

The Drax Power (Generating Stations) Order

Land at, and in the vicinity of, Drax Power Station, near Selby, North Yorkshire

Environmental Statement 10 – Landscape and Visual Amenity



The Planning Act 2008
The Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009 – Regulation 5(2)(a)

Drax Power Limited

Drax Repower Project

Applicant: DRAX POWER LIMITED

Date: May 2018
Document Ref: 6.1.10
PINS Ref: EN010091

Document History

Document Ref	6.1.10
Revision	001
Author	Maritta Boden
Signed	Date 17/05/2018
Approved By	Chris Taylor
Signed	Date 17/05/2018
Document Owner	WSP UK Limited



Table of Contents

10	LANDSCAPE AND VISUAL AMENITY	10-1		
10.1	Introduction	10-1		
10.2	Policy, Legislation and Guidance	10-2		
10.3	Consultation	10-6		
10.4	Assessment Methodology and Significance Criteria	10-21		
10.5	Assessment of Likely Significant Landscape and Visual Impacts and Effects	10-48		
10.6	Mitigation and Enhancement Measures	10-88		
10.7	Residual Effects	10-91		
10.8	Limitations and Assumptions	10-101		
10.9	Summary	10-101		
REFER	RENCES	10-164		
Tabl	e of Tables			
Table 1	0-1 - Summary of Consultation Undertaken to Date	10-7		
Table 1	0-2 - Scoping Opinion Summary Table	10-12		
Table 10-3 - Statutory Consultation Summary Table of the PEIR				
Table 1	Table 10-4 - Stages and LVIA Assumptions 10			
<i>Table 1</i> 26	0-5 - Number and Height of Proposed Facilities Based on Completion of Stages 2 a	nd 310-		
Table 1	0-6 - Colour Palette for Structures	10-29		
Table 1	0-7 - Matrix for Determining Significance of Landscape and Visual Effect	10-36		
Table 1	0-8 - Development Parcels and Associated Description	10-41		
Table 1	0-9 - Stage 0 – Development Parcel Landscape / Habitat Losses	10-50		
_	0-10 - Stage 1 – Temporary Development Parcel Landscape / Habitat Losses from uction of Unit X	10-53		
	0-11 - Stage 1 – Permanent Development Parcel Landscape / Habitat Losses from uction of Unit X	10-53		
	0-12 - Stage 1 – Temporary and Permanent Landscape / Habitat Losses from Const Pipeline and AGIs	truction 10-54		
	0-13 - Stage 2 – Temporary Development Parcel Landscape / Habitat Losses from uction of Unit Y	10-59		
	0-14 - Stage 2 – Permanent Development Parcel Landscape / Habitat Losses from uction of Unit Y	10-60		
Table 1	0-15 - Summary of Landscape Effects Table for the Landscape and Visual Chapter	10-104		
Table 1	0-16 - Summary of Significant Visual Effects Table for the Landscape and Visual C	hapter		



Table of Figures

Figure 10-1 - Landscape Character	10-115
Figure 10-2 - Digitial Surface Model	10-116
Figure 10-3 - Built Environment	10-117
Figure 10-4 - Natural Environment	10-118
Figure 10-5 - Built and Natural Environment	10-119
Figure 10-6 - ZTV for Unit X and Y	10-120
Figure 10-7 - ZTV for Pipeline A AGIs	10-121
Figure 10-8 - ZTV for Battery Storage Area	10-122
Figure 10-9 - ZTV for GRF	10-123
Figure 10-10 - Viewpoint Location Plan A	10-124
Figure 10-11 - Viewpoint Photos	10-125



10 LANDSCAPE AND VISUAL AMENITY

10.1 Introduction

- 10.1.1. This Chapter reports the outcome of the assessment of likely significant effects arising from the Proposed Scheme upon landscape and visual amenity. The Landscape and Visual Impact Assessment (LVIA) deals with the separate but interlinked issues of:
 - Landscape: Landscape effects are direct physical changes to the landscape caused by the Proposed Scheme or indirect changes to landscape character and how the landscape is perceived following the Proposed Scheme. Landscape impact assessment considers these effects both in terms of the individual components of the landscape and on the structure, coherence and character of the landscape as a whole.
 - Visual: Visual effects are changes in the composition and character of views available in the area affected by the Proposed Scheme. Visual impact assessment considers the response of the people who experience these effects, who may be living or working in the area, enjoying recreational activities or simply passing through. The assessment considers the overall consequence of the effects on the visual amenity - the pleasantness of the view or outlook - that the people affected enjoy.

