

Eggborough CCGT Project

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The Eggborough CCGT (Generating Station) Order

**Land at and in the vicinity of the Eggborough Power Station site,
near Selby, North Yorkshire, DN14 0BS**

Environmental Impact Assessment: Environmental Statement – Non Technical Summary

The Planning Act 2008

**The Infrastructure Planning (Environmental Impact Assessment) Regulations
2009 (as amended)**

Regulations – 6(1)(b) and 8(1)



Applicant: Eggborough Power Limited

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1.0 INTRODUCTION

1.1 Introduction

- 1.1.1 This document presents a Non-Technical Summary (NTS) of the Environmental Statement (ES) that has been prepared in support of a Development Consent Order (DCO) application for the construction and operation of the proposed up to 2.5 gigawatt (GW) gas-fired power station (referred to as the 'Proposed Development'), to be constructed largely within the site of the existing Eggborough coal-fired power station (referred to as the 'existing coal-fired power station') near Eggborough, North Yorkshire, with associated infrastructure including a gas connection to the National Grid gas transmission system approximately 3.1 kilometres (km) to the north of the existing coal-fired power station site.
- 1.1.2 The gas-fired power station will comprise up to three combined cycle gas turbine (CCGT) units and a gas-fired peaking plant and black start facility. A peaking plant is a fast-response generating plant that only runs for short periods when there is a peak in electricity demand on the National Grid. A black start facility is a small generating plant used to restore the National Grid in the unlikely event that it should fail.
- 1.1.3 The Proposed Development and the land within the DCO application boundary (referred to as 'the Site') are described in Sections 3 and 4 of this NTS. The location and Site boundary are shown on Figures NTS1 and NTS2.
- 1.1.4 The purpose of this NTS is to describe the Proposed Development and provide a summary in non-technical language of the key findings of the ES for the benefit of consultees and stakeholders. The ES is a document to enable stakeholders to understand the potential environmental effects of the Proposed Development identified through the Environmental Impact Assessment (EIA) process. EIA is a systematic process used to predict the adverse and beneficial effects of a proposed development. Full technical details are provided within the ES Volume I – Main Report, Volume II – Figures, and Volume III – Technical Appendices (Application Document Ref. Nos. 6.2, 6.3 and 6.4).
- 1.1.5 Further information on the Proposed Development can be found on the project website: <http://www.eggboroughccgt.co.uk/>.

1.2 The Applicant

- 1.2.1 The Applicant for the DCO is Eggborough Power Ltd (EPL). EPL owns and operates the 2 GW existing coal-fired power station at Eggborough, as well as a significant part of the land required for the Proposed Development.

1.3 The Development Consent Order Process

- 1.3.1 EPL has submitted this application to the Secretary of State (for Business, Energy and Industrial Strategy) under Section 37 of the Planning Act 2008, seeking a DCO for the Proposed Development. The DCO would provide the necessary authorisations and consents for the construction, operation and maintenance of the Proposed Development.

1.4 The Relevant EIA Regulations

- 1.4.1 The ES has been prepared to comply with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) ('the 2009 EIA Regulations'). The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the 2017 EIA Regulations') came into force on 16 May 2017, replacing the 2009 EIA Regulations, but the 2009 Regulations continue to apply to this DCO application because the EIA scoping opinion request was made in August 2016, prior to the commencement of the 2017 EIA Regulations.

1.5 EIA Scoping

- 1.5.1 EPL identified the issues that the EIA needed to address within the EIA Scoping Report submitted to the Planning Inspectorate in August 2016, following initial consultation with a number of statutory consultees. The SoS' Scoping Opinion was received on 28th September 2016, including the formal responses received by the Planning Inspectorate from consultees. The scope of the EIA has considered all the issues raised through the scoping process.

1.6 Preliminary Environmental Information (PEI) Report

- 1.6.1 A PEI Report was published for statutory consultation in January 2017, in accordance with the 2009 EIA Regulations. In order to enable consultees to understand the likely environmental effects of the Proposed Development, the PEI Report presented preliminary findings of the environmental assessments undertaken up to that point in time. This allowed consultees the opportunity to provide informed comments on the Proposed Development, the assessment process and preliminary findings, through a consultation process prior to the finalisation of this ES.

1.7 Consultation

- 1.7.1 Consultation is integral to the preparation of DCO applications and to the EIA process. The Planning Act requires applicants for development consent to carry out pre-application consultation on their proposals. EPL has adopted a two stage approach to pre-application consultation on the Proposed Development. Stage 1 consultation (non-statutory consultation) was carried out from 15 September to 16 October 2016, and Stage 2 (statutory) consultation was carried out from 12 January to 16 February 2017.
- 1.7.2 Consultation with key stakeholders has continued since the completion of the Stage 2 consultation stage ended, including providing key consultees with the opportunity to review draft ES chapters, and their comments have been addressed in the final ES where applicable.
- 1.7.3 All the responses received have been taken into account in the preparation of the DCO application and supporting documentation.

2.0 EIA ASSESSMENT METHODOLOGY

2.1 General Assessment Approach

2.1.1 In response to the SoS Scoping Opinion, the EIA and the ES include assessments of the following environmental topics:

- air quality;
- noise and vibration;
- ecology and nature conservation;
- water resources, flood risk and drainage;
- geology, hydrogeology and land contamination;
- cultural heritage;
- traffic and transportation;
- land use, agriculture and socio-economics;
- landscape and visual amenity;
- waste management;
- sustainability and climate change;
- human health; and
- cumulative and combined effects.

2.1.2 The EIA scoping process concluded that aviation, electronic interference (TV reception) and accidental events/ health and safety could be scoped out of the EIA for this Proposed Development.

2.1.3 The assessment presented in the ES follows a standard EIA methodology, which is summarised below. Where possible, the EIA uses standard methodologies, based on legislation, definitive standards and accepted industry criteria. This is set out in detail in each technical chapter of the ES (Volume I – Main Report).

2.1.4 The objective of the EIA process is to anticipate the changes (or ‘impacts’) that may occur to the environment as a result of the Proposed Development, such as increases in traffic and changes to air quality or noise conditions at identified sensitive receptors. The changes are compared to the environmental conditions that would have occurred without the Proposed Development (the ‘baseline’). The EIA process identifies potentially sensitive ‘receptors’ that may be affected by these changes (*e.g.* people living near the development, local flora and fauna) and defines the extent to which these receptors may be affected by the predicted changes (*i.e.* whether or not the receptors are likely to experience a ‘significant effect’).

2.1.5 The environmental impacts of the Proposed Development are assessed at key stages in its construction and operation/ use and, where possible and relevant, its eventual decommissioning.

2.1.6 The study area for each technical assessment is defined based on the nature of the impacts and the locations of potentially affected environmental resources or receptors.

2.1.7 ‘Existing baseline’ conditions have been defined based on desk-based studies and site surveys.

2.1.8 ‘Future baseline’ conditions have been considered, taking into account the influence of other anticipated changes within the study area in the absence of the Proposed Development. One

key change that is expected to occur over the lifetime of the Proposed Development is that the existing coal-fired power station is anticipated to stop generating electricity between 2017 and 2019, and will then be decommissioned and subsequently demolished. It is likely that the demolition of the existing coal-fired power station will take place at the same time as construction and/or the start of operation of the Proposed Development. There is therefore the potential for effects associated with decommissioning and demolition activities to interact with the effects of construction and operation of the Proposed Development (i.e. for the effects of the two projects to be cumulative). Given that both the demolition of the existing coal-fired power station and construction and operation of the Proposed Development are taking place within a site that is currently within the control of EPL, these cumulative effects have been considered as an integral part of the technical assessments described in Sections 7-18, to ensure 'worst case' scenarios have been assessed. For example, the landscape and visual impact assessment (Section 16) considers two scenarios for the operation of the Proposed Development – one at the start of operation (referred to as 'Opening') with the Proposed Development present alongside the existing coal-fired power station buildings and structures, and one later in the operation of the Proposed Development (referred to as 'Operation') when the existing coal-fired power station is likely to no longer be present.

2.2 Development Design, Impact Avoidance and Mitigation

2.2.1 The Proposed Development has been sited, and has had a number of measures incorporated into the concept design, to avoid or minimise adverse environmental impacts. Commitments to implementing these measures are secured through the DCO, either through the setting of limits of deviation (e.g. for the maximum heights of some buildings and structures and using fixed grid references for emission points) or through DCO Requirements (which are similar to planning conditions and are included at Schedule 2 of the draft DCO (Application Document Ref. No. 2.1)). The Requirements will be enforced by Selby District Council (SDC) who, in some cases, will be required to consult other bodies such as the Environment Agency or North Yorkshire County Council. Mitigation measures are also identified where possible, to reduce significant effects are identified by the assessment. Key impact avoidance and mitigation measures are summarised in this Non Technical Summary and further details are provided in Volume I of the ES (Volume I – Main Report) in each relevant technical chapter.

2.3 Impact Assessment Methodology and Significance Criteria

2.3.1 Effects are classified as major, moderate, minor and negligible, and adverse, neutral or beneficial. Each effect has been classified both before and after mitigation measures have been applied. Effects after mitigation are referred to as 'residual effects'.

2.3.2 Definitions of the standard terms are provided below:

- negligible – imperceptible effects to an environmental resource or receptor;
- minor – slight, very short or highly localised effect;
- moderate – limited effect (by extent, duration or magnitude);
- major – considerable effect (by extent, duration or magnitude) of more than local scale or in breach of recognised acceptability, legislation, policy or standards;
- adverse – detrimental or negative effects to an environmental resource or receptor;
- neutral – effects to an environmental resource or receptor that are neither advantageous or detrimental; and
- beneficial – advantageous or positive effect to an environmental resource or receptor.

- 2.3.3 Effects may also be temporary or permanent, short, medium or long term, and direct or indirect.
- 2.3.4 For the purpose of the EIA, adverse and beneficial effects are described as 'significant' or 'not significant'. Moderate and major effects are generally considered to be 'significant' for the purposes of the 2009 EIA Regulations, in accordance with standard EIA practice. Where the environmental assessment predicts a significant effect on one or more receptors, mitigation measures are identified where possible to avoid or reduce the effect, or to reduce the likelihood of it happening.

3.0 THE SITE

3.1 The Proposed Development Site

3.1.1 The Site is centred on grid reference 457796, 424391 and is located off the A19, between the River Aire to the north and the M62 to the south – see Figure NTS1.

3.1.2 All the land required for the Proposed Development is referred to as 'the Site' (see Figure NTS2). The Site is located entirely within the administrative boundary of Selby District Council (SDC), within North Yorkshire County Council (NYCC).

3.1.3 The Site is approximately 102.5 hectares (ha) in area.

3.1.4 For ease of reference the different areas of the Site are described using the terms listed below (see Figure NTS3). The references to 'Work No.' below refer to the 'works' described in Schedule 1 of the draft DCO and the Works Plans (Application Document Ref. Nos. 2.1 and 4.4).

- Proposed Power Plant Site (Work No. 1) – the CCGT, peaking plant, black start facility and associated infrastructure within the existing coal stockyard area, and a small area to the north-east of the coal stockyard area;
- Proposed Electricity Connection (Work No. 3) – from the Proposed Power Plant Site to the existing National Grid sub station within the existing coal-fired power station site;
- Proposed Cooling Water Connections (Work No. 4) – from the Proposed Power Plant Site to the existing abstraction point located upstream of the weir at Chapel Haddlesey (non tidal) and to the existing outfall point located within the tidal section of the River at a meander known as Eggborough Ings;
- Proposed Borehole and Towns Main Water Connections (Work No. 5) – there are two existing groundwater abstraction boreholes that are potentially going to be used, one adjacent to the Eggborough Sports and Leisure Complex and one further south near the A19/ A645 Weeland Road roundabout, and towns main water connections at Tranmore Lane and Hensall Gate;
- Proposed Gas Connection (Work No. 6) and Above Ground Installation (AGI) (Work No. 7) – from the Proposed Power Plant Site to Feeder 29, the National Grid gas transmission network, to the north of the Site at a point south-west of Burn village. The AGI is at the connection point of the proposed gas pipeline to the gas transmission network;
- Proposed Surface Water Discharge Connection (Work No. 9) – for the discharge of surface water to Hensall Dyke in the south-east of the Site;
- Proposed Rail and Access Works (Work No. 10) – an area to the west of the Proposed Power Plant Site which is predominantly to be used for access (via Tranmore Lane) and potential works to alter the existing rail infrastructure for use during construction;
- Proposed Construction Laydown area (Work No. 2A) – within part of the existing coal-fired power station site to the north-east of the Proposed Power Plant Site;
- Proposed Carbon Capture and Storage Readiness (CCR) Land (Work No. 2B) – land must be set aside for the potential future installation of a carbon capture plant, to meet the requirements of the UK Carbon Capture Readiness guidance that applies to power stations of this capacity. This land is located within the Proposed Construction Laydown area; and
- Retained Landscaping areas (Work No. 8) – areas of existing plantation woodland that are to be retained for landscape and biodiversity benefit.

- 3.1.5 There are three potential access points to the Proposed Power Plant Site (see Figure NTS3), which are referred to as:
- existing main entrance (off the A19 to the west of the Proposed Power Plant Site);
 - Tranmore Lane entrance (off the A19 to the south of the existing main entrance, which crosses the existing private railway line, to the west of the Proposed Power Plant Site); and
 - Hensall Gate entrance (off Wand Lane to the north of the Proposed Power Plant Site).
- 3.1.6 A number of points of access to the Proposed Gas Connection corridor (for construction) have also been identified from north to south as follows (see Figure NTS3):
- West Lane;
 - the A19 south of Burn Lodge Farm;
 - Whittings Lane (off the A19 opposite Burn Lodge Farm);
 - via Fox Lane;
 - Millfield Road east of Chapel Haddlesey; and
 - Wand Lane.
- 3.1.7 Access to the Proposed AGI Site during operation will be via West Lane, and rights to access the Proposed Gas Connection pipeline corridor via West Lane, Whittings Lane, Millfield Road and Wand Lane will be required to allow for annual testing and, if necessary, maintenance of the pipeline..

