

Lighthouse Green Fuels

Development Consent Order

PEIR Addendum (April 2026)

Planning Inspectorate Reference: EN0110025

10th April 2026

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1. Introduction and Scope of PEIR Addendum

1.1 Introduction

Background

- 1.1.1 On 2nd December 2025, LGF Projects Ltd. published a Preliminary Environmental Information Report (PEIR) as part of the Statutory Consultation for the proposed application for a Development Consent Order (DCO) under the Planning Act 2008 to the Planning Inspectorate (who administers such applications on behalf of the Secretary of State for Energy Security and Net Zero) (the 'DCO Application') (PINS Reference EN0110025). The DCO Application is anticipated to be submitted by the end of July 2026.
- 1.1.2 The PEIR was prepared by Ove Arup and Partners Ltd (Arup) on behalf of LGF Projects Ltd (the Applicant), to support a proposed application (the Application) to be made to the Secretary of State (SoS) for Energy Security and Net Zero seeking Development Consent for the construction, operation, maintenance and decommissioning of the Lighthouse Green Fuels project on land at Stockton-on-Tees and Redcar and Cleveland on Teesside (the Proposed Development)
- 1.1.3 The Applicant notified the Planning Inspectorate in a project update meeting on 5th March 2026 that it intends to change the Proposed Development as described in the PEIR. This document is an addendum to the PEIR (the PEIR Addendum) which describes and incorporates the proposed changes and undertakes a scoping of the changes to the environmental assessments set out in the PEIR. This PEIR Addendum will support a targeted consultation in April 2026 with relevant statutory consultees and affected and potentially affected landowners (Interested Parties) -
- 1.1.4 Since the Statutory Consultation, the Applicant has continued to engage with Interested Parties with a view to addressing comments and agreeing common ground, while also continuing with Front End Engineering Design (FEED).
- 1.1.5 There are four proposed changes ('the Proposed Development Changes'), as described in Section 2 of this PEIR Addendum. Some of the changes require modifications (increases) to the draft Order Limits as described in the original PEIR.

- 1.1.6 The Proposed Development Changes arise from ongoing design development by the Applicant, given:
- the 'First of a Kind' nature of the Proposed Development;
 - the further design work that has been completed since the Statutory Consultation; and
 - the need to respond to a potential opportunity to connect to third party infrastructure to further improve the environmental benefits of the Proposed Development.
- 1.1.7 Several of the Proposed Development Changes increase the extent of the draft Order limits, while others include the use of new construction techniques such as use of trenchless crossings techniques with additional environmental effects (for example, horizontal directional drilling as a worst case) or construction in areas previously not assessed in the PEIR.
- 1.1.8 A targeted consultation on the Proposed Development Changes with relevant statutory undertakers, - including Stockton-on-Tees and Redcar and Cleveland Borough Councils, and affected and potentially affected landowners will be carried out by the Applicant between Monday 13th April 2026 and Wednesday 13th May 2026. Further details of the consultation activities and feedback received will be contained in the Consultation Report which will be submitted with the DCO Application.

Purpose of this document

- 1.1.9 The original PEIR has been reviewed to identify if any of the Proposed Development Changes alter the scope and conclusions of that document. This PEIR Addendum should be read in conjunction with the original PEIR and supporting documents.
- 1.1.10 This PEIR Addendum only considers how the Proposed Development Changes affect the assessments presented in the PEIR. There have been no changes in relevant legislation or baseline conditions since the original PEIR was made available for consultation.

1.2 Scope and Methodology of the PEIR Addendum

- 1.2.1 Throughout this PEIR Addendum, references are given to the original PEIR by Volume and Chapter where necessary.
- 1.2.2 The general assessment methodology and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set out in PEIR (specifically Chapter 2: Assessment Methodology) remain unchanged unless specifically stated in this PEIR Addendum.

1.3 Structure of this PEIR Addendum

- 1.3.1 This PEIR Addendum describes the required modifications to the Proposed Development which have triggered the Proposed Development Changes and sets out how the changes affect the PEIR technical chapters, appendices and PEIR Figures.

2. Proposed Development Changes

2.1 Introduction

2.1.1 This chapter of the PEIR Addendum presents a description of the Proposed Development Changes and considers how the changes modify the description of the Proposed Development and the environmental assessment outcomes as presented in the original PEIR.

2.2 Evaluation of Proposed Development Changes

2.2.1 Following Statutory Consultation, four changes to the Proposed Development have been identified through continued design development and engagement with landowners. Some of these changes also require the inclusion of additional land within the Proposed Development boundary (the proposed Order limits). The changes are grouped as explained below.

2.2.2 Section 3 of this PEIR Addendum provides an explanation of how the introductory chapters of the PEIR would change as a result of the Proposed Development Changes. Section 4 sets out the likely additional environmental effects associated with the Proposed Development Changes and describes how they will be assessed.

2.2.3 An updated Site Location plan is presented as Figure A2.1 of this PEIR Addendum and the updated draft Order Limits presented in Figure A2.2. A plan showing the changes between the updated draft Order Limits and the same boundary presented in the PEIR is presented as Figure A2.3.

Change 1 Inclusion of connection to the Northern Endurance Partnership CO₂ Gathering Network

2.2.4 To support the UK Government's drive to net zero, the Applicant has been invited to make an application to the East Coast Cluster Track 1 expansion for a connection to the consented Northern Endurance Partnership (NEP) CO₂ Gathering Network. This would enable CO₂ produced by the SAF production process to be directed to the NEP infrastructure and from there be transported for permanent off-shore geological storage rather than being vented to atmosphere. This would further reduce the carbon intensity of the SAF and naphtha to be produced in the Proposed Development.

2.2.5 Such a connection would require a new pipeline spur for export of CO₂ from the Acid Gas Removal Unit (AGRU) on the Main Site to the third party NEP CO₂ Gathering Network that runs close to the Site boundary.

2.2.6 The connection to the NEP infrastructure could take place at one of two potential locations where an NEP Above Ground Installation (AGI) is

already proposed and consented. One connection option would require no change to the current Order limits of the Proposed Development whereas the other would require a crossing of existing third party pipelines, (using horizontal directional drilling (HDD) for example). The latter pipeline routing would require additional land for the construction and operation of the pipeline to the south of the Main Site.

