffic, further reducing lorry traffic on the highway network.

Thus a relatively small footprint railhead (3 acre / 1.2 hectare) could make a significant contribution to NLGEP's inbound and outbound capacity, as well as avoiding significant levels of long-distance HGV traffic on the highway network. The satellite railheads could operate alongside adjacent processing facilities and/or be linked by local / internal road vehicle shuttles to nearby sites. Most of the rail-served sites identified are of considerably greater scale than needed for the railhead and/or processing sites, some already co-located alongside waste handling facilities.

Due to the delays and ongoing uncertainties over the last 3 years regarding delivery of pipeline infrastructure to enable sequestration of CO<sub>2</sub> under the North Sea, NLGEPL has (as others in the sector have done) been considering alternative / interim options for CO<sub>2</sub> movement, including by rail to ports for onward transport to offshore storage locations.

The proposed NLGEP project is therefore well-located to address the undercapacity of recovery facilities in the region, providing opportunities for multi-modal transportation, with access to Flixborough Wharf and an extensive network of rail-linked sites in the surrounding regions.

<sup>&</sup>lt;sup>1</sup> Rail Freight Strategy, Department for Transport 2016

# Appendix A Memorandum of Understanding with Freightliner (redacted)

#### MEMORANDUM OF UNDERSTANDING

By and between

North Lincolnshire Green Energy Park Limited

CRN: 10949653

Office 71, The Colchester Centre, Hawkins Road, Colchester, CO2 8JX

And

Freightliner Group Limited

CRN: 05313119

Address 6th Floor, The Lewis Building, 35 Bull Street, Birmingham, B4 6EQ, UK

(the "Supplier")

#### 1. Background

The parties have initiated discussions regarding the delivery of Refuse Derived Fuel (RDF), aggregates and construction materials to North Lincolnshire Green Energy Park Limited's Energy Recovery Facility (the "Plant") on Flixborough Industrial Estate near Scunthorpe. The site will produce up to 285,000 tonnes of concrete products per annum using 130,000 tonnes of IBA and 155,000 tonnes of imported aggregates. The site will implement carbon capture and will require the transport of up to 470,000 tonnes per annum liquid CO<sub>2</sub> per annum to Immingham. The site will produce low-carbon hydrogen and has potential customers that would take delivery by rail.

This memorandum of understanding ("MOU") sets out the proposed terms of a potential agreement and timetable for implementation. It is not intended to be legally binding except as specifically set out below.

North Lincolnshire Green Energy Park Limited is developing a plant in Flixborough North Lincolnshire which, at full capacity, will consume 760,000 tonnes of RDF and plastic for recycling per year. In addition, the site will include a 6km private rail connection between the Flixborough Wharf and the Dragonby Sidings where there is an operational connection to Network Rail. The facility will design and build new sidings at the Dragonby Sidings and build a new railhead operation with sidings at the Flixborough Wharf. The plant is scheduled to commence operations Q4 2028 with CCUS enabled at the plant from the outset. The facility will provide a low-carbon option for waste management using rail services where possible to transport goods in and out of the facility with the option to refuel hydrogen trains in the future.

The Supplier transports more than 450,000 tonnes of waste per annum in the UK and transports over 20 million tonnes of aggregates and other bulk / containerised products. The Supplier already operates from a network of rail facilities in the East Midlands and Yorkshire and Humberside and has the rolling stock and infrastructure to manage the tonnages of good described. The supplier has committed to increase the handling of containerised traffic, as evidenced by the introduction in 2021 of the first of a new fleet of 230 container-carrying wagons.

The option of including a low-carbon or carbon-negative fuels in the future based on long-term contracts is part of the Suppliers strategic development plan.

The option to maximise containerised RDF transport by rail with the development of one or more RDF compactor sites at railheads close to the waste sources in the East Midlands will be the focus of future discussions between the Parties.

The Supplier can Supply and Deliver 350,000 tonnes per year of containerised RDF through its own capacity or network from the East Midlands Region with NLGEPL responsible for the procurement of the containers.

#### 2. Identified Operational Loading Points in the East Midland

The Supplier will supply to North Lincolnshire Green Energy Park Limited from multiple railhead locations with a minimum train capacity of 900 tonnes of RDF and recyclable plastics per consignment with a maximum of 200 container wagons. (see attached plan in Annex 1 showing the current network of sites served).

#### 3. Indicative train consist information (subject to route)

#### 3.1. RDF

- 66 x 20' length x 8'6" height waste containers (or equivalent) per train;
- 22 x KFA flat wagons (or equivalent) per train;
- 469m trailing length (excluding locomotive) per train;
- 1,342t maximum payload (including RDF and container tare) per train;
- 1,130t notional payload based on 13.5t of RDF and 3.63t tare per container.

#### 3.2. Aggregates

- 26 x MWA box wagons (or equivalent) per train;
- 335m trailing length (excluding locomotive) per train;
- 1,700t maximum payload per train.