3.2 The Surrounding Area and Potential Environmental Receptors

- 3.2.1 The area surrounding the existing coal-fired power station is generally rural, characterised by arable fields bounded by hedgerows, punctuated by a network of B and C roads and interspersed with small villages and farms. This is intersected north-south by the A19 (which lies to the west of the existing coal-fired power station) and by the East Coast Main Line (to the east of the existing coal-fired power station), and intersected east-west by the A645, Goole to Knottingley railway line, Knottingley and Goole Canal, and M62 (which all lie to the south of the existing coal-fired power station), and by the River Aire (to the north of the existing coal-fired power station).
- 3.2.2 A summary of key environmental receptors is provided below. Where distances are quoted in this ES the distance is defined (unless otherwise stated) as the shortest distance between two described locations, for example from the closest point of the Site boundary to the closest point of a designated site boundary.
- 3.2.3 Residential receptors include:
- the villages of Gallows Hill, Hensall, Eggborough, Kellington, Chapel Haddlesey; West Haddlesey, East Haddlesey and Burn;
 - properties around the Hazel Old Lane/ Weeland Road junction;
 - a residential property at the Eggborough Sports and Leisure Complex;
 - two properties off the A19 near Roall Water Works opposite the Tranmore Lane entrance and Roall Hall Farm to the north of the existing coal-fired power station main entrance; and

- Haddlesey Manor, Lodge Farm, Burn Lodge Farm and Gateforth Grange located in the vicinity of the Proposed Gas Connection and AGI Site.
- 3.2.4 There are no nationally designated nature conservation site (Sites of Special Scientific Interest (SSSIs)) within 5 km of the Site. The River Derwent Special Area of Conservation (SAC) is located 9.5 km to the east of the Site. There are no Special Protection Areas (SPAs) or Ramsar sites within 10 km of the Site.
- 3.2.5 There are four Public Rights of Way (PRoW) that fall partly within the Site: a footpath on the north side of the Tranmore Lane entrance (less than 150 m long); a footpath in the vicinity of the existing cooling water abstraction infrastructure (less than 100 m long); a footpath linking Chapel Haddlesey Weir to Gallows Hill which is crossed by the Proposed Gas and Cooling Water Connections; and a bridleway east of the A19 opposite Burn Lodge Farm, which is crossed by the Proposed Gas Connection corridor.
- 3.2.6 Watercourses in and around the Site include the River Aire and Ings and Tetherings Drain (both to the north of the existing coal-fired power station), and Hensall Dyke (in the south-east of the Site).
- 3.2.7 The Proposed Power Plant Site is located within Flood Zone 1. A small section of the Proposed Construction Laydown is located in Flood Zone 3, and the Proposed Gas Connection passes through Flood Zones 1, 2 and 3, and the Proposed AGI is located in Flood Zone 2.
- 3.2.8 The Site is located within a nitrate vulnerable zone, and the Proposed Power Plant Site is located in Groundwater Source Protection Zone three.
- 3.2.9 A scheduled monument (Roman fort) is located approximately to the north-west of the existing coal-fired power station's main entrance and a number of listed buildings/ structures are located in the vicinity of the Site, including:
- two Grade II structures to the east of the existing coal-fired power station – Pair Of Gate Piers To Roall House 250 m to the north-west of the existing coal-fired power station's main entrance on the A19, and a milestone 320 m north-east of the existing coal-fired power station's main entrance on the A19;
 - three Grade II and two Grade II* buildings in Hensall between 1 km and 1.5 km to south-east/ east of the Proposed Power Plant Site;
 - Grade II Temple Manor located approximately 1 km east of the Proposed Gas Connection corridor; and
 - Grade II Tankards Bridge, Paper House Bridge and Selby Canal Paper House Bridge, which are all bridges over the Selby Canal, between 660 m and 1 km from the Proposed Gas Connection corridor.
- 3.2.10 There are no Conservation Areas within 5 km of the Site.
- 3.2.11 There are a number of non-designated heritage assets within and around the Site, including the existing coal-fired power station itself, and Hall Garth (a medieval moated site which is of schedulable quality) to the east of the Proposed Gas Connection corridor near Haddlesey Manor. The route of the Proposed Gas Connection has been routed and refined to avoid heritage assets where possible.

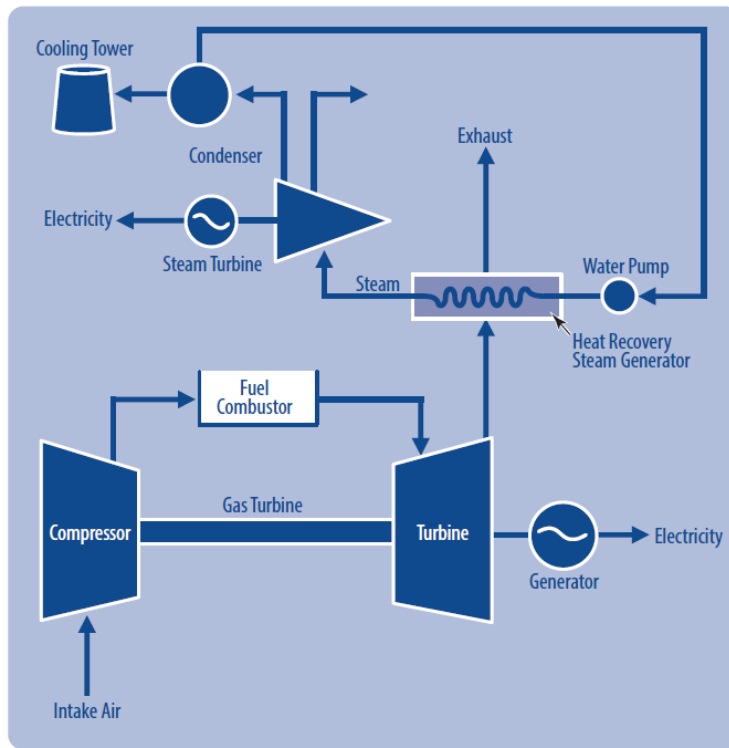
- 3.2.12 The Site is located entirely within the Humberhead Levels National Landscape Character Area, which is a “*flat, low-lying and large scale agricultural landscape*” (Natural England, 2014a). More details of the landscape surrounding the Site are provided in Chapter 16: Landscape and Visual Amenity.

4.0 THE PROPOSED DEVELOPMENT

- 4.1.1 The Proposed Development comprises the construction and operation of a gas-fired power station with a gross output capacity of up to 2,500 MW; comprising up to three high efficiency CCGT units and associated steam turbines; and a gas-fired peaking plant and black start facility with a combined gross output capacity of up to 299 MW to be installed on the same Site. Subject to obtaining the necessary consents, construction is anticipated to start in early 2019 and be completed in 2022.
- 4.1.2 There are several elements of the Proposed Development (see Figures NTS3, NTS4a and NTS4b). These include:
- up to three CCGT units with associated chimney stacks (which will be grouped together or 'co-located');
 - low level cooling towers and associated water treatment plant and pipework;
 - a peaking plant comprising either open cycle gas turbines or gas engines, housed in a dedicated building with associated chimney stacks;
 - a 'black start' gas turbine with associated diesel generators for start-up;
 - underground electrical cables and a new sub station to connect to the existing 400 kV National Grid sub station at the existing coal-fired power station site;
 - an underground gas supply pipeline (approximately 4.6 km long) and infrastructure to connect to the National Grid Transmission gas network;
 - river, ground and towns water supply pipelines and infrastructure to provide cooling water and water for the boilers; and
 - various other supporting facilities, such as administration, workshop and storage buildings, storage tanks, access roads, changes to existing rail infrastructure, drainage, fencing and landscaping.
- 4.1.3 Land for construction laydown (contractor compounds, materials storage, pre-fabrication etc.) and for potential future carbon capture and storage technology (if and when the technology is both viable and technically feasible to be installed) have also been identified within the Site.
- 4.1.4 Two concept layouts have been prepared to inform the ES (see Figures NTS4a and NTS4b). These represent two possible configurations that EPL and the construction contractor may select at the detailed design stage – a 'single shaft' configuration, and a 'multi shaft' configuration. Only one configuration will be constructed and the electrical output of either configuration would be similar. Likewise the environmental effects of either configuration are similar, but where there are differences, these are explained in the relevant technical chapter of the ES (Volume I – Main Report) and the worst case is assessed accordingly.
- 4.1.5 The concept design of the Proposed Development has been developed to take into account the findings of the environmental assessments and where practicable, decisions have been influenced by the findings of the EIA in order to design out or minimise environmental effects.

4.1.6 A schematic of the CCGT power generation process is provided below in Plate 1.

Plate 1: Power generation process (for a single shaft generating unit)



4.1.7 The Proposed Development will seek to use some of the existing connections of the existing coal-fired power station (such as the cooling water connections on the River Aire), although infrastructure may require replacement/ upgrading due to its age and condition. The existing National Grid sub-station within the Site will be used to export the generated electricity; the proposed power station will be connected to it via new underground cables.

4.1.8 Supplies of water for cooling and use in the boilers will be needed for the proposed power station, as they are for the current coal-fired power station. The proposed cooling water connections will be via the existing coal-fired power station's abstraction and discharge points on the River Aire but new/ upgraded pipework and other infrastructure is likely to be required. The cooling technology has not yet been finalised but whether wet cooling towers or hybrid cooling towers are used, the volume of water required from the River will be less than that currently licenced to be extracted from the River for the existing coal-fired power station. Boiler feedwater will be sourced from two existing groundwater boreholes (one within the existing Eggborough Power Station Golf Course, the other near the A19/ A645 Weeland Road roundabout) using new pipework between the abstraction points and the proposed power station, and with backup provided by towns water connections.

4.1.9 The gas supply for the Proposed Development will be via a new underground pipeline and connection to the National Grid transmission gas network to the north of the Proposed Power Plant Site. The gas pipeline will be up to 1 m in diameter and will be laid approximately 1.2 m below ground level within the proposed route corridor shown in Figure NTS3. Where the new gas pipeline meets the National Grid gas transmission network, National Grid and EPL AGI compounds will be required, with a new access point off West Lane.

5.0 CONSTRUCTION PROGRAMME AND MANAGEMENT

5.1.1 The ES (Volume 1 – Main Report) sets out information on the expected construction activities and timescales, including anticipated staff numbers, construction hours, delivery routes and an outline construction programme (see Table 1 below).

Table 1: Indicative construction programme

	2019				2020				2021				2022			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Demolition of ancillary structures	■	■														
Earthworks	■	■														
Main civil works			■	■	■	■	■	■	■	■						
Process works					■	■	■	■	■	■	■	■	■			
Gas connection/ AGI construction									■	■	■	■				
Commissioning													■	■		

5.1.2 Management of the environmental effects associated with the construction works will be formalised and agreed with regulators through the development and implementation of a Construction Environmental Management Plan (CEMP) and other related documents including a Construction Traffic Management Plan and a Construction Workers Travel Plan (all secured by DCO Requirements). Frameworks for these documents are included in the ES Volume III (Appendix 5A and Appendix 14A, Annexes AB and AC) and they will be finalised by the construction contractor when they are appointed, in accordance with DCO Requirements.

6.0 NEED, ALTERNATIVES AND DESIGN EVOLUTION

- 6.1.1 The Proposed Development will provide vital new energy infrastructure required to ensure security of electricity supply to the UK. High efficiency CCGTs, alongside a number of renewables technologies, will form part of a diverse energy mix that will replace ageing coal and nuclear power stations which are due to close over the next five to ten years (including the existing Eggborough coal-fired power station).
- 6.1.2 Alternatives have been considered throughout the development of the concept design for the Proposed Development and preparation of the DCO application, including alternative sites, alternative locations with the existing coal-fired power station site, alternative routes for the Proposed Gas Connection and AGI, alternative technologies, and alternative design options. The Proposed Development and Site have been defined as a result of technical and environmental studies.
- 6.1.3 As with any development of this nature, the design process is based upon lessons learned from previous similar developments and the application of Best Available Techniques (BAT) (the available techniques that are currently identified to be the best for preventing or minimising emissions and impacts on the environment). The DCO includes a degree of flexibility in the dimensions of buildings to allow for the selection of the preferred technology and contractor. In order to ensure a robust assessment, an 'envelope' (also referred to as the 'Rochdale envelope') has been defined to accommodate this necessary flexibility and to enable the EIA to consider the 'worst case'. For example the landscape and visual impact assessment has assessed the largest massing of buildings.

7.0 RELEVANT LEGISLATION AND PLANNING POLICY

7.1 The Proposed Development Consent Order

7.1.1 The Proposed Development falls within the definition of a 'Nationally Significant Infrastructure Project' (NSIP) under the Planning Act 2008, because it is an onshore generating station in England that will have a generating capacity greater than 50 MWe gross output. As such, a DCO is required to enable the construction, operation and maintenance of the Proposed Development.

7.2 The Planning Act 2008 and National Policy Statement

7.2.1 The Planning Act 2008 provides a system for determining applications for DCOs for NSIPs. The Planning Inspectorate is responsible for receiving and examining DCO applications, upon which they make a recommendation to the relevant Secretary of State, who then decides whether the DCO should be granted.

7.2.2 The Government has put in place a series of National Policy Statements (NPSs), which set out the policy for considering NSIPs. There are a number of National Policy Statements covering new energy developments, which define the clear and urgent need for new energy generating plants to be developed in the UK. The most relevant NPSs for the Proposed Development are the Overarching NPS for Energy (EN-1) and the NPS for Fossil Fuel Electricity Generating Infrastructure (EN-2).

7.3 The National Planning Policy Framework

7.3.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how they are to be applied, though it clearly states that it does not contain specific policies for NSIPs (these policies are provided by the NPSs referred to above). The NPPF can, however, be a material consideration in examining applications for DCOs and therefore the ES has considered its policies where relevant.

7.4 Selby District Council (SDC) Development Plans

7.4.1 There are a number of SDC local development plan documents that set out relevant local policy and these have been considered during the assessment process. These policies are described further within the ES (Chapter 7: Legislative Context and Planning Policy Framework in Volume I – Main Report).