Change 2 – Electrical Connection

2.2.7 In addition to the on-site electrical connection described in the PEIR, it is proposed that an additional off-site electrical connection to the Main Site be constructed from the existing North Bank switchyard located within the Sabic North Tees Site to the south of the Main Site.

2.2.8 It is proposed that the new cable would be constructed through previously developed but now vacant and cleared land, and buried using open cut techniques where possible and would follow other cables known to run in this location. A crossing of existing third party pipelines would be required, which may require use of compact HDD techniques. This would therefore require additional land for cable routing to the south of the Main Site and the proposed compact HDD crossing. This additional land will be sufficient to accommodate a number of potential alternative cable routings to the switchyard.

Change 3 - Process Wastewater Pipeline Replacement

2.2.9 In the PEIR, a combination of new and existing pipelines were proposed to be utilised and repurposed to direct process effluent from the Main Site to Bran Sands Wastewater Treatment Works for treatment and disposal.

2.2.10 Due to the condition of the existing pipeline, it is now proposed to replace, rather than retain it. These works would also include replacement of that part of the existing pipeline within the Sembcorp No. 2 Tunnel.

2.2.11 The existing pipeline will be removed and replaced. Method statements for installation of the pipeline within the tunnel would be agreed with the tunnel operator.

Change 4 - Minor Additions to the Proposed Order Limits

2.2.12 In addition to new land required for Changes 1 and 2, a small number of additions to the draft Order limits are required to facilitate access, construction and operation of LGF Pipelines. These changes are not expected to affect new land interests from those previously consulted through the Statutory Consultation process.

3. Changes to the Introductory PEIR Chapters

3.1 Introduction

3.1.1 This chapter of the PEIR Addendum describes whether there are any changes in the introductory chapters of the PEIR required because of the Proposed Development Changes. Other than these changes, the original PEIR text remains valid.

3.2 Chapter 1 Introduction

3.2.1 The general background to the DCO Application and the general description of the Proposed Development remains as described following the Proposed Development Changes and no changes are therefore required to PEIR Chapter 1: Introduction.

3.3 Chapter 2 Assessment Methodology

3.3.1 The general assessment methodology and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set out in Chapter 2: Assessment Methodology remain unchanged so far as relevant to the Proposed Development Changes.

3.4 Chapter 3 Description of the Site and Surrounding Area

3.4.1 The Proposed Development Changes amend the Order limits such that the area of the Site has increased by 13 hectares (ha) from 218 ha to 231 ha.

3.4.2 The description of the Proposed Development site set out in Chapter 3: Description of the Site and Surrounding Area remains unchanged. There are only slight changes in the distances measured between the Order limits and receptors as a result of the Proposed Development Changes.

3.5 Chapter 4 Proposed Development

CO₂ Export Pipeline

3.5.1 The pipeline required for export of compressed CO₂ will run from the Main Site to the NEP CO₂ Gathering Network. The pipeline routing will involve one of the following two options:

- a pipeline from the Main Site to the consented NEP AGI-C1 which is located to the south of the Main Site on third-party land and Sembcorp Pipeline Corridor (see Figure A3.1), or alternatively;
- a pipeline from the Main Site to the consented NEP AGI-C2 which is located in the Sembcorp Pipeline Corridor on third-party land (see Figure A3.1).

3.5.2 If access to the NEP CO₂ Gathering Network pipeline is granted, either of the alternative options will enable direct transport and permanent storage of CO₂ emissions from the AGRU, thus further reducing the carbon intensity of the produced SAF and naphtha from the Proposed Development. No carbon capture plant is required for this process as the AGRU already produces export ready gaseous biogenic CO₂, which would otherwise be vented to atmosphere. The treated and metered CO₂ stream from the AGRU will already be at a pressure which will allow it to enter the NEP CO₂ Gathering Network without requiring additional compression infrastructure.

3.5.3 For Option 1, the connection to the south of the Main Site, this would involve construction of a metering compound within the Main Site and a connecting section of steel pipeline (approximately 100 m long) running southward from the Main Site to the delivery point at the separately consented NEP AGI-C1 (Figure A3.1). This new pipeline will need to cross the Sembcorp Pipeline Corridor which runs east-west to the south of the Main Site before connecting to the delivery point at NEP AGI C-1. The proposed connection works to the south of the Sembcorp Corridor are not within the draft Order limits and require additional land to be included within the Proposed Development boundary (Figure A3.1) both for the connection itself and for its construction.

3.5.4 The alternative Option 2 connection route to the north-east of the Main Site would also involve the construction of a metering compound and also a new steel pipeline running above ground from the Main Site in an existing pipeline corridor then northward along the existing above ground pipe track in the Sembcorp Pipeline Corridor to connect to the delivery point at NEP AGI C-2 located the north-east of the Main Site, also on third-party land (Figure A3.1). This change is entirely within the existing proposed Order limits.

3.5.5 The choice of the connection depends on surveys, technical feasibility and discussions with landowners and the NEP operator.

Electrical Connection

3.5.6 In addition to the 5 MW on-site electrical connection described in the PEIR, it is proposed that an additional off-site electrical connection to the Main

Site be constructed from the existing North Bank switchyard located within the SABIC Site to the south of the Main Site.

- 3.5.7 The new electrical connection point at the North Bank switchyard and cable routing is not within the proposed Order limits as shown in the PEIR (PEIR Figure 1-2). The exact routing of the new electrical connection has not yet been finalised and the proposed change includes the addition to the proposed Order limits of brownfield land in the former SABIC North Tees site within which the new electrical connection will run. This corridor (Figure A3.2) is wide enough to accommodate a number of alternative routings for consideration. As this area is not within the current site boundary a Preliminary Ecological Appraisal (PEA) will also need to be undertaken for this area and the results included in the Ecological Impact Assessment included in the Environmental Statement which will accompany the DCO Application.

Wastewater Pipeline Replacement

- 3.5.8 The PEIR describes how the wastewater connection would use a mixture of new and existing pipelines for the transport of process wastewater from the Main Site to Bran Sands Wastewater Treatment Plant. Further design development has identified that the existing pipework to and within the Sembcorp Pipeline Corridor is not suitable for long term use for the transport of the process wastewater. Consequently, the existing pipe will need to be replaced with a new pipeline of similar (or slightly larger) diameter.
- 3.5.9 This proposed change will not affect the proposed pipeline connection from the pipeline in the Sembcorp Pipeline Corridor into Bran Sands Wastewater Treatment Works as described in the PEIR. Nor will it require use of any additional land outside the proposed Order limits as presented in the in the PEIR. However, the proposed change will necessitate the replacement of an existing above ground pipeline in the Sembcorp Pipeline Corridor, including alongside the Dabholm Gut, and within the Sembcorp No. 2 Tunnel.