#### 3.3. Concrete Products

- 11 x FWA twin flat wagons (or equivalent) per train;
- 22 x 40' ISO flatracks per train, 55t maximum gross weight per flatrack;\*
- 449m trailing length (excluding locomotive) per train;
- 1,210t maximum payload (including product and container tare) per train;\*
- \*Assumes flatracks remain captive between railheads and not moved on public roads.

#### 3.4. Other Containerised Liquid / Gaseous Products (subject to commodity)

11 x FWA twin flat wagons (or equivalent) per train;

Up to 66 x TEU (Twenty-Foot Equivalent length) containers per train;

449m trailing length (excluding locomotive) per train;

Up to 1,320t payload per train (including product and container tare).

#### 4. Delivery Containerised Compacted RDF

- The goods shall be delivered to North Lincolnshire Green Energy Park Limited ERF facility in compacted in containers;
- b) North Lincolnshire Green Energy Park Limited and the Supplier shall agree a delivery schedule based on up to 7000 tonnes per week contribution to the overall throughput;
- c) Residual Waste plastics suitable for recycling will be baled or compacted into containers.

#### 5. Commercial Capacity at Dragonby

#### 6. Pricing

- a. The delivery of containerised waste will be priced by collection point and;
- b. North Lincolnshire Green Energy Park Limited shall pay the following:
  - A fixed price per tonne compacted and loaded into containers for rail transportation at source;
  - b. A CPI price index annual increase in price.

#### 7. Duration and timing

- a. North Lincolnshire Green Energy Park Limited and the Supplier shall enter into a long-term supply agreement with a duration of no less than ten years;
- b. North Lincolnshire Green Energy Park Limited shall use its reasonable endeavour to ensure its readiness to accept Supply by the end of **2028**;
- North Lincolnshire Green Energy Park Limited and the Supplier shall conclude negotiations for a firm supply agreement no later than 6 months before scheduled commencement operation of the Plant;
- A commitment to support an intermittent waste supply through the facility commissioning period.

#### 8. Sustainability and Certifications

- The Supplier will use its reasonable endeavours to support North Lincolnshire Green Energy Park Limited in acquiring relevant certifications under UK schemes, according to its standard Conditions of Carriage and associated regulations and standards;
- b. The Supplier will use its reasonable endeavour to ensure that the carbon footprint of the supply chain is kept to a minimum.

#### 9. Confidentiality

a. This paragraph is legally binding. North Lincolnshire Green Energy Park Limited and the Supplier will keep all information confidential, including but not limited to information regarding North Lincolnshire Green Energy Park Limited technology, product requirements and this MOU. Unless otherwise agreed in writing.

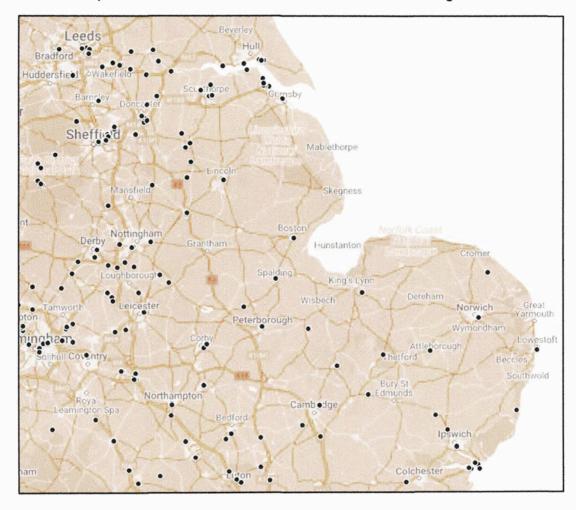
#### 10. Governing Law and Jurisdiction

a. This paragraph is legally binding. This MOU and all negotiations and any legal agreements prepared in connection with it, and any dispute or claim arising out of or in connection with them or their subject matter or formation, shall be governed by and construed in accordance with English law. Any dispute or claim arising out of or in connection with the MOU, its subject matter, existence, validity, formation or termination and including non-contractual disputes or claims shall be referred to and final resolved by arbitration, under the Rules of the London Court of International Arbitration, which are deemed to be incorporated by reference into the clause.