8.0 AIR QUALITY

8.1 Introduction and Baseline Conditions

- 8.1.1 The air quality assessment considers potential impacts from the Proposed Development on both human and ecological receptors including residential properties, schools, Air Quality Management Areas (AQMA), Special Areas for Conservation (SACs), Sites of Special Scientific Interest (SSSIs) and local Sites of Importance for Nature Conservation (SINCs). There is a small Air Quality Management Area (AQMA) located in Selby town (New Street/ The Crescent) approximately 9 km to the north-east of the Proposed Power Plant Site and there is also an AQMA 5 km to the west of the Proposed Power Plant Site, along the M62 corridor through Wakefield District.
- 8.1.2 Baseline air quality has been determined using available local authority and Defra published data and data collected by EPL.
- 8.1.3 The air quality assessment uses computer models and screening tools to predict the dispersion of air emissions from the Proposed Development including anticipated emissions from the proposed stacks and traffic emissions associated with the construction of the Proposed Development, to predict concentrations of pollutants in ambient air which are compared to national air quality standards.

8.2 Effects During Construction

- 8.2.1 During construction, impacts could arise from emissions from construction vehicles and mobile construction plant as well as dust and particulate matter from construction activities such as site clearance. However, based on predicted construction traffic volumes and through the use of appropriate standard construction management measures and mitigation throughout the construction phase (as will be employed through the implementation of the CEMP) as well as construction vehicle travel plans, emissions to air are assessed to have no significant adverse effects on human or ecological receptors.

8.3 Effects During Operation

- 8.3.1 Predicted ground level concentrations of relevant air pollutants (principally nitrogen oxides and carbon monoxide) due to air emissions from the operation of the Proposed Development have been calculated. The results have been used to determine the appropriate stack heights for both the CCGT units and the peaking plant. By using CCGT stacks 90 m in height above ground level and peaking plant stacks up to 45 m in height, the risk of exceeding the Government-defined air quality objectives is negligible. The heights of the CCGT stacks are fixed in the draft DCO (the top of stacks will be at 99.9 m Above Ordnance Datum (AOD)). No significant air quality effects are predicted at the identified human and ecological receptors.
- 8.3.2 The use of additional technology ('Selective Catalytic Reduction' or SCR) to further reduce nitrogen oxides emissions from the Proposed Development has been considered, and potential effects on designated ecological sites have been assessed. Based on conservative assumptions, significant (moderate and major) adverse effects from atmospheric nitrogen concentrations, ammonia deposition and acid deposition on three SACs (Thorne Moor, Skipwith Common and Humber Estuary) are predicted if SCR was to be used without further mitigation. The requirement to use SCR will be determined through the Environmental Permit

application process and by agreement with the Environment Agency that would regulate the Environmental Permit. At this stage, space has been left for the use of SCR should that be required, but further evaluation of the likely effects on SACs would be required before SCR was installed in accordance with The Conservation of Habitats and Species Regulations 2010 (as amended) (the Habitats Regulations).

- 8.3.3 while there is the potential for more significant effects without additional mitigation this would be evaluated and addressed if SCR were ever to be installed since conservative assumptions have been used on the assessment. If you want we could say that our base position is that no SCR is being installed
- 8.3.4 Emissions from the Proposed Development during operation will be carefully controlled through continuous monitoring and regulated by the Environment Agency through the Environmental Permit. The Permit must be granted prior to operation of the Proposed Development. The Permit will set out specific requirements to ensure continuous compliance with European and national legislation for this type of power station, including the use of BAT to control and minimise emissions.
- 8.3.5 The stacks will not give rise to any visible plumes (due to water vapour condensation) during normal operation. However, depending on the choice of cooling technology, visible plumes could occur from the proposed new low level cooling towers located to the east of the main CCGT units. An assessment of visible plume formation has been undertaken and these effects are not predicted to be significant, but will be used to inform the BAT assessment for choice of cooling technology, that will accompany the Environmental Permit application.

8.4 Effects During Decommissioning

- 8.4.1 Effects during the decommissioning phase are anticipated to be comparable to the construction phase. A Decommissioning Environmental Management Plan (DEMP) will be developed prior to decommissioning setting out measures to avoid adverse environmental effects.

8.5 Conclusions

- 8.5.1 In summary, it is concluded that there will be no significant effects due to air quality changes as a result of the Proposed Development through the use of embedded mitigation, use of a CEMP during construction and DEMP during decommissioning, and use of appropriate stack heights and compliance with the required Environmental Permit during operation of the Proposed Development.
- 8.5.2 If SCR is required by the Environment Agency to be used to reduce nitrogen oxides emissions further then significant adverse effects on three SACs are predicted due to atmospheric ammonia, nitrogen deposition and acid deposition effects. The need for the use of SCR will therefore be considered in this context, and agreed with the Environment Agency prior to operation of the Proposed Development.

9.0 NOISE AND VIBRATION

9.1 Introduction and Baseline Conditions

- 9.1.1 Potential noise sensitive receptors have been identified around the Site. The potential for increased noise and vibration during construction and operation of the Proposed Development has been predicted using noise models and the results compared with recorded baseline noise levels at the identified receptors during the day and night. The predicted change has been compared with national standards for noise and vibration to see whether the increased noise will be noticeable at receptors and whether there is therefore the potential for significant effects without further mitigation measures being applied.
- 9.1.2 The assessment has also considered the potential for vibration effects from construction, operation and decommissioning of the Proposed Development. Vibration is likely to occur for a short period of the construction works as piling is likely to be required for some of the main structures. However, due to the distance to any buildings that could be affected by vibration, and the nature of the works proposed, no significant vibration impacts are likely.

9.2 Effects During Construction

- 9.2.1 For the majority of the construction works, no significant noise effects are predicted during the daytime period through the implementation of best practice measures to control construction noise that will be applied in accordance with a DCO Requirement. This is due to distance, intervening screening provided by the existing large earth bund around the Proposed Power Plant Site and existing background noise levels. Construction noise traffic is also not anticipated to be significant.
- 9.2.2 Based on conservative assumptions, during construction of the Proposed Borehole Water Connection significant (moderate) adverse short term noise effects could occur at the Eggborough Sports and Leisure Complex (residential receptor) when the work is closest to the property, and during concrete breaking works at the Proposed Cooling Water abstraction point significant (major) adverse short term noise effects could occur at nearby residential properties in Chapel Haddlesey. Appropriate mitigation will be implemented to reduce effects, including agreement of construction noise limits in accordance with a DCO Requirement.
- 9.2.3 During the peak of construction, some work may be required outside of normal working hours, however appropriate noise limits will be imposed and construction noise will be managed and mitigated in accordance with a DCO Requirement, so this is not predicted to give rise to significant effects.
- 9.2.4 There is potential for significant (moderate) adverse short term effects on residential properties adjacent to local roads used for construction access to the Proposed Gas Connection corridor and AGI Site, due to the increase in HGVs using these roads particularly in the first two weeks of construction of each section of the Proposed Gas Connection. These effects will be managed through a traffic management plans and HGV deliveries will be restricted to daytime hours only in accordance with DCO Requirements.

9.3 Effects During Operation

- 9.3.1 The design of the Proposed Development will include appropriate measures to mitigate potential operational noise effects in accordance with the use of BAT as regulated by the Environment Agency through the Environmental Permit.
- 9.3.2 The assessment considers the potential for noise to arise from increased traffic movements on local roads during operation of the Proposed Development. As operational traffic flows will be very low, no significant effects are predicted.
- 9.3.3 During the operation, noise from the Proposed Power Plant Site is not predicted to have a significant adverse effect on the nearest receptors during the daytime, but there is potential for significant (moderate) adverse effects at Roall Waterworks residential receptors at night time. This will be avoided through adoption of control measures within the detailed design of the Proposed Development (e.g. noise insulation in external building walls) to achieve agreed noise limits in accordance with a DCO Requirement.

9.4 Effects During Decommissioning

- 9.4.1 Effects associated with decommissioning of the Proposed Development will be similar to construction effects as described above.

9.5 Conclusions

- 9.5.1 In summary, it is concluded that there could potentially be short term significant adverse construction noise effects at a small number of receptors around the Site; however, these will be minimised by measures and noise limits to be agreed in accordance with a DCO Requirement.
- 9.5.2 Decommissioning effects are anticipated to be similar to construction effects.
- 9.5.3 No significant noise effects are anticipated during the operation of the Proposed Development (following appropriate mitigation), which will be operated in accordance with an Environmental Permit.
- 9.5.4 No significant vibration effects are anticipated during construction, operation or decommissioning.

10.0 ECOLOGY AND NATURE CONSERVATION

10.1 Introduction and Baseline Conditions

- 10.1.1 Ecological receptors have been identified in and around around the Site through a desk based study and ecological surveys of the Site and its immediate surroundings.
- 10.1.2 There is one international nature conservation designation (SACs, Special Protection Areas (SPAs) or Ramsar sites) within the 10 km of the Site – the River Derwent SAC. To ensure a conservative approach air quality effects on SACs beyond 10 km from the Site have also been assessed as requested by consultees. There are also five Sites of Special Scientific Interest (SSSIs) located within 10 km and two non-statutory designations within 1 km of the Site.
- 10.1.3 A number of protected or notable animal species have been identified as present, or potentially present, within the Site – bats, great crested newt, badger, otter, fish, grass snake and breeding birds.
- 10.1.4 An Indicative Landscape and Biodiversity Strategy has been prepared and the final Strategy will be agreed and implemented in accordance with a DCO Requirement. This will deliver biodiversity enhancements within the Site.

10.2 Effects During Construction

- 10.2.1 There will be no loss of habitat within any statutory or non-statutory designated sites due to construction, and while there will be some loss of the existing (non-designated) habitats within the Site, with best practice measures implemented in accordance with DCO Requirements, no significant adverse effects are predicted.
- 10.2.2 There will be no significant adverse effects on protected or notable species as a result of construction. There may be some level of disturbance but this would be temporary in nature, reversible and therefore not significant. Design measures, including directional lighting (directed downwards to minimise light spill), and good practice methods to manage dust will assist in minimising any disturbance. In addition:
- pre-construction surveys will be undertaken including for badger and water vole, to check the status of these species within the Site;
 - precautionary method statements will be used to manage works near sensitive areas, such as a pond 300 m from the Proposed AGI Site which supports great crested newts;
 - a Fish Management Plan will be prepared to protect the welfare of fish in the lagoon (to be drained within the construction laydown area) and for any works in the River Aire, and
 - temporary cofferdams (required for works to the existing cooling water abstraction and discharge structures in the River) will only be installed and removed outside the main salmonid migratory season (October to December).

10.3 Effects During Operation

- 10.3.1 The assessment has concluded there will be no significant adverse effects on designated sites, notable habitats or protected species during operation, including air quality effects.

10.4 Effects During Decommissioning

- 10.4.1 The effects of decommissioning cannot be assessed in detail as ecological receptors within the Study Area may have changed by that time, but effects are anticipated to be less significant than construction effects.

10.5 Conclusions

- 10.5.1 No significant adverse effects on ecological receptors are predicted as a result of construction, operation or decommissioning of the Proposed Development. Consequently no additional mitigation measures are proposed, however an Indicative Landscape and Biodiversity Strategy has been prepared to identify enhancement measures that can be accommodated within EPL's landholding. These measures will be implemented and secured by Requirement of the DCO.

11.0 WATER RESOURCES, FLOOD RISK AND DRAINAGE

11.1 Introduction and Baseline Conditions

- 11.1.1 Key water bodies that may receive runoff or discharges from the Site during construction, operation and decommissioning of the Proposed Development have been identified, and the potential contamination risk to these water bodies has been assessed. The study areas for groundwater and surface water have been defined based on the potential for impacts to occur; the groundwater study area is larger than the surface water study area in order to consider the potential impacts on the aquifer beneath the Site.
- 11.1.2 The main surface watercourses within or close to the Site are the River Aire, Ings and Tetherings Drain and Hensall Dyke. There are also a number of minor watercourses and water features in and around the Site. The Site is located within a groundwater protection zone and groundwater beneath the Site is used for public water supply (defined as a Principal Aquifer).
- 11.1.3 The majority of the Site within the existing coal-fired power station site is located within Flood Zone 1 (low risk), as defined by the Environment Agency. A small area of the Proposed Construction Laydown area is located within Flood Zone 3 (high risk) and the Proposed Gas Connection corridor is located predominantly within Flood Zone 3 (high risk), with small pockets of land located within Flood Zone 2 (medium risk) along the pipeline route (including the Proposed AGI Site).

11.2 Effects During Construction

- 11.2.1 The assessment has concluded that during construction there is the potential for spillages to occur, but the likelihood of these occurring will be low through the use of working methods that will be formalised through the CEMP. As a result, the potential impact of such an incident is not considered likely to result in a significant effect on surface or groundwater quality.
- 11.2.2 Construction work for the Proposed Cooling Water and Gas Connections will need to take place within Flood Zone 3, but these works will be temporary and once the pipeline is installed there will be no long term effect because it will be below ground.
- 11.2.3 Construction materials will be stored outside of the 1 in 100 year floodplain extent wherever possible. Other standard practice measures will be used in the construction of the Proposed Development, thereby ensuring that the temporary works will not increase flood risk in the area or exacerbate flooding for neighbouring properties, and to avoid any adverse environmental effects if the Site flooded during construction.
- 11.2.4 The only potentially significant (moderate) adverse effect that has been identified is a potential increase in flood risk during the short term use of cofferdams during construction works at the existing cooling water abstraction and discharge points in the River Aire, if this was to coincide with high water levels in the river channel. The risk of this effect occurring will be minimised by reducing the duration of the cofferdams being present in the River and by only installing them during the summer when flows in the River are generally lower.

11.3 Effects During Operation

- 11.3.1 The potential impacts during operation will be managed by similar best practice measures for working procedures and the storage of materials and fuels as in the construction phase, but formalised through the Environmental Permit. The drainage system (which will be designed and approved in accordance with a DCO Requirement) will prevent potentially polluted runoff from causing pollution of surface or ground water bodies.
- 11.3.2 The Proposed Development will utilise cooling water abstracted from the River Aire at the same point as currently used for the coal-fired power station and discharged back to the River at the same point as the current discharge. The volume of water to be extracted will be less than half that currently licensed to be extracted for the existing coal-fired power station. The discharge will also be of lower volume and temperature than the existing coal-fired power station and therefore the effects are not considered to be significant given the current context.
- 11.3.3 The Proposed Development will not increase the risk of flooding off Site because the drainage and landscape design will follow appropriate guidance to attenuate and control run-off rates from the Site. Space for surface water attenuation has been included in the indicative concept layouts (see Figures NTS4a and NTS4b), and the discharge rate to Hensall Dyke will be limited to the 'greenfield' runoff rate.