10.1.2. This Chapter considers:

- Relevant policy, legislation, conventions and guidance.
- Consultation undertaken to date.
- Potential landscape and visual effects of the construction phase (e.g. a change in landscape character and visual amenity, the loss or alteration to landscape features including vegetation, land use and topography).
- Potential landscape and visual effects associated with the operation (and maintenance)
 of the Proposed Scheme, including presence of proposed structures, and on and off site
 mitigation.
- Potential landscape and visual effects of the decommissioning phase of the Proposed Scheme.
- 10.1.3. The Chapter describes the assessment methodology, the baseline conditions at the Site and in the surrounding area, any primary and tertiary mitigation adopted for the purposes of the assessment, a summary of the likely significant effects taking into account national and local legislation, guidance and conventions, the further mitigation measures required to prevent, reduce or offset any significant negative effects, and the likely residual effects after these measures have been employed.
- 10.1.4. This Chapter (and its associated figures and appendices) is intended to be read as part of the wider ES, with particular reference to Chapters 8 (Historic Environment) and Chapter 9 (Biodiversity) and Document 6.7 the outline Landscape and Biodiversity Strategy and associated landscape and biodiversity mitigation plans. The LVIA informs the cultural heritage assessment about the extent of potential visibility. It addresses the 'present day' effects on heritage assets that are also landscape or visual receptors because they are distinct local landscapes or tourist/visitor attractions where views are an important contributory factor to the experience.



10.2 Policy, Legislation and Guidance

Policy

- 10.2.1. The applicable policy framework is listed and summarised below. Refer to full details in Appendix 10.1 where relevant:
 - Overarching National Planning Policy Statement for Energy (EN-1) (Ref. 10.1).
 - National Planning Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2) (Ref. 10.2).
 - National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (Ref.10.3).
 - National Planning Policy Framework (Ref. 10.4).
 - National Planning Policy Framework Consultation Proposals (Ref 10.5)
 - 'Saved' policies of the Selby District Local Plan (Ref. 10.6).
 - Selby District Core Strategy Local Plan (Ref.10.7).
 - East Riding Local Plan Strategy document (Ref. 10.8).
 - Doncaster's Core Strategy 2011- 2028 (Ref.10.9).

National Planning Policy Statements

- 10.2.2. The Overarching National Planning Policy Statement for Energy (EN-1) (Department for Energy and Climate Change (DECC, now the Department for Business, Energy and Industrial Strategy, 2011) (Ref. 10.1) includes a number of statements of relevance to the landscape including green infrastructure (GI) and visual impacts of energy infrastructure in general.
- 10.2.3. Section 5.9 of EN-1 sets out the requirements for assessing and mitigating landscape and visual impacts of proposed nationally significant energy infrastructure projects (NSIPs). The scope of the assessment should include construction phase effects as well as the effects of the completed facility and its operation on landscape components, landscape character and views and visual amenity.
- 10.2.4. In addition, consideration should be given to the impact on nationally designated areas where proposals lie outside the boundaries of protected landscapes as well as highly valued landscapes which are protected by a local designation.
- 10.2.5. In terms of mitigation, EN-1 encourages the reduction in scale of the buildings taking into consideration function, appropriate siting, design including colours and materials, and landscaping schemes to mitigate adverse landscape and visual impacts including landscaping off site.
- 10.2.6. Paragraphs 5.9.15 to 5.9.16 of EN-1 state: "The scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The IPC [now the Secretary of State] should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project."
- 10.2.7. "In reaching a judgement, the IPC [Secretary of State] should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the IPC [Secretary of State] considers reasonable."