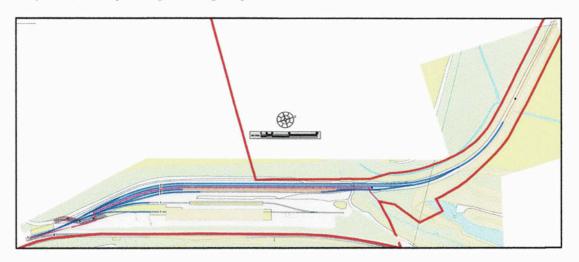
# This Memorandum of Understanding has been entered into on: 22 Nov 2022

For:	For:
North Lincolnshire Green Energy Park	Freightliner Group
Limited	Limited
Mr Colin Hammond	Mr
Director	





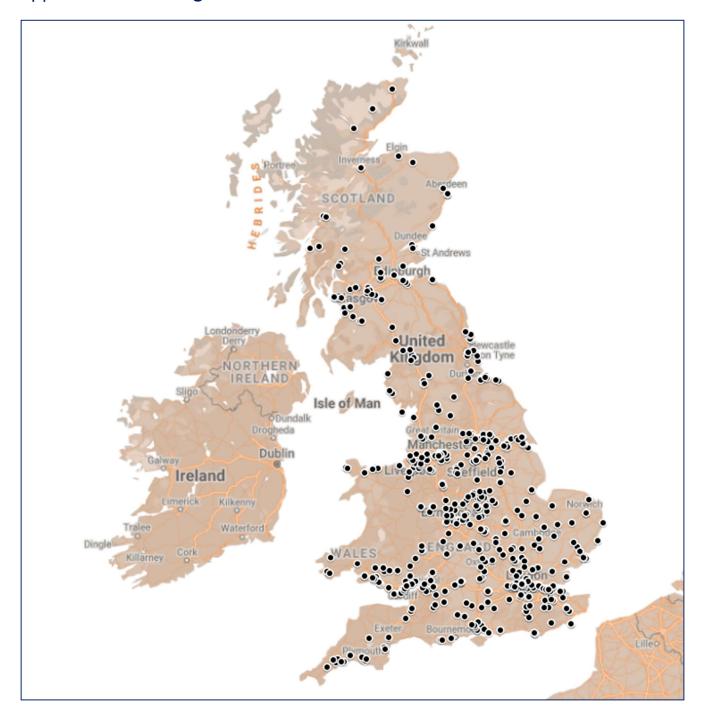
Annex 2
Proposed Railway Sidings at Dragonby



Proposed new sidings and railhead at Flixborough Wharf

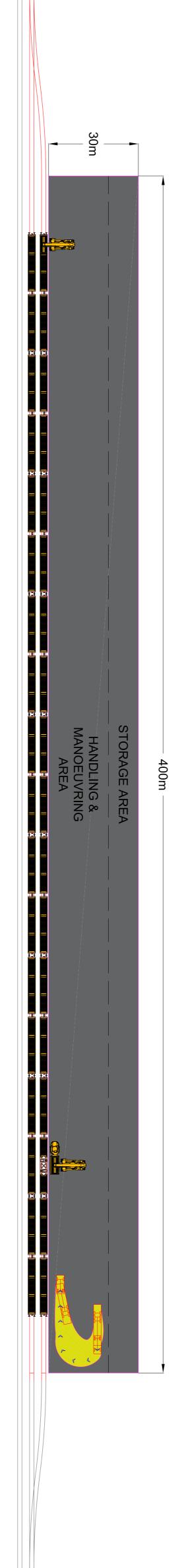


## Appendix B Existing rail-linked sites in Great Britain<sup>2</sup>



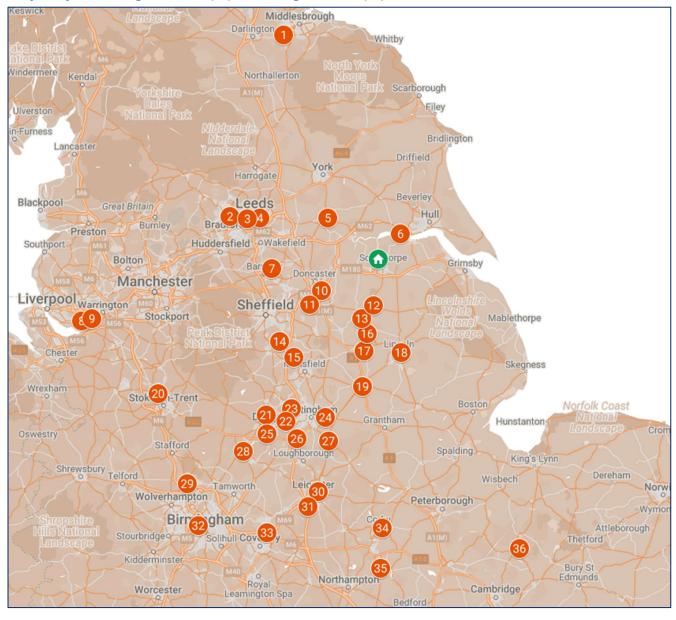
<sup>&</sup>lt;sup>2</sup> Source Intermodality / Network Rail

# Appendix C Notional railhead footprint (schematic, not to scale) Railway sidings shown in red will tend to be required, those shown in grey provide optional / additional features.



### Appendix D Target rail-linked site opportunities

Key map showing NLGEP (●) and target sites (●)



#### Intermodality

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