11.4 Effects During Decommissioning

- 11.4.1 Decommissioning effects are anticipated to be similar to those predicted during the construction phase, as described above.

11.5 Conclusions

- 11.5.1 No significant effects on surface or ground water bodies are predicted due to the proposed use of best practice measures during construction, operation and decommissioning, and the design of the drainage system for the Proposed Development.
- 11.5.2 The majority of the Site is at low risk of flooding as it is located in Flood Zone 1 and the Proposed Development will not result in any increase in flood risk off Site.

12.0 GEOLOGY, HYDROGEOLOGY AND LAND CONTAMINATION

12.1 Introduction and Baseline Conditions

- 12.1.1 A desk based assessment of historical ground condition information and previous surveys has been undertaken to identify the potential effects associated with ground conditions.
- 12.1.2 Baseline information indicates that the areas of the Site within the existing coal-fired power station are underlain by Made Ground of varying thickness. Below this there is an area of sand and gravel which runs through the centre of the existing coal-fired power station site in a generally north-west to south-east orientation. Under the Proposed Gas Connection corridor lies alluvial clay, silt, sand and gravel as well as localised deposits of glacial till. Sherwood Sandstone bedrock (a Principal Aquifer) lies below the superficial deposits and Made Ground across the Site.
- 12.1.3 The assessment has considered the potential risks to people (staff on site during construction and operation), surrounding land uses, ecological receptors, buildings, soils and groundwater from the construction, operation and decommissioning of the Proposed Development.

12.2 Effects During Construction

- 12.2.1 The history of the areas of the Site within the existing coal-fired power station site indicates the presence of possible ground contamination. Prior to starting construction, any significant contamination within the Site will be identified and, if necessary, cleaned up, so as to prevent movement of that contamination into the groundwater or surface waters around the Site.
- 12.2.2 Best practice measures to protect construction staff and the environment will be used, including dust control and the use of Personal Protective Equipment. Risks to the environment from leaks or spillages and to workers and local residents from construction dust will be managed by construction best practice measures, such as regular checks of all plant and machinery and drip trays, an emergency spillage action plan to contain any leak or spill, and damping down surfaces for control of dust.
- 12.2.3 If piling is undertaken (*e.g.* for the building foundation), a piling risk assessment will be prepared and submitted to the Environment Agency for approval in accordance with a DCO Requirement, to demonstrate that installing piles would not open up a pathway for contamination to reach the underlying groundwater.
- 12.2.4 No significant effects have been identified as a result of the construction phase.

12.3 Effects During Operation

- 12.3.1 The Proposed Development will employ good housekeeping and management practices to avoid risks of soil and groundwater pollution, such as using impermeable surfacing and bunding for the storage of any liquid fuel to ensure that, in the event of any spillage, materials are safely contained. In addition, oil/ water separators will be installed as appropriate within the drainage system to reduce the likelihood of oil-based materials (from road vehicles) impacting on the environment. These measures will be defined in the Environmental Permit and inspected and regulated by the Environment Agency.

12.3.2 No significant effects have been identified as a result of the operation of the Proposed Development.

12.4 Effects During Decommissioning

12.4.1 Decommissioning effects are predicted to be similar to those described above for the construction phase.

12.5 Conclusions

12.5.1 Best practice measures to protect people on Site from any potentially contaminated land and to prevent the risks of causing contamination of soils and groundwater have been incorporated into the design and management systems of the Proposed Development. As a result it is not expected that there will be any significant effect relating to ground conditions during the construction or operation of the Proposed Development.

13.0 CULTURAL HERITAGE

13.1 Introduction and Baseline Conditions

- 13.1.1 The desk based assessment of the Study Area has identified four Scheduled Monuments, 82 listed buildings and three Conservation Areas within 5 km of the Site, and 71 non-designated assets within 1 km of the Site. The Scheduled Monuments are the buried remains of a Roman fort west of Roall Hall, Whitley Thorpe moated Templar grange, Thorpe Hall moated monastic site, and a World War Two (WW2) bombing decoy control building.
- 13.1.2 There is known prehistoric activity in the 1 km study area, with cropmarks that are likely to be associated with an Iron Age or Roman ditched enclosure. A medieval find has also been recorded.
- 13.1.3 There are no designated heritage assets identified within the Site.

13.2 Effects During Construction

- 13.2.1 The construction of the Proposed Development within the Power Station Site will have no impact on designated heritage assets. Due to the extent of ground disturbance caused by previous development at the existing coal-fired power station site, impacts to previously unknown buried heritage assets are unlikely and significant effects are not anticipated.
- 13.2.2 A number of designated heritage assets have been identified within the study corridor of the Proposed Gas Connection. The Proposed Gas Connection corridor has been designed to avoid remains of potential national importance (including the core complex of Hall Garth medieval moated site to the north of the River Aire) and this has been confirmed by the results of a geophysical survey. However peripheral features associated with Hall Garth and three other known heritage assets (a double-ditched enclosure, a possible field system complex, and ridge and furrow and field boundary features associated with medieval agricultural activities) may be impacted during construction of the Proposed Gas Connection, which could result in significant (moderate) adverse effects.
- 13.2.3 In addition, there is a potential for previously unrecorded archaeological features to be present within the Proposed Gas Connection corridor. This could have significant adverse effects, depending on the importance of the features.
- 13.2.4 Other impacts to cultural heritage assets associated with the construction phase include the use of lighting and temporary impacts on the setting of Hall Garth during the construction of the Proposed Gas Connection pipeline. However, these impacts are all temporary in nature and will not have an impact upon the significance (importance) of the assets. Consequently, the effects will not be significant.
- 13.2.5 While there will be a requirement for the temporary use of lighting during construction, night-time lighting is already present within the existing coal-fired power station site and so the impact of construction lighting is assessed to be very low.
- 13.2.6 Mitigation measures will be discussed and approved with the NYCC archaeologist. The methodology will be set out in a written scheme of investigation which will be approved in

accordance with a DCO Requirement. Successful implementation of this mitigation strategy will reduce the adverse effects to a non-significant level.

13.3 Effects During Operation

13.3.1 Effects of the Proposed Development on the setting of heritage assets has been assessed. Two significant (moderate) adverse effects have been identified, on the setting of two grade II* listed buildings in Hensall (the Church of St Paul's and Red House) due to the introduction of new buildings and structures into the physical surroundings of these heritage assets alongside the existing coal-fired power station. The change to the setting is slight but the effect is considered to be significant due to the high value of the assets. These effects are likely to be reduced when the existing coal-fired power station has been demolished.

13.3.2 No other significant adverse effects on the cultural heritage assets in the study area have been identified.

13.4 Effects During Decommissioning

13.4.1 There will be no physical impacts to buried cultural heritage assets during eventual decommissioning of the Proposed Development, as any impact upon archaeological remains will have been mitigated during the construction phase.

13.5 Conclusions

13.5.1 With the implementation of mitigation, no significant effects on archaeology and cultural heritage assets have been identified during construction and decommissioning. During operation of the Proposed Development, the presence of the large buildings and structures of the Proposed Development alongside the existing coal-fired power station are considered likely to affect the setting of two listed buildings in Hensall, but this effect is likely to be reduced following the demolition of the existing coal-fired power station.

14.0 TRAFFIC AND TRANSPORTATION

14.1 Introduction and Baseline Conditions

14.1.1 The traffic and transportation assessment identifies the potential effects of the Proposed Development on traffic and transport in the surrounding area. The assessment considers the predicted number of vehicle movements generated during the construction and operation of the Proposed Development, and the sensitivity (including pedestrian and cyclist safety) and capacity of the local road network.

14.2 Effects During Construction

14.2.1 A number of measures are already embedded into the routing and control of construction traffic movements to and from the existing coal-fired power station site. Routes for Heavy Goods Vehicle (HGV) traffic travelling to and from the motorway network have been defined avoiding residential areas wherever possible. Construction worker and HGV access to the Proposed Power Plant Site and Construction Laydown area is available via three existing access points – Hensall Gate entrance located off Wand Lane, Tranmore Lane entrance from the A19, and the existing coal-fired power station main entrance from the A19. Any HGV arriving or departing the Site will be required to travel to/from the south along the A19 to Junction 34 of the M62.

14.2.2 The Proposed Development construction traffic will result in small, temporary, increases of traffic flows, including HGVs, on the roads leading to the Site. However, the assessment concludes that predicted numbers of construction traffic movements will not have significant adverse effects on the road network in terms of capacity and effect on sensitive road users (pedestrians and cyclists), even if traffic movements were to occur at the same time as those needed for the demolition of the coal fired power station. Any abnormal loads would be timed to minimise disruption following consultation with the local authority and agreed in accordance with a DCO Requirement, and a traffic management plans will be developed by the contractor in accordance with a DCO Requirement to manage and where possible, reduce, the number of vehicles accessing the Site. Thus, the effects of construction traffic on all road links and junctions within the study area are not considered to be significant.

14.2.3 HGV and construction traffic associated with the construction of the Proposed Gas Connection and AGI Site will be significantly less than that for the construction of the Proposed Power Plant Site. Construction traffic will be routed via West Lane, the A19, Fox Lane, Millfield Road and Wand Lane. No significant effects are anticipated on these roads, and the effects will be short term.

14.3 Effects During Operation

14.3.1 Traffic associated with the operation of the Proposed Development will use the same routes as for construction traffic (described above). There will be some HGV traffic generated by deliveries of operational and maintenance plant and equipment, however this will equate to a maximum of four HGVs per day, as fuel for the new power station will be imported into the Site via pipeline therefore there will be no vehicular movements associated with the transport of fuel to the Site, with the exception of minor quantities of diesel that may be used for start-up of the plant. The traffic effects during operation are therefore not considered to be significant.

14.4 Effects During Decommissioning

14.4.1 There will be some traffic movements during the eventual decommissioning of the Proposed Development, however, the vehicle numbers are not expected to be any higher than experienced during the construction period as described above.

14.5 Conclusions

14.5.1 In summary, there will be no impacts of any significance to any of the road sections assessed and a number of traffic management measures will be implemented to further minimise any traffic increases as a result of the Proposed Development.

15.0 LAND USE, AGRICULTURE AND SOCIO-ECONOMICS

15.1 Introduction and Baseline Conditions

- 15.1.1 The land use, agriculture and socio-economics assessment considers the potential economic impacts of the Proposed Development on land use, agriculture, employment, local businesses and the local population. The effects during construction and operation are described below.
- 15.1.2 The land use assessment considers impacts on existing land uses, including Public Rights of Way and recreational land.
- 15.1.3 The agricultural impact assessment has been informed by a soil quality (Agricultural Land Classification) survey of the agricultural land within the Site.
- 15.1.4 Baseline socio-economic conditions have been established using published statistics. Economic benefits can arise directly (through employment of local people) and indirectly (*e.g.* during the construction phase, when contractors may be using local accommodation and other amenities).

15.2 Effects During Construction

- 15.2.1 The majority of the Site lies within the existing coal-fired power station site, thus limiting the effects on land use. However, there will be a temporary significant adverse effect on users of three Public Rights of Way which will be temporarily closed during part of the construction period: a footpath in the vicinity of the existing cooling water abstraction infrastructure (less than 100 m long) which is crossed by the Proposed Cooling Water Connection; a footpath linking Chapel Haddelsey Weir to Gallows Hill which is crossed by the Proposed Gas and Cooling Water Connections corridors; and a bridleway east of the A19 opposite Burn Lodge Farm, which is crossed by the Proposed Gas Connection corridor
- 15.2.2 The Proposed Cooling Water and Gas Connections will temporarily affect 7.7 ha of 'very good' and 'good' quality agricultural land (also referred to as 'best and most versatile agricultural land', as defined by the Agricultural Land Classification system). This effect will be temporary as soils will be reinstated after construction in accordance with Defra guidance, and is not considered to be significant.
- 15.2.3 The construction of the Proposed Development is predicted to have a temporary significant beneficial effect on the local and regional economy through the creation of an estimated 1,170 construction jobs (the average per year), of which 931 are expected to be sourced from the region. EPL will agree a plan with the local authorities to promote employment, skills and training development opportunities for local residents in accordance with a DCO Requirement. The creation of employment during construction is considered to comprise a significant (major) beneficial effect.

15.3 Effects During Operation

- 15.3.1 No significant adverse operational effects on land use, leisure and amenity have been identified, given that the Public Rights of Way affected during construction will be reopened and agricultural land will be reinstated following construction. A small area of agricultural land will be lost at the gas connection point, where the Proposed AGI Site will be located, which is

not considered to be significant due to its size and Agricultural Land Classification ('moderate' quality which is not classed as 'best and most versatile agricultural land').

- 15.3.2 During operation the Proposed Development will retain or employ approximately 40 full-time permanent staff, as well as around 30 corporate staff.

15.4 Effects During Decommissioning

- 15.4.1 No significant effects on land use or agriculture have been identified during the decommissioning phase of the Proposed Development. Decommissioning and demolition of the Proposed Development will create employment, but beneficial effect is not considered likely to be significant due to the anticipated number of staff.

15.5 Conclusions

- 15.5.1 Significant adverse short term effects on three Public Rights of Way are anticipated during part of the construction phase, when works to construct the Proposed Gas and Cooling Water Connections require temporary closures.
- 15.5.2 The economic benefits generated by the construction of the Proposed Development will be significant and beneficial on the local and regional economy.
- 15.5.3 Following mitigation, no other significant effects on the local or regional economy, land use, amenity and leisure are predicted.