Proposed Additional Land

- 3.5.10 Modifications to PEIR Chapter 4 Proposed Development have been required for the additional land arising from of Changes 1 and 2 as described above. No additional land is required for Change 3 as this relates to a change in construction methodology only. The small changes in the proposed Order Limits in Change 4 are not sufficient to require any changes to the text in Chapter 4.

3.6 Chapter 5 Construction Programme and Management

CO₂ Export Pipeline

- 3.6.1 Construction of Option 1 would involve construction of a new metering point within the Main Site and a connecting section of steel pipeline running southward from the LGF Main Site to the delivery point at the NEP AGI-C1 (Figure A3.1). This new pipeline will need to cross the Sembcorp Pipeline Corridor which runs east-west to the south of the Main Site. The pipeline crossing may be achieved using conventional trenchless techniques such as HDD.
- 3.6.2 Construction of Option 2 would involve the construction of a new steel pipe from a new metering point within the Main Site along the existing pipe rack in the Sembcorp Pipeline Corridor to connect to the delivery point at the NEP AGI-C2 to the north-east of the Main Site (Figure A3.1). Construction will be using conventional pipe handling and joining techniques.

Electrical Connection

- 3.6.3 The connection works will require approximately 900m of buried electrical cables from the existing North Bank switchyard located within the Sabic Site to the south of the Main Site and then under the Sembcorp Pipeline Corridor to the Main Site using conventional construction techniques. The crossing of the Sembcorp Pipeline Corridor may require the use of compact HDD techniques (Figure A3.2).

Wastewater Pipeline Replacement

- 3.6.4 The replacement of the existing wastewater pipeline will require the removal of the existing pipe and installation a of new replacement pipeline along the same routing:
- on the above ground pipe rack in the Sembcorp Pipeline Corridor in North Tees;
 - in the Sembcorp No. 2 Tunnel; and
 - on the above ground pipe rack in the Sembcorp Pipeline Corridor in South Tees to the north of Dabholm Gut.
- 3.6.5 This will involve the following construction techniques:
- Conventional techniques for pipeline removal and replacement within the Sembcorp Pipeline Corridor; and
 - Pipeline removal and replacement within the Sembcorp No. 2 Tunnel to a methodology agreed with the tunnel operator.

3.7 Chapter 6 Alternatives and Design Evolution

3.7.1 It is considered that the existing text in Chapter 6: Alternatives and Design Evolution does not need to be updated to accommodate the Proposed Development Changes.

3.8 Chapter 7 Planning and Energy Policy

3.8.1 None of the changes reported on in this PEIR Addendum have been driven by legislative changes in national, regional or local policy. Furthermore, there have been no significant changes in policy since the PEIR was made available for consultation. Chapter 7: Planning and Energy Policy has not therefore been updated.

4. Environmental Assessment of Proposed Development Changes

4.1 Introduction

4.1.1 This chapter of the PEIR Addendum identifies where the Proposed Development Changes have the potential to modify the assessment of impacts and effects reported in the technical chapters of the original PEIR.

Change 1 - CO₂ Export Pipeline

4.1.2 Change 1 will involve construction of a CO₂ Export Pipeline which, dependent on the option selection as described in paragraph 2.2.6, may be outside the current Proposed Development boundary. The connection to the NEP AGI-C1 will involve use of open cut and HDD pipeline installation techniques in an area of former industrial land which has been subject to potentially contaminative former land-uses. This land is outside the Proposed Development boundary in the PEIR. This land has previously been cleared and, as a worst case, may be classified as open mosaic habitat. The alternative connection to the NEP AGI C-2 will be constructed in an existing pipeline corridor and is within the Proposed Development boundary assessed in the PEIR.

Change 2 – Electrical Connection

4.1.3 Change 2 will involve construction of a new electrical connection outside the current Proposed Development boundary and will involve use of open cut and compact HDD cable installation techniques in an area of former industrial land which has been subject to potentially contaminative former land-uses. This land has previously been cleared and, as a worst case for the purposes of ecological impact assessment, may be classified as open mosaic habitat.

Change 3 - Wastewater Pipe Replacement

4.1.4 Change 3 is within the existing Proposed Development boundary, but will involve the removal and replacement, rather than re-use, of an existing pipeline in an existing pipeline corridor both north and south of the Tees and in Sembcorp No. 2 Tunnel. This will require assessment as it will involve removal of an existing pipeline and use of pipeline handling and joining techniques in the corridor with associated potential for noise, vibration and visual disturbance on land adjacent to Bran Sands Lagoon and the Dabholm Gut – which are both within the Teesmouth and Cleveland

Coast SPA and Ramsar and also the Teesmouth and Cleveland Coast SSSI.

Change 4 - Minor Additions to the Proposed Order Limits

- 4.1.5 Change 4 will involve minor changes to the Proposed Development boundary which are necessary to take into account more accurate knowledge of the location of existing pipelines and services and access routes. No additional effects are anticipated from this change.

4.2 Scope and Methodology for the Assessment of the Proposed Changes

- 4.2.1 A preliminary environmental assessment (screening) of whether the changes proposed would change the baseline or alter the outcomes of the previous assessments presented within Volumes I, II and III of the PEIR has been completed. The results of the screening assessment are presented in Table 4-1.