- 10.2.8. Paragraph 5.9.18 of EN-1 states: "All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The IPC [Secretary of State] will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project."
- 10.2.9. Paragraph 5.9.22 of EN-1 adds: "Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration."
- 10.2.10. Section 5.10 of EN-1 establishes the requirements for identifying and mitigating impacts of energy infrastructure projects on open space (including green infrastructure).
- 10.2.11. Paragraph 5.10.1 of EN-1 provides: "An energy infrastructure project will have direct effects on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Given the likely locations of energy infrastructure projects there may be particular effects on open space including green infrastructure."
- 10.2.12. Where green infrastructure is affected, the Secretary of State should consider imposing requirements to ensure the connectivity of the green infrastructure network is maintained in the vicinity of the development and that any necessary works are undertaken, where possible, to mitigate any adverse impact.
- 10.2.13. The NPS for Fossil Fuel Electricity Generating Infrastructure EN-2 (DECC, 2011) (Ref. 10.2) provides further detail with respect to the impacts of large scale structures associated with fossil fuel generating stations.
- 10.2.14. Section 2.6.5 of EN-2 states that "It is not possible to eliminate the visual impacts associated with a fossil fuel generating station. Mitigation is therefore to reduce the visual intrusion of the buildings in the landscape and minimise impact on visual amenity as far as reasonably practicable."
- 10.2.15. The design should provide the best fit with the existing local landscape and to minimise the impact through use of appropriate external finishes and colour choice and to enclose low level buildings and structures to reduce impacts from nearby receptors.
- 10.2.16. The NPS for Gas Supply Infrastructure and Gas and Oil Pipelines EN-4 (DECC, 2011) (Ref.10.3), in Section 2.21.1, refers to additional considerations associated with: "specific landscape elements within and adjacent to the pipeline route, such as grasslands, field boundaries (hedgerows, hedgebanks, drystone walls, fences), trees, woodlands, and watercourses. There will also be temporary visual impact caused by the need to access the working corridor and to remove flora and soil."
- 10.2.17. Mitigation measures may include reducing the working width of the route in specific locations.

 National Planning Policy Framework
- 10.2.18. Within Paragraph 17 of the National Planning Policy Framework (Department for Communities and Local Government (DCLG), 2012) (Ref.10.4) the Government sets out a number of overriding core planning principles that are relevant to the landscape including:



- Always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings.
- Take account of the different roles and character of different areas.
- Contribute to conserving and enhancing the natural environment and reducing pollution.
- 10.2.19. In Section 11 "Conserving and enhancing the natural environment", paragraph 109 notes that the planning system should contribute to and enhance the natural and local environment by, inter alia: "Protecting and enhancing valued landscapes, geological conservation interests and soils"
- 10.2.20. The National Planning Policy Framework Consultation Proposals, March 2018 (Ref 10.5) differs from the current NPPF and states under Chapter 15 "Conserving and enhancing the natural environment" paragraph 168 a) that valued landscapes, sites of geological interest and soils should be protected and enhanced "in a manner commensurate with their statutory status or identified quality". Under paragraph 109 clause b) an additional reference is added stating that the "intrinsic character and beauty of the countryside, and the wider benefits from natural capital including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland" must be recognised. Further text has been added to this paragraph under clause d) which emphasises that impacts on biodiversity should be minimised and net gains achieved by "establishing ecological networks that are more resilient to current and future pressures". Under clause e) further text has been added stating that "development should, wherever possible, help to improve local environmental conditions such as air quality."
- 10.2.21. Paragraph 115 notes that: "Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads."
- 10.2.22. Paragraph 170 of the Consultation Proposals adds that the scale and extent of development with such designated areas should be limited and planning permissioned refused for major development unless in exceptional circumstances and where the development is in the interests of the public. "Consideration of such applications should include an assessment of:
 - a) The need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
 - b) The cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
 - c) Any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated."

Local Planning Policy

10.2.23. The study area spans four Local Planning Authority (LPA) areas, North Yorkshire County Council, Selby District Council, East Riding of Yorkshire Council and Doncaster Metropolitan Borough Council.



Selby District Council

- 10.2.24. The following policies are of relevance to the Site and are drawn from the documents below:
 - The 'saved' policies of the Selby District Local Plan adopted February 2005 (Selby District Council, 2005) (Ref.10.6).
 - The Selby District Core Strategy Local Plan adopted October 2013 (Selby District Council, 2013) (Ref.10.7).
- 10.2.25. Policies of relevance in landscape and visual terms to the Proposed Scheme are as follows:

Selby District Core Strategy Local Plan:

- SP15 Sustainable Development and Climate Change.
- SP 18 Protecting and Enhancing the Environment.
- SP 19 Design Quality.