16.0 LANDSCAPE AND VISUAL AMENITY

16.1 Introduction and Baseline Conditions

- 16.1.1 The study area for landscape and visual effects includes areas where it is considered that there is potential for significant direct or indirect effects on landscape character or sensitive views due to the construction or operation of the Proposed Development. The area in which the Proposed Development is likely to be visible (known as the Zone of Theoretical Visibility) is shown in Figures NTS5a and NTS5b.
- 16.1.2 Based upon the tallest element of the Proposed Development being the CCGT stacks (90 m above ground) it is considered that it is highly unlikely that significant effects will be possible from further than 10 km from the stacks.
- 16.1.3 Landscape effects are considered with reference to published national, regional and local landscape character assessments and the immediate landscape setting of the Site. The main potential for effects on landscape character relates to the intervisibility between the Proposed Development and the identified landscape character areas. Given that the Proposed Development is located within an area characterised by large scale industrial, highway and power development, there is a low potential for the landscape character of the surrounding areas to be affected.
- 16.1.4 The scale of the Proposed Development is similar or smaller than existing buildings found within the Study Area including the existing coal-fired power station at Eggborough, Drax Power Station, Ferrybridge Multifuel 1 and Ferrybridge 'C' Power Station. These developments are all large scale and as such are recognisable features within the local landscape. The visual assessment considers effects on 15 representative viewpoints located around the Site, due to changes during the construction, operation (with and without the existing coal-fired power station still standing) and decommissioning phases of the Proposed Development.
- 16.1.5 The site for the Proposed Development has been selected partly due to the existing embankment and vegetation around the Proposed Power Plant Site which provides screening for low level operations and structures within the majority of the Study Area. Further impact avoidance measures will be incorporated into the design of the Proposed Development to minimise impacts on landscape and visual amenity such as selection of appropriate building finishes and protection and enhancement of existing landscape screen to the north, east and south of the Proposed Power Plant Site as part of a Landscape and Biodiversity Strategy in accordance with a DCO Requirement.

16.2 Effects During Construction

- 16.2.1 During construction there will be changes in the landscape due to the movement of plant and HGVs within close proximity to the Site and the introduction of large scale structures in various stages of the development. However given the presence of existing large scale power generation infrastructure in the landscape, no significant effects on the national, regional or local landscape character areas are predicted. The only significant (moderate) adverse landscape effect identified is on the Site level, due to the removal of small areas of woodland planting.

- 16.2.2 At various viewpoints surrounding the Site, views for the majority of residential receptors will either be oblique or contain clear views of structures associated with the construction of the Proposed Development. However, at some viewpoints, views of ground level construction activities will be limited as a result of intervening vegetation and woodland located along the boundaries of the existing coal-fired power station site. Due to the size and massing of the structures, significant (moderate and major) adverse visual effects are predicted at a number of viewpoints around the Site. No specific mitigation measures are proposed since it is largely not possible to avoid or mitigate these effects due to the size of the buildings and structures involved.

16.3 Effects During Operation

- 16.3.1 If the impacts of the operational Proposed Development on landscape character are compared to a future baseline with the existing coal-fired power station still standing, no significant adverse effects are predicted. However to ensure a robust assessment, the effects of the operational Proposed Development have also been compared to a future baseline following the removal of the existing coal-fired power station, and this concludes there would be a significant adverse effect on a local landscape character area (the River Aire Corridor).
- 16.3.2 Enhancement of the existing landscape screen planting around the Proposed Power Plant Site as part of the Landscape and Biodiversity Strategy is expected to result in a significant (moderate) beneficial effect during operation.
- 16.3.3 Visual effects of the operational Proposed Development have also been assessed by comparison to the two future baseline scenarios, with and without the existing coal-fired power station still standing. A number of potentially significant (moderate and major) adverse effects are predicted at representative viewpoints around the Site based on the scale of the Proposed Development either with or without the presence of the existing coal-fired power station. Due to the size and massing of the structures, no specific mitigation measures are proposed.
- 16.3.4 The Overarching NPS for Energy (EN-1) (paragraph 5.9.15) recognises that new power stations are likely to have visual effects due to their necessary scale, and that this must be weighed against the benefits and need of the project.

16.4 Effects During Decommissioning

- 16.4.1 The impacts on landscape character and visual amenity arising as a result of decommissioning of the Proposed Development will generally be similar to those identified during the operation phase of the Proposed Development (without the existing coal-fired power station present), described above.

16.5 Conclusions

- 16.5.1 Due to the existing industrial character of the setting of the Site and surrounding landscape, it is anticipated that there is a low likelihood that the effects will be sufficient to result in an inherent change to the existing landscape character at local, regional or national scale. The landscape assessment has identified significant adverse effects at the Site level during construction and on a local landscape character area during operation (when the Proposed Development is compared to a future scenario without the existing coal-fired power station).

When the proposed enhancements to the existing landscape planting around the Proposed Power Plant Site have taken effect, a significant beneficial effect is predicted at the Site level.

- 16.5.2 Although the location of the Proposed Power Plant Site benefits from existing screening in the form of an earth embankment with tree planting, the Proposed Development is predicted to result in significant adverse effects on visual amenity during its the construction and operation from several viewpoints as a result of the close distance, the necessarily large scale of the buildings and structures, and lack of intervening vegetation. Significant adverse effects would also remain following demolition of the existing coal-fired power station. However, due to the size and massing of the buildings structures, no specific mitigation measures are proposed.

17.0 WASTE MANAGEMENT

17.1 Introduction and Baseline Conditions

17.1.1 The assessment has taken into consideration the likely effects associated with the generation of waste and use of resources during the construction and operation of the Proposed Development.

17.2 Effects During Construction

17.2.1 It is estimated that the construction of the Proposed Development will generate approximately 8,000 tonnes of waste (predominantly inert construction waste with around 60 tonnes of hazardous construction waste) based on information presently available on the waste types and quantities anticipated. This is considered in the context of the total regional waste arisings of around 820,000 tonnes of inert construction waste and 33,000 tonnes of hazardous construction waste per year in North Yorkshire. As a percentage of North Yorkshire's total, waste from the Proposed Development is therefore estimated to be very small and it not considered significant or likely to lead to any capacity issues within the regional waste management network.

17.2.2 A Site Waste Management Plan (SWMP) will be implemented by the contractor to reduce, re-use and recycle construction waste where feasible. A framework SWMP is included within Appendix 5A of the ES (Volume III). The Proposed Development is being designed to minimise excavation waste by balancing the 'cut' of surplus material and 'fill' to level the Site prior to construction as much as possible. Additionally, consideration will be made to recycling inert waste material (such as concrete) from existing structures which require demolition, in order to allow this to be reused within the Proposed Development.

17.2.3 Good practice waste management procedures will also minimise the risk of adverse effects on human or ecological receptors from the storage, transfer or disposal of waste.

17.2.4 The contractor, where possible, will be required to minimise the use of virgin raw materials by specifying products and materials with recycled content and which are durable with a long life.

17.3 Effects During Operation

17.3.1 During operation, the quantities of waste that will be generated are expected to be very small. In contrast to coal, the combustion of gas does not generate any solid residues which require disposal.

17.3.2 The anticipated quantities and types of operational waste are negligible (not significant) when compared to the predicted hazardous and non-hazardous waste arisings within North Yorkshire. All operational waste will be taken for treatment or disposal at a suitably licenced waste facility.

17.4 Effects During Decommissioning

17.4.1 Waste generated during decommissioning of the Proposed Development has been scoped out of this assessment because there is no information on waste policies, regional waste arisings or facilities that may be in place when the Proposed Development is decommissioned (around

2047 or later), and because the timing and method of decommissioning is unknown so quantities of waste cannot be estimated.

17.5 Conclusions

17.5.1 It is concluded there will be no significant effects as a result of waste arising from the construction or operation of the Proposed Development.

18.0 SUSTAINABILITY AND CLIMATE CHANGE

18.1 Introduction and Baseline Conditions

18.1.1 This assessment addresses the potential wider impacts on sustainability and climate change predicted to arise as a consequence of the Proposed Development. The Proposed Development has several characteristics incorporated into its design, construction and management which meet the key sustainability requirements as set out in national, regional and local policy, and it will be designed in accordance with the principle of BAT.

18.2 Effects During Construction

18.2.1 The construction stage of the Proposed Development will adhere to the basic principles of environmental sustainability including minimising the use of natural resources, greenfield land and water, whilst maximising energy efficiency. These will be achieved through design and implementation of management plans including a CEMP, SWMP and Construction Traffic Management Plan. Rail access to the Site is available for use during the construction phase if it can feasibly provide a viable alternative to the use of HGVs for the importation of materials and equipment to the Site.

18.3 Effects During Operation

18.3.1 The Proposed Development will provide a lower carbon source of electricity than the current UK energy mix. The Carbon Assessment (Appendix 18A – ES Volume III) demonstrates that the Proposed Development compares favourably with the existing coal-fired power station, and with current UK gas fired power stations, with direct emissions from combustion of gas representing carbon savings of between 847 and 988 kilotonnes carbon dioxide equivalent compared to a UK average gas fired power station,.

18.3.2 There is also potential for the Proposed Development to incorporate Combined Heat and Power (CHP) if an economically and technically feasible connection to an off-site customer can be identified. The plant is designed to be CHP ready in case such opportunities can be identified in the future. This would represent further carbon savings as waste heat from the Proposed Development could be used by other local developments, reducing the need for grid electricity or gas.

18.3.3 In addition, design and operational measures to increase the resilience of the Proposed Development to potential effects of climate change will be incorporated in the detailed design, including flood resilience measures.

18.3.4 During operation, management plans will also be implemented to improve the sustainability of the operation, including minimising the use of water through methods such as re-use of rainwater and use of borehole water instead of towns water.

18.3.5 The cooling water demand of the Proposed Development will be significantly less than the cooling water demand of the existing coal-fired power station due to the increased efficiency of the CCGT plant, therefore no significant effects are anticipated.

18.4 Effects During Decommissioning

- 18.4.1 A DEMP will be prepared in accordance with a DCO Requirement prior to the commencement of decommissioning works, setting out measures to manage potential environmental impacts associated with decommissioning and demolition of the Proposed Development. No significant adverse sustainability effects (including energy and water use) are predicted.

18.5 Conclusions

- 18.5.1 The design, construction and operation of the Proposed Development will adhere to national, regional and local sustainable development policies and will provide a low carbon source of electricity. No significant effects have been identified.

19.0 HUMAN HEALTH

19.1 Introduction and Baseline Conditions

- 19.1.1 Potential effects of the Proposed Development on human health are considered in several of the sections above, including Air Quality, Noise and Vibration, Traffic and Transport, Water Resources, Flood Risk and Drainage, Geology, Hydrogeology and Land Contamination, and Land Use, Agriculture and Socio-Economics.
- 19.1.2 The health assessment has also considered potential for the Proposed Development to result in significant electro-magnetic effects.

19.2 Effects During Construction

- 19.2.1 Potential effects on human health during the construction phase are considered in the Air Quality, Noise and Vibration, Traffic and Transport, Water Resources, Flood Risk and Drainage, Geology, Hydrogeology and Land Contamination, and Land Use, Agriculture and Socio-Economics sections above. No significant adverse human health-related effects have been predicted, following the implementation of appropriate mitigation measures in accordance with DCO Requirements.
- 19.2.2 Potential effects associated with electromagnetic fields have also been assessed. Such effects will be limited due to the fact that the Proposed Development does not include any new overhead electricity lines. The only potential receptors of such effects are construction workers in the vicinity of the new below-ground electricity connection and new sub station, and appropriate mitigation will be implemented to avoid any significant effects.

19.3 Effects During Operation

- 19.3.1 Potential effects on human health during the operation phase are also considered in the Air Quality, Noise and Vibration, Traffic and Transport, Water Resources, Flood Risk and Drainage, Geology, Hydrogeology and Land Contamination, and Land Use, Agriculture and Socio-Economics sections above. No significant adverse human health-related effects have been predicted, following the implementation of appropriate mitigation measures in accordance with DCO Requirements.
- 19.3.2 As described above for construction, the only potential receptors of effects related to electromagnetic field are staff in the vicinity of the new below-ground electricity connection and new sub station, and appropriate mitigation will be implemented to avoid any significant effects.
- 19.3.3 Potential health effects to workers from accidental releases of hazardous or non-hazardous materials will be minimised through the appropriate design, management and control of the plant, which will be regulated by the Environment Agency through the required Environmental Permit.

19.4 Effects During Decommissioning

19.4.1 Potential human health-related effects during decommissioning are generally anticipated to be similar to those described above for the construction phase. No significant adverse human health effects are anticipated.

19.5 Conclusions

19.5.1 No significant human health-related effects have been identified as a result of the construction, operation or decommissioning of the Proposed Development following the implementation of the identified mitigation measures.

20.0 CUMULATIVE AND COMBINED EFFECTS

20.1 Introduction

20.1.1 Other proposed developments that are also likely to be constructed and operated in the future and have the potential to generate cumulative environmental effects together with the Proposed Development have been identified. Significant cumulative effects may be possible due to the nature of these developments (*e.g.* the potential to release emissions to air in the vicinity of the same receptors) or their location (*e.g.* close enough to the Site to affect the same receptors).

20.1.2 The other proposed developments that are considered to have potential for significant cumulative effects, and that have been assessed in more detail, are:

- Eggborough Coal-Fired Power Station (demolition works);
- a residential development of 55 dwellings in Eggborough;
- an extension to the Euro Auctions site near the existing coal-fired power station;
- an Advanced Thermal Treatment Plant in Eggborough;
- the hydro-electricity generation scheme (construction recently completed);
- a residential development of 64 dwellings in Eggborough;
- a single storey insulation production facility at Saint Gobain glass factory (construction will be completed before 2019);
- Knottingley Power Station and Pipeline;
- a solar farm 4 km south-east of the Site;
- Thorpe Marsh Gas Pipeline;
- Kellingley Colliery Business Park;
- Southmoor Energy Centre;
- Ferrybridge Multifuel 2 power station; and
- Thorpe Marsh CCGT Power Station.

20.1.3 The locations of these other developments are shown on Figure NTS6.

20.1.4 The potential for cumulative effects with these other developments was considered for all of the environmental topics by consideration of the available information (including the Environmental Statements and any detailed environmental modelling information where available). As a result of the detailed consideration undertaken in respect of the identified proposed developments, no significant cumulative effects during construction or operation were identified for the majority of environmental topics. The only exceptions to this are:

- potentially significant adverse air quality effects on properties adjacent to the A19 in Low Eggborough due to road traffic emissions if all the other developments' construction phases overlapped with the construction of the Proposed Development (although the contribution of the Proposed Development would be minimal); and
- potentially significant cumulative visual effects for a number of identified viewpoints as a result of views of both the Proposed Development and other proposed developments during construction and operation.