Table 4-1: Screening of Environmental Assessments for Proposed Development Changes

PEIR Chapter	Screening Decision	Rationale
Chapter 8 Air Quality	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 9 Noise and Vibration	In	<p>The following changes will produce additional sources of noise which have not been assessed in the original PEIR:</p> <ul style="list-style-type: none"> • The construction of the CO₂ pipeline from the AGRU to the NEP AGI-C1 which will involve open cut trenching, potential HDD operations and pipe handling/joining and testing; • The construction of the electrical connection to the Northbank Switchyard which will involve open cut trenching, potential HDD operations and cable laying; and • The removal and replacement of the existing pipeline in the Sembcorp Pipeline Corridor and Sembcorp No. 2 Tunnel which will involve pipeline removal and pipe handling/joining and testing. <p>These will be assessed in the noise and vibration assessment in the Environmental Statement</p>
Chapter 10 Terrestrial Ecology	In	<p>The following changes will produce additional sources of noise/ physical disturbance which have not been assessed in the original PEIR:</p> <ul style="list-style-type: none"> • The construction of the CO₂ pipeline from the Main Site boundary to the NEP AGI-C1 due to potential removal of habitat (potentially including open mosaic habitat) during open cut trenching and potential HDD operations and the generation of additional sources of noise and disturbance; • The construction of the electrical connection to the Northbank Switchyard due to removal of habitat (potentially including existing open mosaic habitat) during open

PEIR Chapter	Screening Decision	Rationale
		<p>cut trenching and potential HDD operations and the generation of additional sources of noise and disturbance; and</p> <ul style="list-style-type: none"> The removal and replacement of the existing pipeline in the proposed corridor and Sembcorp No. 2 Tunnel generating causing additional sources of noise and disturbance associated with pipe handling at the tunnel head houses. <p>These will be assessed in the Ecological Impact Assessment in the Environmental Statement and the Report to inform the Habitat Regulations Risk Assessment.</p>
Chapter 11 Freshwater and Marine Ecology	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 12 Water Environment and Flood Risk	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 13 Landscape and Visual Impact	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 14 Greenhouse Gases	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 15 Climate Change Resilience	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 16 Materials and Waste	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 17 Socioeconomics	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.

PEIR Chapter	Screening Decision	Rationale
Chapter 18 Traffic and Transport	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 19 Major Accidents and Disasters	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 20 Marine Navigation	Out	None of the changes will result in modifications to the impacts previously assessed in the original PEIR during the construction, operational or decommissioning stages.
Chapter 21 Geology and Soils	In	<p>The following changes will require assessment which have not been assessed in the original PEIR:</p> <ul style="list-style-type: none"> • The construction of the CO₂ pipeline from the Main Site boundary to the NEP AGI-C1 due to use of open cut and potential HDD construction methods on a previously developed and potentially contaminated site; and • The construction of the electrical connection to the Northbank Switchyard - due to use of open cut and potential HDD construction methods on a previously developed and potentially contaminated site. <p>These will be assessed in the Geology and Soils chapter in the Environmental Statement</p>
Chapter 22 Cumulative Effects	In	The cumulative effects assessment in the Environmental Statement will include the potential additional impacts from the proposed changes.

4.2.2 The screening exercise set out in Table 4-1 has identified the following topic assessments as requiring an updated assessment as a result of the changes, these are:

- Noise and Vibration;
- Terrestrial Ecology;
- Geology and Soils; and
- Cumulative Effects.

4.2.3 As explained in Section 1.3, impacts of the Changes will be assessed in the Environmental Statement to be submitted with the DCO Application.

4.3 Noise and Vibration

4.3.1 The scope and methodology for the noise and vibration assessment of the Proposed Development Changes will follow the same approach as outlined within the original PEIR and in line with the approaches agreed through consultation responses from key stakeholders covering both the construction and operational phase of the Proposed Development.

Construction Noise Assessment

4.3.2 The Proposed Development Changes are unlikely to have any effect on human health and amenity due to the distance to residential receptors but will require assessment of impacts on ecological receptors.

4.3.3 Noise associated with the construction of the proposed CO₂ Export Pipeline need to be assessed for terrestrial ecological receptors, particularly around the Royal Society for the Protection of Birds (RSPB) Saltholme site and Dorman's Pool.

4.3.4 Noise associated with the new electrical connection will need to be assessed for terrestrial ecological receptors, particularly around RSPB Saltholme and Dorman's Pool.

4.3.5 The replacement of the existing wastewater pipeline near Dabholm Gut will require construction noise assessment of noise impacts on nearby terrestrial ecological receptors in Bran Sands Lagoon and the Dabholm Gut.

4.3.6 Construction noise outside the Main Site will also require assessment for terrestrial ecological receptors, particularly around RSPB Saltholme and Dorman's Pool.

4.3.7 The assessment will use same methods as agreed through EIA scoping and the assessment will be undertaken in accordance with BS4142 based on conservative assumptions about activities that will be undertaken at the same time and the distances to the receptors. The existing baseline data

gathered remains sufficient to characterise these locations and no additional targeted baseline data monitoring is required.

- 4.3.8 Based on the mitigation measures that will be adopted for the Proposed Development, it is considered that all construction effects will not be significant as the Proposed Development Changes are not expected to result in any new significant adverse effects.

Terrestrial Ecology

Scope and Methodology for the Assessment of the Proposed Development Changes

- 4.3.9 The scope and methodology for the terrestrial ecology assessment of the Proposed Development Changes will follow the same approach as outlined within the original PEIR in accordance with the CIEEM EclA guidelines (CIEEM, 2018) and following consultation responses from key stakeholders covering both the construction and operational phase of the Proposed Development.
- 4.3.10 Specifically, an updated PEA will be undertaken covering all new areas included within the updated Proposed Development boundary (Figure A3.2). This will inform an updated baseline and assessment of the relative importance of each Important Ecological Feature (IEF) and the magnitude of change arising from the Proposed Development (including the Proposed Development Changes). Similarly to the approach set out within the PEIR, measures will be incorporated to avoid and mitigate adverse effects and then an assessment on the significance of any residual effects after embedded mitigation will be undertaken as part of the full assessment to inform the Environmental Statement. Appropriate additional mitigation measures and opportunities for ecological enhancement will then be identified as part of the overall strategy for the Proposed Development.

Potentially Significant Effects

- 4.3.11 The following effects during construction are considered to be potentially significant as a result of the Proposed Development Changes and will be considered further in the Environmental Statement (ES) which will form part of the DCO Application:
- Habitat loss or fragmentation;
 - Killing or injury of protected and/or notable species;
 - Disturbance from artificial lighting;
 - Noise disturbance; and
 - Vibration disturbance.

- 4.3.12 Based on the mitigation measures that will be adopted for the Proposed Development, it is considered that all effects are not likely to be significant as the Proposed Development Changes are not expected to result in any new significant adverse effects.