"Saved" policies from Selby District Local Plan:

- ENV 1 Control of Development.
- ENV 15 Locally Important Landscape Area (Magnesian Limestone Ridge, Brayton Barff and Hambleton Hough).
- ENV21 Landscaping Requirements.
- EMP 10 Additional Industrial Development at Drax and Eggborough Power Stations.

East Riding of Yorkshire

- 10.2.26. The following policies were considered of relevance to the Site and drawn from the East Riding Local Plan Strategy document, adopted 2016 (Ref. 10.8):
 - Policy EC5 Supporting the Energy Sector.
 - Policy ENV1 Integrating High Quality Design.
 - Policy ENV2 Promoting a High Quality Landscape.
 - Policy ENV3 Valuing Our Heritage.
 - Policy ENV4 Conserving and Enhancing Biodiversity and Geodiversity.
 - Policy ENV5 Strengthening Green Infrastructure.

Doncaster Metropolitan Borough Council

- 10.2.27. Doncaster's Core Strategy 2011- 2028 was adopted in 2012 (Ref.10.9). Policies of relevance to the Proposed Scheme and study area are as follows:
 - Policy CS3 Countryside.
 - Policy CS14 Design and Sustainable Construction.
 - Policy CS15 Valuing our Historic Environment.
 - Policy CS16 Valuing our Natural Environment Policy CS17 Providing Green Infrastructure.
- 10.2.28. These policies and policies of relevance within other administrative areas which fall within the study area are outlined in further detail in Appendix 10.1.
- 10.2.29. Figures 10.1, 10.2, 10.3 and 10.4 illustrate the extent of the study area, landscape character, built and natural environment in terms of designations.

Legislation / Conventions

- 10.2.30. The applicable legislative framework is summarised as follows. These include:
 - Countryside and Rights of Way Act (CROW) 2000 (Ref.10.10).
 - European Landscape Convention, 2000 (Ref.10.11).



Countryside and Rights of Way Act

10.2.31. The Countryside and Rights of Way Act 2000 provides a statutory framework for protected landscapes and introduced an additional right of access requiring the identification of "open access land".

European Landscape Convention

10.2.32. The landscape and visual impact assessment takes account of legislation relevant to landscape and visual issues, including the European Landscape Convention (ELC) which was ratified in the UK on the 21 November 2006. The ELC became binding on 1 March 2007 and provides a basis for closer co-operation on landscape issues across Europe. The Convention highlights the need to recognise landscape in law, to develop landscape policies dedicated to the protection, management and creation of landscapes, and to establish procedures for the participation of the general public and other stakeholders in the creation and implementation of landscape policies. It also encourages the integration of landscape into all relevant areas of policy, including cultural, economic and social policies. The ELC defines landscapes as:

"An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."

10.2.33. The ELC applies to natural, rural, urban and peri-urban areas including land, inland water and marine areas. Its purpose is to promote landscape protection, management and planning in relation to all landscapes regardless of whether their quality and condition is considered outstanding, ordinary or degraded. The UK is recognised as already putting many of the principles of the ELC into practice. The importance of landscapes in contributing to local identity and in reflecting local cultural influences and ecological diversity is shown through the use of Landscape Character Assessments and Natural England's National Character Areas project.

Guidance

- 10.2.34. The following guidance documents have been used during the preparation of this Chapter:
 - Author. Guidelines for Landscape and Visual Impact Assessment, Third Edition (Ref.10.12).
 - Author. An Approach to Landscape Character Assessment (Ref. 10.13).
 - Author. Photography and Photomontage in Landscape and Visual Impact Assessment (Ref.10.14.
- 10.2.35. In addition, this Chapter has been prepared in accordance with the Government's Planning Practice Guidance section Natural Environment – Landscape (Ref 10.15) which contains the following relevant paragraph:

Paragraph: 001 Reference ID: 8-001-20140306. This section states that: "One of the core principles in the National Planning Policy Framework is that planning should recognise the intrinsic character and beauty of the countryside. Local plans should include strategic policies for the conservation and enhancement of the natural environment, including landscape. This includes designated landscapes but also the wider countryside".