20.1.5 Any potential cumulative air quality effects would be mitigated by EPL managing the timing of construction traffic for the Proposed Development and demolition traffic for the coal-fired power station to minimise the overlap of the two, since both projects are in the control of EPL.

- 20.1.6 As discussed in Section 16 above, opportunities for mitigating visual effects are limited by the large scale and massing of the Proposed Development buildings and structures and no mitigation is proposed.
- 20.1.7 Combined effects (meaning the combination of different types of effects from the Proposed Development on a single receptor) have also been assessed, and no significant combined effects have been identified.

21.0 SUMMARY AND CONCLUSIONS

21.1.1 The ES details the initial findings of the EIA that is being undertaken for the Proposed Development based on the information and design details currently available.

21.1.2 The majority of the Proposed Development is located within the existing Eggborough Power Station site, and has been sited and designed to be in keeping with the surrounding infrastructure. This has helped to minimise the potential for significant adverse effects.

21.1.3 Following assessment of a comprehensive range of environmental topics as agreed through the EIA Scoping and consultation, the following potential significant residual effects (i.e. effects after implementation of mitigation, where measures are identified) have been found:

- short term adverse effects on nearby residential properties in Chapel Haddlesey during concrete breaking out works at the existing cooling water abstraction point, if required;
- short term adverse effects on receptors close to local roads to be used for access to the Proposed Gas Connection construction corridor, during the initial period of construction of this part of the Proposed Development when the majority of HGV deliveries will be made;
- short term adverse effect on flood risk if a low return period flood event coincides with the installation of a cofferdam in the River Aire (to enable construction works to the existing cooling water abstraction and discharge points), although the risk of this occurring has been minimised by reducing the duration of the cofferdam installations and timing the works to summer when river flows are generally lowest;
- adverse effects on the setting of two grade II* listed buildings in Hensall during operation of the Proposed Development due to the presence of the large buildings and structures alongside the existing coal-fired power station, although these effects are likely to be reduced when the existing coal-fired power station is demolished;
- short term adverse effects during part of the construction phase on three Public Rights of Way that will be crossed by the Proposed Gas and Cooling Water Connections;
- short term beneficial effects on the local and regional economy due to generation of construction employment;
- adverse effects on Site landscape during construction due to the removal of small areas of woodland planting;
- adverse effects on views from a number of residential, road and footpath viewpoints around the Site during construction, operation and decommissioning of the Proposed Development;
- long term adverse effects on one local landscape character area during operation of the Proposed Development (if compared to a future situation with the existing coal-fired power station no longer present);
- long term beneficial effects on Site landscape during operation following the enhancement of landscape screening at the Site;
- short term adverse cumulative effects on air quality if all the other proposed developments considered in the cumulative impact assessment were to occur at the same time as construction of the Proposed Development (although the Proposed Development's contribution is negligible);
- short term adverse cumulative effects on views from a number of residential, road and footpath viewpoints around the Site during the construction and operation of the Proposed Development and other developments in the vicinity of the Site.

- 21.1.4 No other significant environmental effects have been identified.
- 21.1.5 A number of environmental impact avoidance, design and mitigation measures have been identified to mitigate and control environmental effects during construction and operation of the proposed power station. Where these are not embedded in the design of the Proposed Development, they will be secured through a number of Requirements contained within the draft DCO.

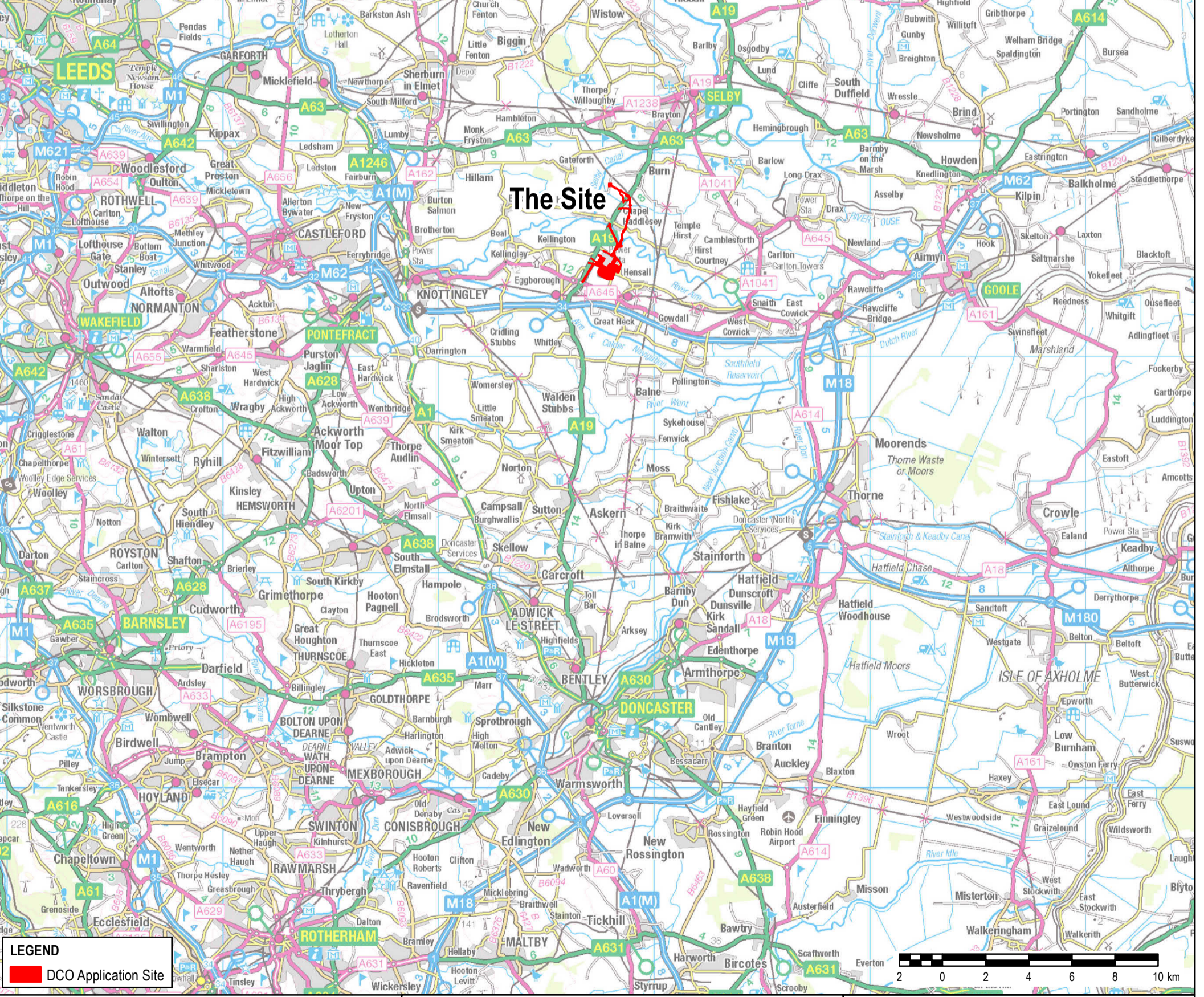
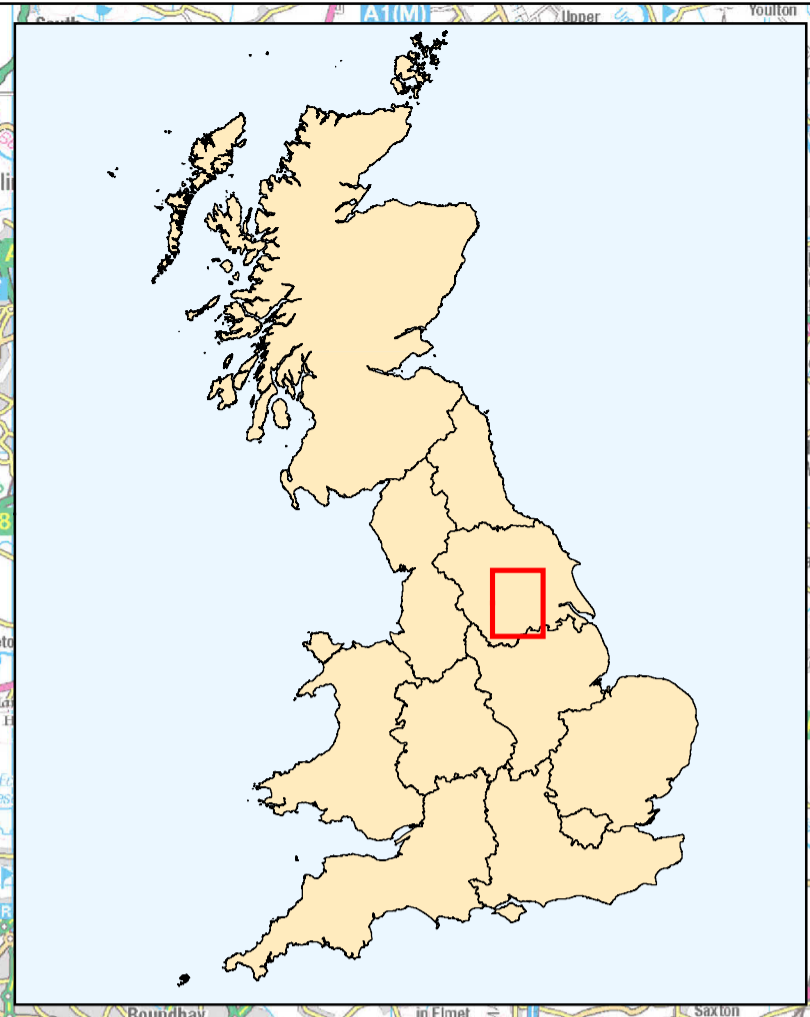
22.0 REFERENCES

Department for Energy and Climate Change (2011a) *National Policy Statement for Energy (EN-1)*

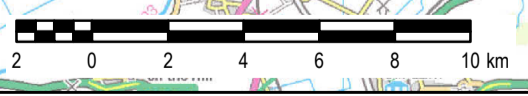
Department for Energy and Climate Change (2011b) *National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)*

FIGURES

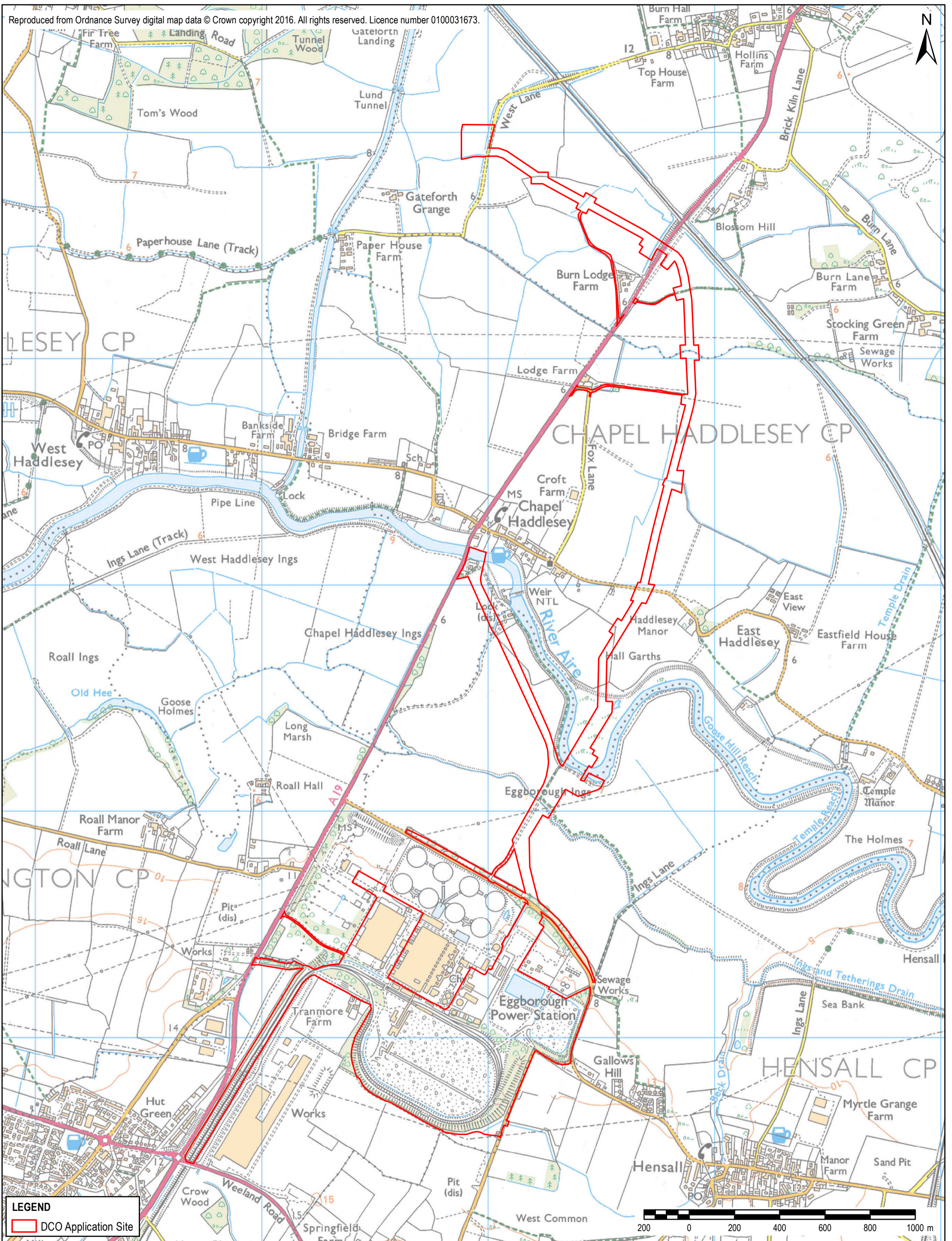
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LEGEND
■ DCO Application Site