Sensitive Receptors/Important Ecological Features

- 4.3.13 The following Important Ecological Features (IEF)/receptors potentially impacted as a result of the construction of the Proposed Development (including the Proposed Development Changes) will be considered as part of the terrestrial ecology assessment within the ES:

Table 4-2: Sensitive Receptors/Important Ecological Features (see Figures 10.1, 10.2 and 10.3 in the PEIR)

Receptor	Construction	Operation
Teesmouth and Cleveland Coast SPA & Ramsar site	Scoped in	Scoped out
North York Moors SPA, North York Moors SAC, Northumbria Coast SPA, Northumbria Coast Ramsar, Durham Coast SAC and Castle Eden Dene SAC	Scoped out because the distance to these receptors is greater than 10 km from the Proposed Development	Scoped out
Teesmouth and Cleveland Coast SSSI and Teesmouth NNR	Scoped in	Scoped out
Briarcroft Pasture SSSI, North York Moors SSSI, Whitton Bridge Pasture SSSI, Durham Coast SSSI, Hart Bog SSSI, Pike Whin Bog SSSI, Hulam Fen SSSI, Castle Eden Dene SSSI, Pinkney and Gerrick SSSI, Fishburn Grassland SSSI, Charity Land SSSI and Newton Ketton Meadow SSSI	Scoped out due to distance from Proposed Development and lack of impact pathways	Scoped out
Lovell Hill Pond SSSI, Saltburn Gill SSSI, Roseberry Topping SSSI, Langbaugh Ridge SSSI, Cliff Ridge SSSI, Kildale Hall SSSI and Boulby Quarries SSSI	Scoped out due to distance from Proposed Development and lack of impact pathways	Scoped out
Coatham Marsh LWS, Greatham Creek North Bank Saltmarsh LWS, Greenabella Marsh LWS, Saltern Saltmarsh LWS, Zinc Works Bird Field LWS and Teessaurus Park LWS	Scoped out due to distance from Proposed Development and lack of impact pathways	Scoped out
Habitat of Principle importance	Scoped in	Scoped out
Habitats	Scoped in	Scoped out
Invasive species	Scoped in	Scoped out
Ancient or veteran trees	Scoped out as none identified in the area of change	Scoped out
Amphibians	Scoped out as no suitable habitat within area of change	Scoped out

Receptor	Construction	Operation
Badger	Scoped out as no suitable habitat in the area of change	Scoped out
Bats	Scoped out as no suitable habitat in area of change	Scoped out
Breeding birds	Scoped in until updated PEA walkover survey completed	Scoped out
Reptiles	Scoped out as no suitable habitat in the area of change	Scoped out
Other mammals	Scoped out as no suitable habitat in the area of change	Scoped out
Otter	Scoped in until updated PEA walkover survey completed	Scoped out
Terrestrial invertebrates	Scoped in until updated PEA walkover survey completed	Scoped out
Water vole	Scoped in until updated PEA walkover survey completed	Scoped out
Wintering birds	Scoped in until updated PEA walkover survey completed	Scoped out

4.3.14 Based on the mitigation measures that will be adopted for the Proposed Development, it is considered that all additional effects will not be significant as the Proposed Development Changes are not expected to result in any new significant adverse effects.

4.4 Geology and Soils

4.4.1 The new areas added to the proposed Order limits as a result of the Proposed Development Changes are all areas that have been subject to historical industrial use, located on reclaimed land in a similar geological setting to the wider development boundary. The most notable area of change, in terms of size, is located to the south of the central Main Site area and is associated with the new electrical connection (Change 2).

4.4.2 The desk-based Phase 1 preliminary risk assessment (PRA), submitted as a technical appendix to the PEIR (Appendix 21A), will be amended to include the updated proposed Order limits as part of the ES. The amended PRA will review available information, including historical maps, to identify potential sources of contamination. An updated contamination conceptual site model will identify any linkages between contamination sources and receptors, including construction workers, the water environment and future site users.

4.4.3 The Geology and Soils ES Chapter will consider those areas within the updated proposed Order limits where excavations and intrusive works are

proposed, essentially the entire Main Site and new below ground sections of pipeline and cable route.

4.4.4 Based on the findings of the PRA, the ES chapter will assess:

a. the potential for construction staff, site neighbours and the general public to be exposed to contaminants and other hazards in the ground.

b. the potential for future site users to be exposed to contaminants in the ground.

c. the potential for contaminants to be mobilised and impact sensitive controlled water receptors; and

d. the potential for creation of additional pathways to allow hazardous gas to accumulate within infrastructure or buildings.

4.4.5 The Geology and Soils chapter of the ES will cover:

a. Identification and evaluation of impacts with respect to land contamination;

b. Qualitative assessment of significance and magnitude of land contamination on human health and controlled waters in accordance with current guidance;

c. Assessment of impacts on land contamination during both the construction and operational phases of the Proposed Development; and

d. Recommendations for mitigation measures that would reduce the potential effects of the developments to acceptable levels.

4.4.6 Based on the mitigation measures that will be adopted for the Proposed Development, it is considered that all effects will not be significant as the Proposed Development Changes are not expected to result in any new significant adverse effects.

5. Consultation

- 5.1.1 The changes are not considered to be of significant public interest being localised to the proposed development site. Therefore, the Applicant has decided to undertake a targeted consultation only, focused on prescribed parties and land interests supported by this PEIR Addendum.

6. Summary

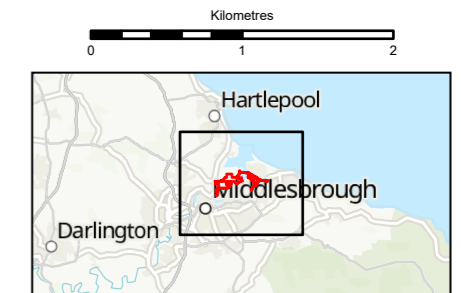
6.1.1 This PEIR Addendum has identified how the Proposed Development Changes interact and change the content, scope and conclusions of the original PEIR published for the Statutory Consultation that took place between December 2025 and January 2026.

1. The Proposed Development Changes that have been identified as requiring changes to the original PEIR are Proposed Development Changes 1 to 4. These changes result in updates to PEIR Chapter 3: Description of the Site and Surrounding Area, Chapter 4: Proposed Development and Chapter 5: Construction Programme and Management. These updates are included in this PEIR Addendum.
2. The four identified changes have been screened and are considered to be of a nature that potentially affects the assessments presented in PEIR Chapter 9: Noise and Vibration, Chapter 10: Terrestrial Ecology, Chapter 21: Geology and Soils and Chapter 22: Cumulative Effects. An explanation of how those chapters and assessments have been affected and how this will be assessed in the ES is presented in this PEIR Addendum.



Proposed Order Limits (Targeted Consultation)

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P02	09/04/26	CWILL	CESL	ICAM	NMcl
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Drawing Title
**PEIR Addendum Figure A2.1
 Site Location**

Client
LGF Projects Ltd.

Project Name
Lighthouse Green Fuels

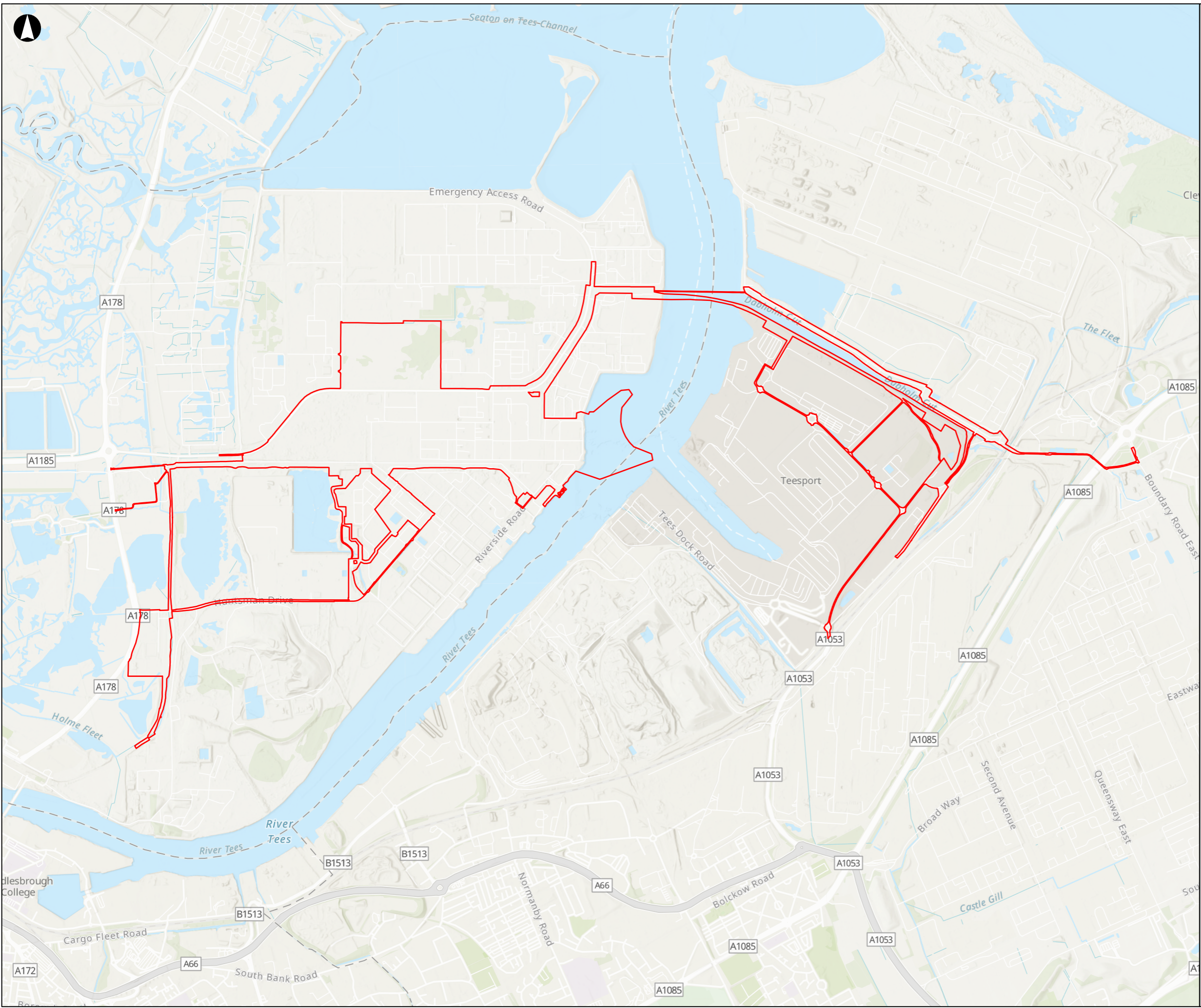
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Project Number
306732-00

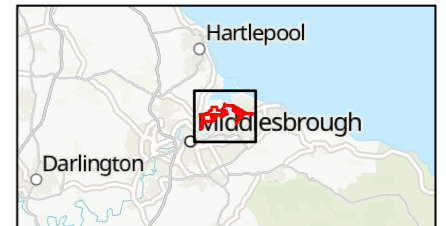
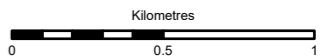
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P02

Proposed Order Limits (Targeted Consultation)



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Drawing Title
**PEIR Addendum Figure A2.2
 Updated Draft Order Limits**

Client
LGF Projects Ltd.