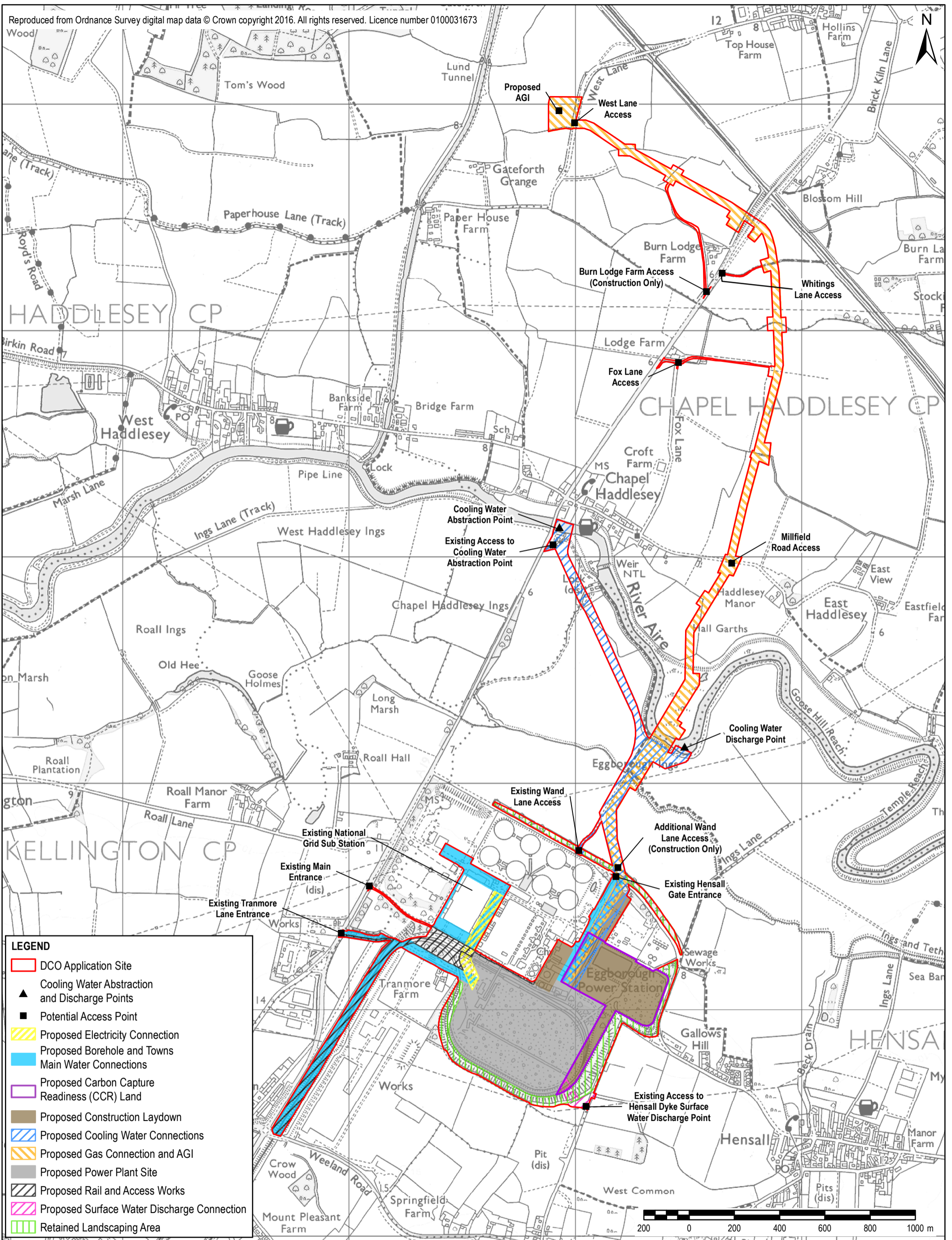


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LEGEND

- DCO Application Site
- ▲ Cooling Water Abstraction and Discharge Points
- Potential Access Point
- Proposed Electricity Connection
- Proposed Borehole and Towns Main Water Connections
- Proposed Carbon Capture Readiness (CCR) Land
- Proposed Construction Laydown
- Proposed Cooling Water Connections
- Proposed Gas Connection and AGI
- Proposed Power Plant Site
- Proposed Rail and Access Works
- Proposed Surface Water Discharge Connection
- Retained Landscaping Area

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NORTH

LEGEND

PLANT DESCRIPTION	
1	TURBINE HALL
2	HEAT RECOVERY STEAM GENERATOR
3	STACK
4	FEEDWATER PUMP BUILDING
5	ELECTRICAL BUILDING
6	GENERATOR TRANSFORMER
7	HYBRID COOLING TOWERS
8	COOLING WATER PUMPS
9	GAS RECEIVING AREA
10	WORKSHOP & STORES
11	ELECTRICAL CONTROL ROOM & ADMIN BUILDING
12	WATER TREATMENT PLANT, FIRE PUMPS & LABORATORY
13	RAW & FIRE WATER TANK
14	DEMINERALISED WATER TANKS
15	AIR INTAKE FILTER
16	GAS-INSULATED SUB STATION
17	DIESEL GENERATORS
18	GATEHOUSE
19	SURFACE WATER ATTENUATION SYSTEM (INDICATIVE LOCATION)
20	WASTE WATER TREATMENT PLANT
21	UNUSED
22	CAR PARKING
23	CLOSED CIRCUIT COOLING WATER COOLERS
24	PEAKING PLANT
25	AUXILIARY BOILER
26	BLACK START FACILITY
27	UNUSED
28	UNUSED
29	COOLING WATER DOSING
30	GAS COMPRESSORS
31	WEIGHBRIDGE
32	COOLING WATER ELECTRICAL MODULE
33	CONTINUOUS EMISSIONS MONITORING SYSTEM CONTAINER

KEY

	FOUL DRAINAGE TO WASTE WATER TREATMENT WORKS
	COOLING WATER (MAKE-UP & BLOWDOWN)
	GAS SUPPLY LINE
	TOWNS WATER & BOREHOLE WATER
	UNDERGROUND CABLE
	CONSTRUCTION LAYDOWN AREA
	CARBON CAPTURE READINESS (CCR) LAND

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Purpose of Issue
ENVIRONMENTAL STATEMENT

Client
EGGBOROUGH POWER LTD

Project Title
EGGBOROUGH CCGT DCO

Drawing Title
INDICATIVE CONCEPT LAYOUT (3 SINGLE SHAFT) FOR THE PROPOSED DEVELOPMENT WITHIN THE EXISTING COAL-FIRED POWER STATION SITE

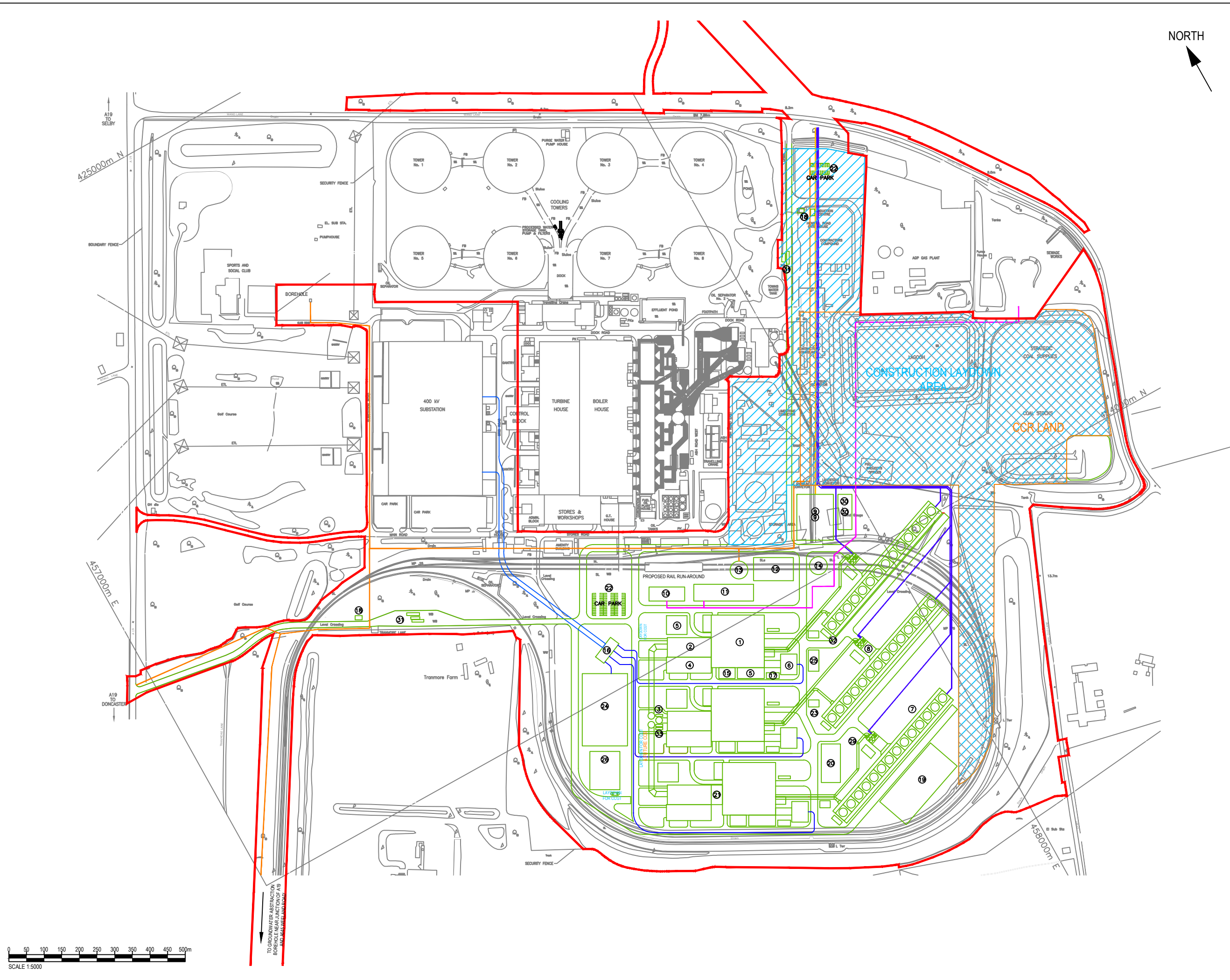
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PLANT DESCRIPTION	
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27	UNUSED
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	FOUL DRAINAGE TO WASTE WATER TREATMENT WORKS
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	TOWNS WATER & BOREHOLE WATER
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	CONSTRUCTION LAYDOWN AREA
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Purpose of Issue
ENVIRONMENTAL STATEMENT

Client
EGGBOROUGH POWER LTD

Project Title
EGGBOROUGH CCGT DCO

Drawing Title
INDICATIVE CONCEPT LAYOUT (MULTI SHAFT + SINGLE SHAFT) FOR THE PROPOSED DEVELOPMENT WITHIN THE EXISTING COAL-FIRED POWER STATION SITE

Drawn GB	Checked JW	Approved KC	Date 09/12/2016
AECOM Internal Project No. 60506766		Scale @ A3 1:5000	