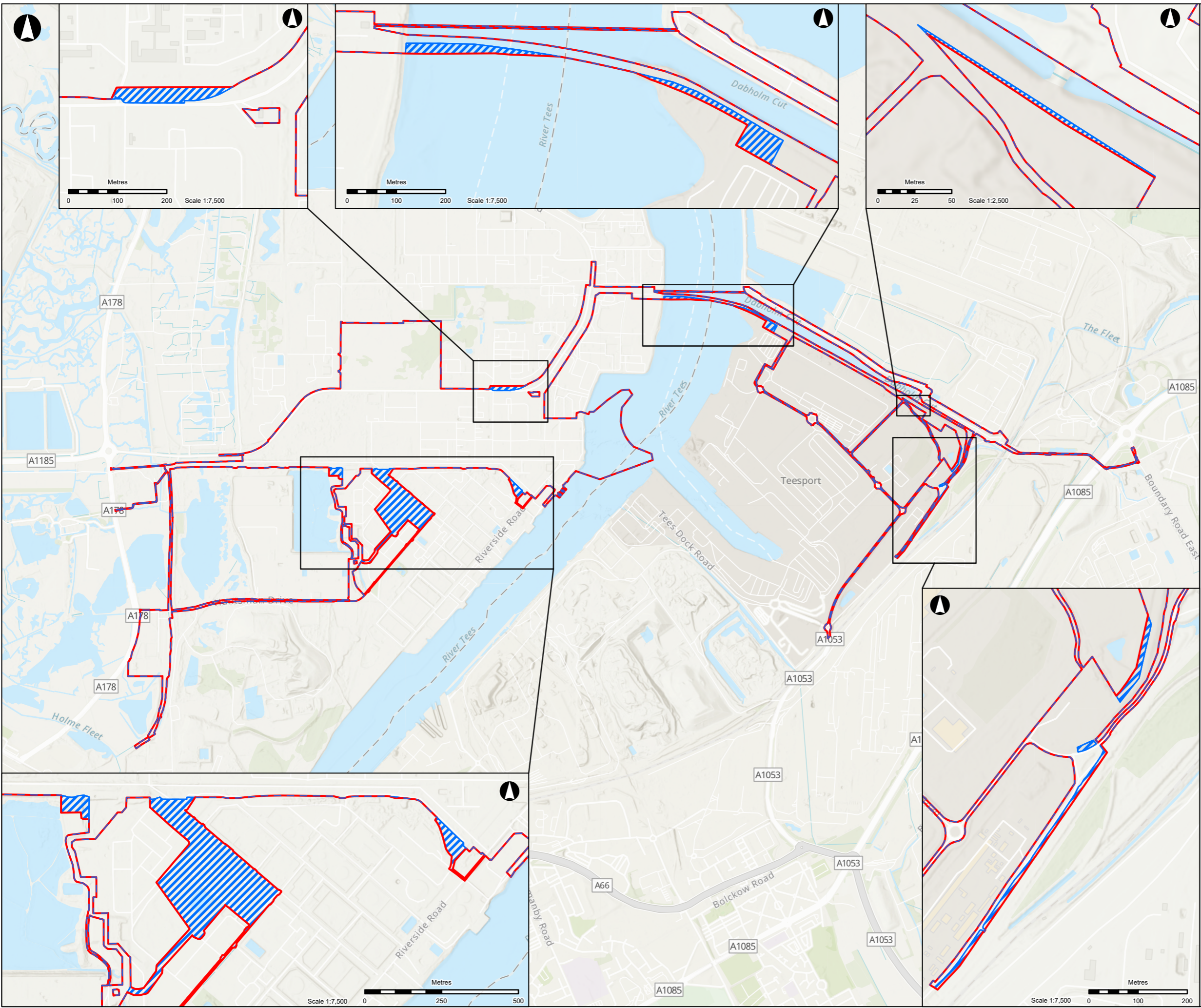
Project Name
Lighthouse Green Fuels

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Project Number
306732-00

Rev
P02

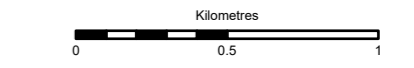
Drawing Number
LGF-306732-0129



- Proposed Order Limits (Targeted Consultation)
- Original Proposed Development Boundary
- Areas Added

Coordinate System: British National Grid

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Drawing Title
**PEIR Addendum Figure A2.3
 Differences between the Original and
 Updated Draft Order Limits**

Client
LGF Projects Ltd.

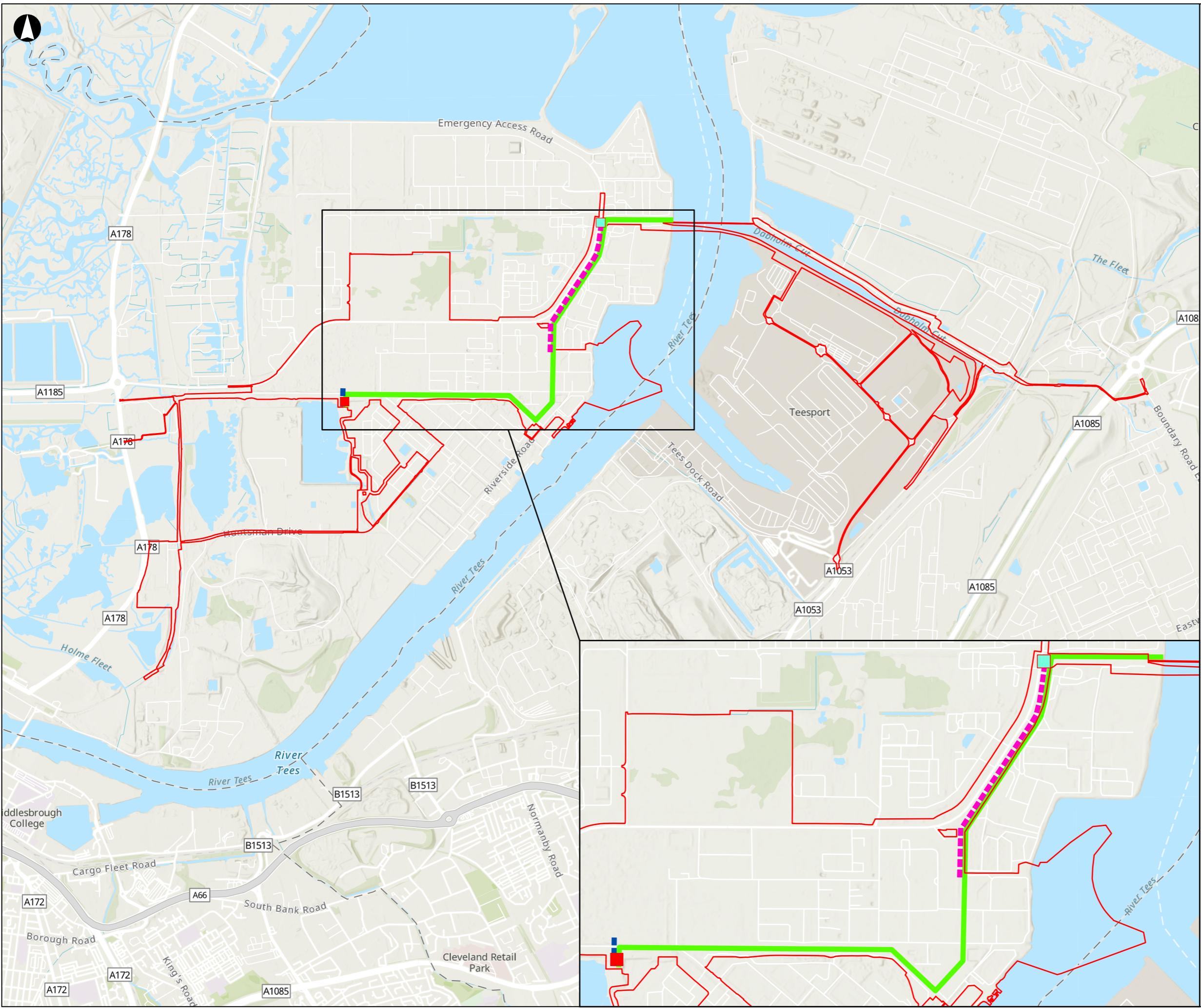
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Project Number
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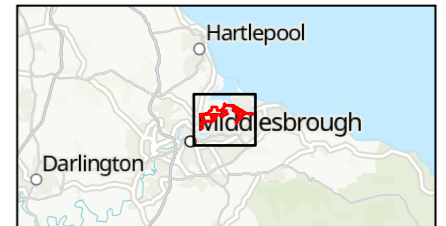
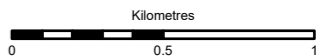
Drawing Number
LGF-306732-0130