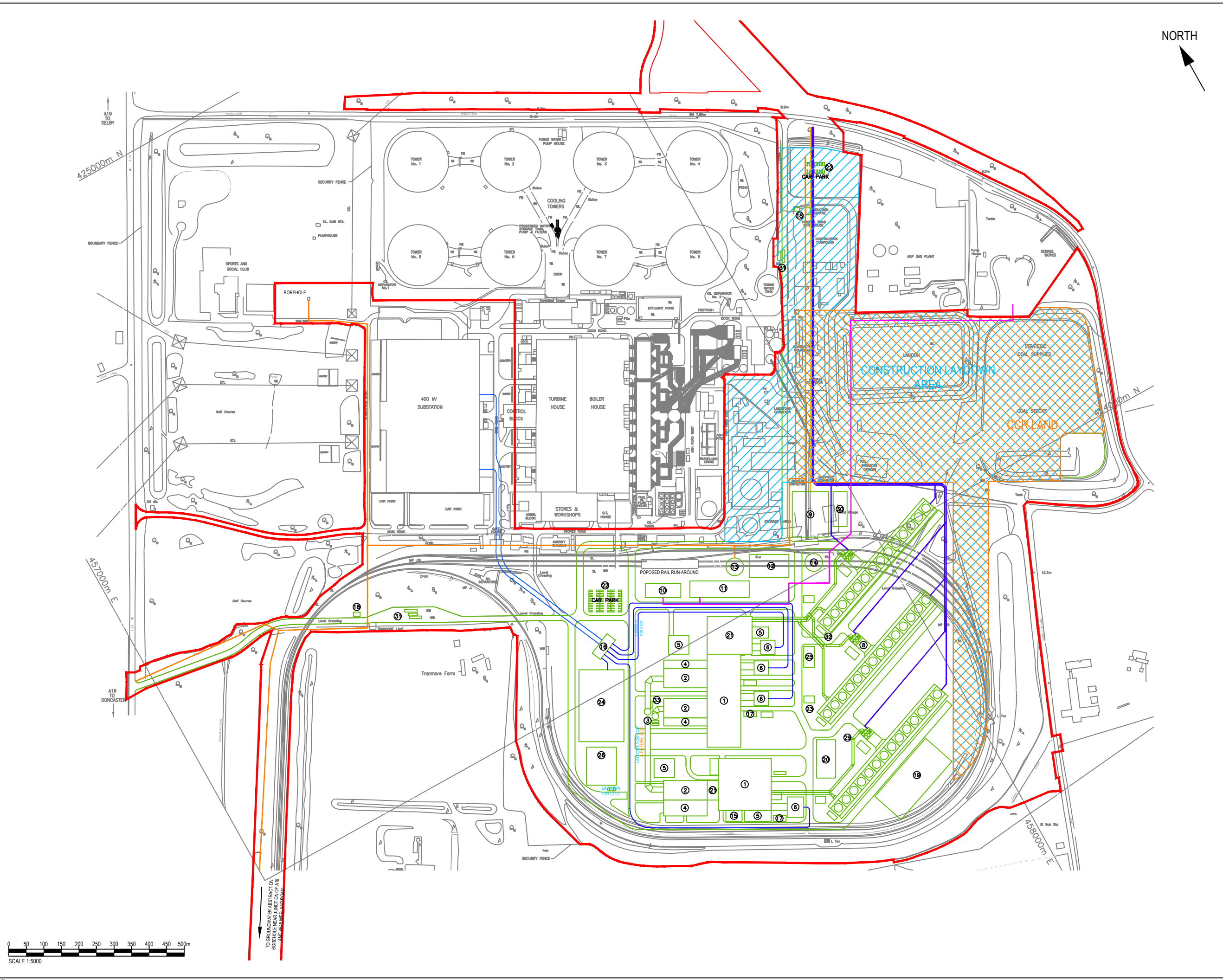
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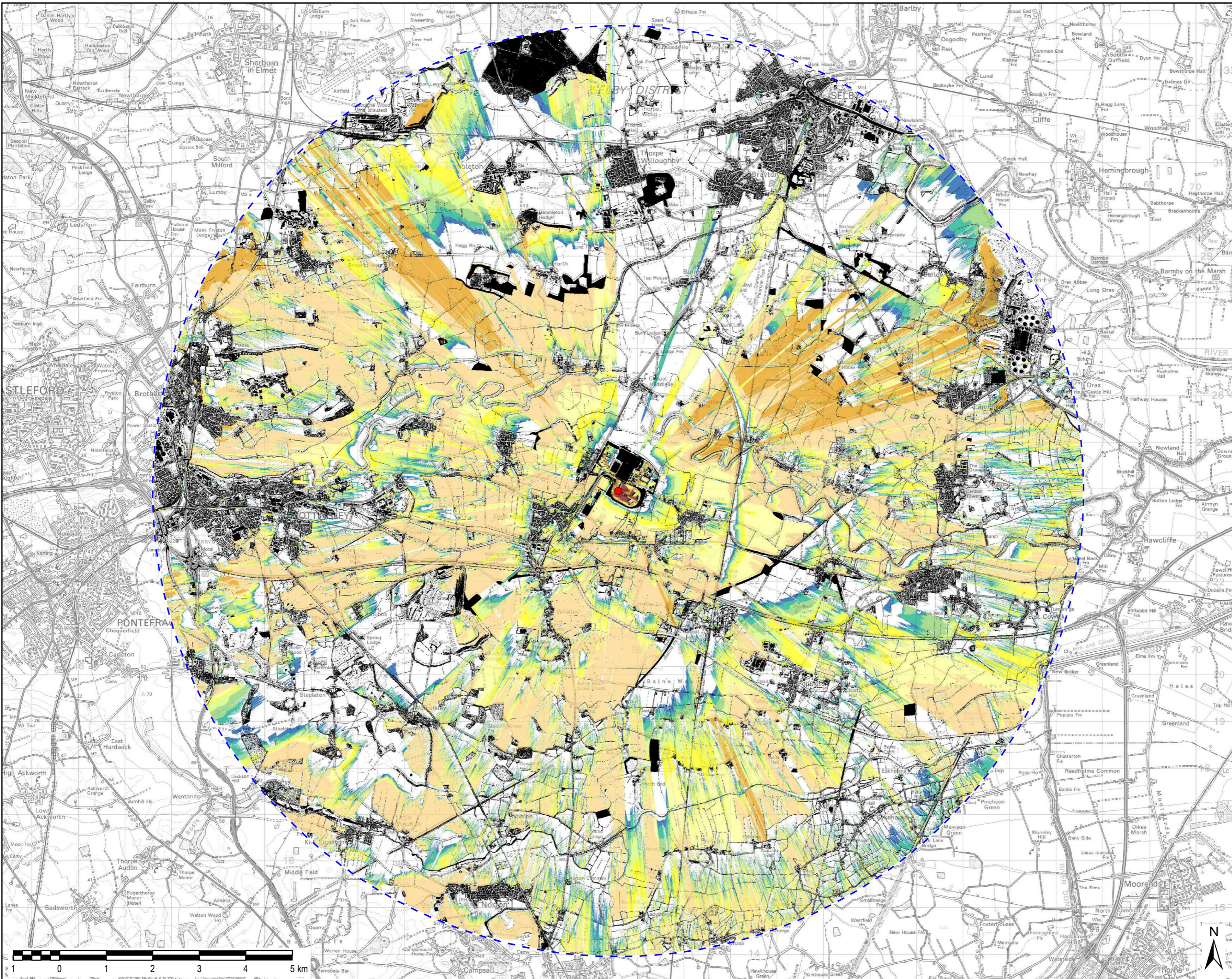
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Scott House
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Drawing Number
FIGURE NTS4b

Rev
01





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- LEGEND**
- Stack Location (Height 99.9m AOD)
 - ▭ 10km Study Area
 - ▭ Buildings/Woodland And Other Features Greater Than 0.5m Above Bare Earth

- Stack Percentage Visibility**
- 10%
 - 20%
 - 30%
 - 40%
 - 50%
 - 60%
 - 70%
 - 80%
 - 90%
 - 100%

Notes:
 Terrain data based on Environment Agency 2m DSM with gaps filled by NextMap Britain 5m DSM and OS Terrain5 DTM with buildings added at 8m and woodland added at 15m in height.

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Purpose of Issue
 ENVIRONMENTAL STATEMENT

Client
 EGGBOROUGH POWER LTD

Project Title
 EGGBOROUGH CCGT DCO

Drawing Title
 PROPOSED 90 M STACK
 ZONE OF THEORETICAL VISIBILITY
 WITH EXISTING
 POWER STATION PRESENT

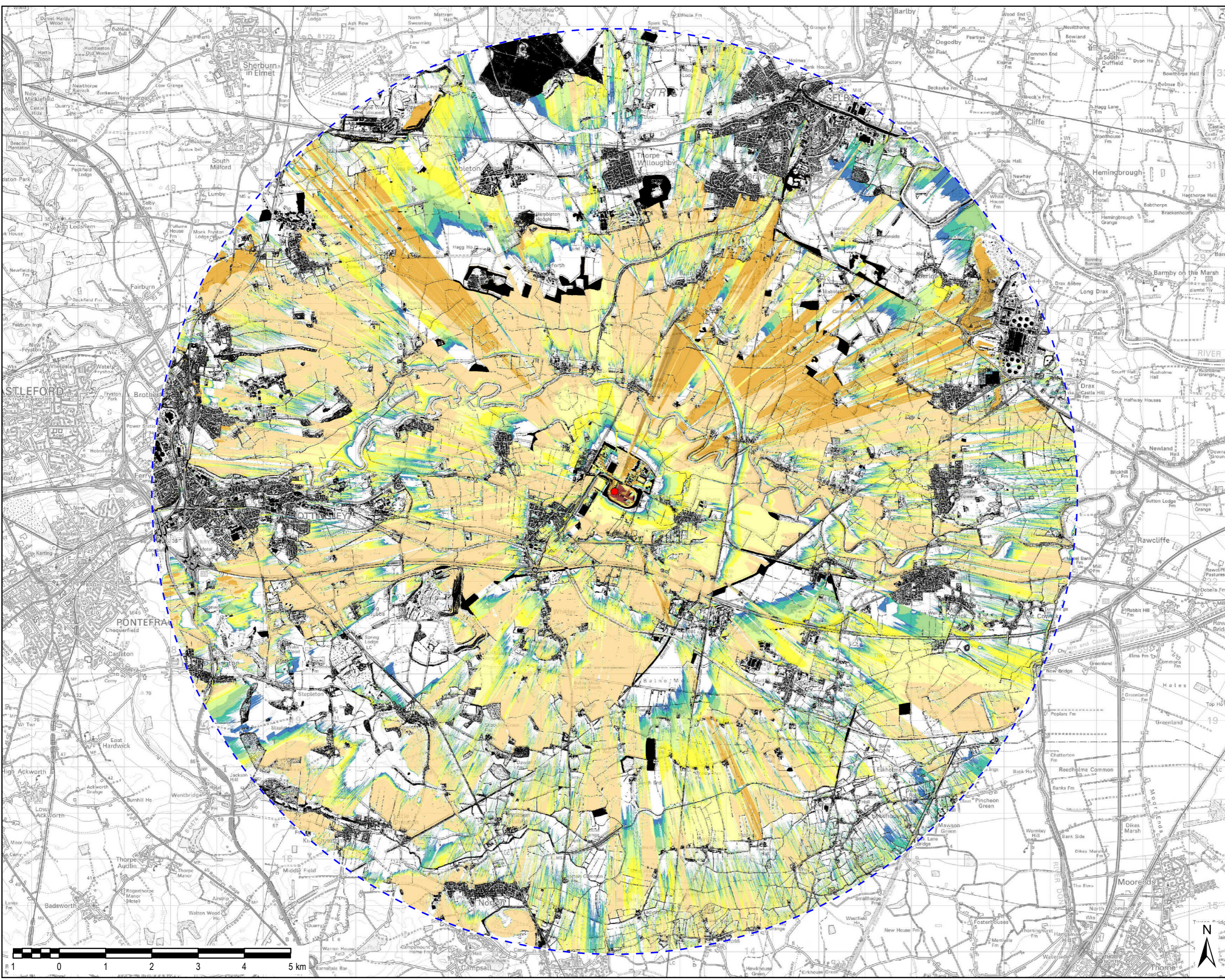
Drawn JW	Checked AK	Approved RC	Date 04/04/2017
AECOM Internal Project No. 60506766		Scale @ A3 1:75,000	

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File Name: IBA-WIP-0044400 - Management Services 5004 - Information Systems 60506766 - Egborough_CCGT_DCO02_Maps\DCO02_Landscape\Figure_16_5_Stack_ZTV_without_PowerStation.mxd



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LEGEND

- Stack Location (Height 99.9m AOD)
- 10km Study Area
- Buildings/Woodland And Other Features Greater Than 0.5m Above Bare Earth

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Purpose of Issue
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Client
EGGBOROUGH POWER LTD

Project Title
EGGBOROUGH CCGT DCO

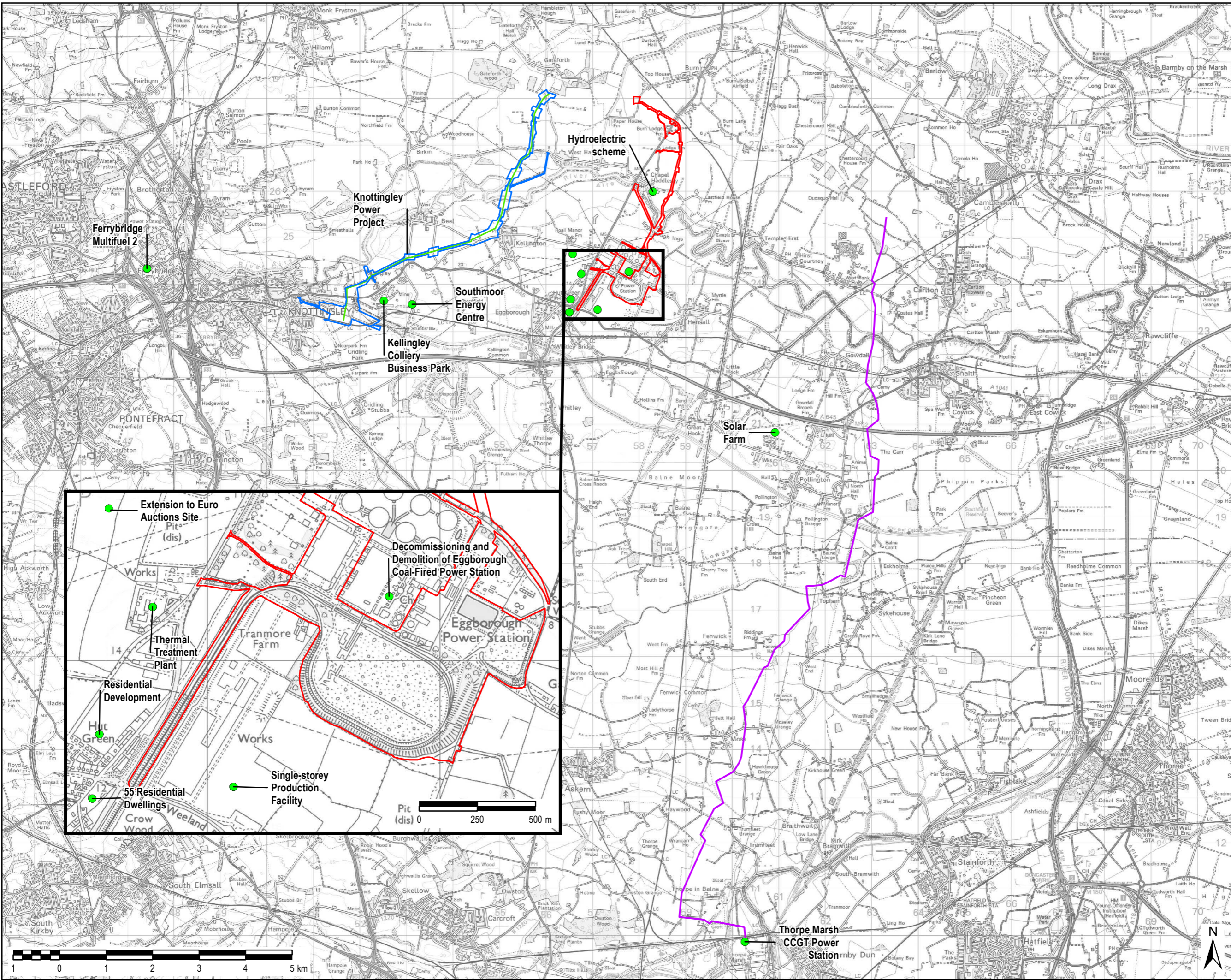
Drawing Title
PROPOSED 90 M STACK
ZONE OF THEORETICAL VISIBILITY
WITHOUT EXISTING
POWER STATION PRESENT

Drawn JW	Checked AK	Approved RC	Date 04/04/2017
AECOM Internal Project No. 60506766		Scale @ A3 1:75,000	

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- LEGEND**
- DCO Application Site
 - Cumulative Development
 - Indicative Thorpe Marsh Gas Pipeline
 - Knottingley Power Project Gas Pipeline
 - Knottingley Power Project Indicative DCO Boundary

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ENVIRONMENTAL STATEMENT

Client
EGGBOROUGH POWER LTD

Project Title
EGGBOROUGH CCGT DCO

OTHER DEVELOPMENTS CONSIDERED FOR CUMULATIVE IMPACT ASSESSMENT

Drawn JW	Checked AK	Approved KC	Date 11/05/2017
AECOM Internal Project No. 60506766		Scale @ A3 Inset 1:75,000 / 1:15,000	

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