Rev
P02



- Proposed Order Limits (Targeted Consultation)
- NEP AGI - C1 (indicative only)
- NEP AGI - C2 (indicative only)
- Consented NEP CO2 Gathering Network (Part)
- AGI - C1 Connection Pipeline
- AGI - C2 Connection Pipeline

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Rev	Date	By	Chkd	Appd	Authd



Drawing Title
PEIR Addendum Figure A3.1
CO₂ Export Connection Options

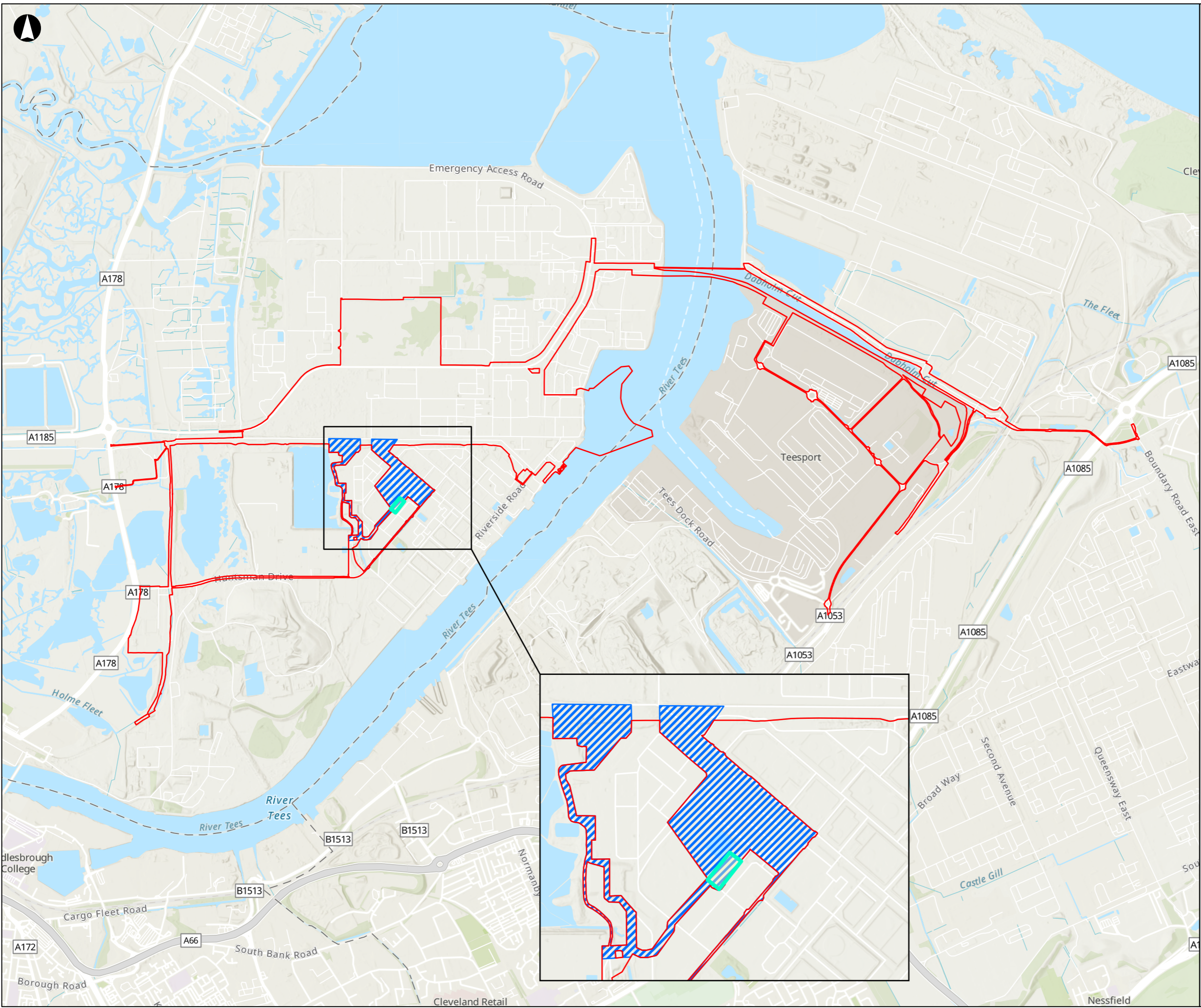
Client
LGF Projects Ltd.

Project Name
Lighthouse Green Fuels

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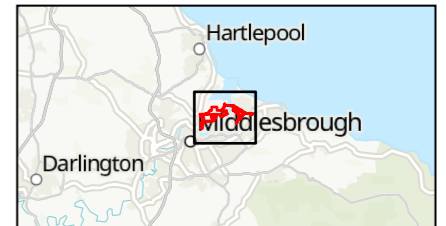
Project Number Rev
306732-00 P04

Drawing Number
LGF-306732-0131



- Proposed Order Limits (Targeted Consultation)
- Electrical Connection Corridor and Construction Access
- North Bank Switchyard

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Drawing Title
**PEIR Addendum Figure A3.2
 Off-Site Electrical Connection Options**

Client
LGF Projects Ltd.

Project Name
Lighthouse Green Fuels

Scale at A3 Inset scale at A3
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Project Number
306732-00 Rev
P04

Drawing Number
LGF-306732-0132