10.3 Consultation



- 10.3.1. As part of the ongoing EIA and design development process, consultation has been undertaken through a two stage process outlined in Chapter 1 (Introduction).
- 10.3.2. Pre application consultations have taken place with technical specialists in Local Planning Authorities (LPAs) to agree the extent of the study area, representative viewpoints, necessity for winter views, verified photomontages and to obtain datasets. Discussions have included North Yorkshire County Council (NYCC), Selby District Council (SDC), East Riding of Yorkshire Council (ERoY) and Doncaster Metropolitan Borough Council (DMBC). North Lincolnshire Council (NLC) was also notified as one selected viewpoint fell outside the study area and within their administrative area. In addition, advice has been sought from Natural England (NE).
- 10.3.3. The first round of consultation sought comments on the study area and preliminary viewpoints. Following site visits a further round of consultation took place over the representative viewpoints, the necessity for winter views and field verified visualisations/photomontages. Subsequent to the discussions over representative viewpoints, further consultation took place to determine with LPAs whether the extent of the study area should be revised to accommodate a potential increase in the height of the stacks up to 120 m (126 m AOD). Consultation activities are outlined in Table 10 - 1 below and Appendix 10.2 refer which includes two "superseded" location plans showing the preliminary and revised viewpoint locations.
- 10.3.4. Table 10-1 provides a summary of the consultation activities undertaken in support of the preparation of this Chapter.

Table 10-1 - Summary of Consultation Undertaken to Date

Body / Organisation	Meeting Dates and other Forms of Consultation	Summary of Outcome of Discussions
NYCC	31/08/2017 (Email and Phone) Pre Application	NYCC agreed that the Study Area should be set at 10 km if LVIA explains the rationale. However other significant features/protected landscapes that may be significantly visually impacted by this developed beyond 10 km should be checked. Two additional viewpoints were included within the preliminary list outside 10 km. These include viewpoint 19 and 20 (which remain unchanged on Figure 10.10 viewpoint location plan)
EROY	28/09/2017 (Email) Pre Application	ERoY agreed with the defined Study Area of 10 km, viewpoints selected and added that consideration should be given to Important Landscape Areas. No action required.
SDC	29/09/2017 (Email) Pre Application	SDC confirmed that they agreed with NYCC comments of 31/8/2017. No action required.



Body / Organisation	Meeting Dates and other Forms of Consultation	Summary of Outcome of Discussions
NYCC	29/09/2017 (Email and Phone) Pre Application	NYCC recommended checking the following viewpoints in addition to the 16 preliminary viewpoints proposed:
		1/ Views towards Drax over the open countryside from the A19 driving eastwards. 2/ Views across to Drax from the A1041. 3/ Open views affecting the southern side of Thorpe Willoughby from the Selby Golf Course area.
		Requested a plan view of the site to check orientation and therefore impact on surrounding landscape.
		Additional viewpoints were field verified and plan issued showing more clearly the orientation of the Proposed Scheme.
DMBC	21/9/2017 and 02/10/2017 (Email and Phone) Pre Application	Confirmed that they agreed with the Study Area of 10 km but suggested another viewpoint from Peatlands Way near Moorends to demonstrate two different views from a smaller more isolated settlement and larger settlement.
		Additional viewpoint was field verified and an alternative (9c) suggested in addition to 9b (now viewpoint 12 on Figure 10.10 viewpoint location plan)
NYCC	02/10/2017 (Email) Pre Application	NYCC recommended that views from Brayton Barff Country Park should be considered.
		Additional viewpoint was field verified (12c) (now viewpoint 15 on Figure 10.10 viewpoint location plan)
DMBC	09/10/2017 (Email) Pre Application	Revised viewpoint list was issued and recommended visualisations / photomontages. DMBC confirmed they were happy with recommended views which now includes one from edge of Moorends (9c). No other comments regarding winter views or visualisations / photomontages were received. No action required.
NYCC	11/10/2017 (Email) Pre Application	NYCC agreed with the revised viewpoints and recommended winter viewpoints should be



Body / Organisation	Meeting Dates and other Forms of Consultation	Summary of Outcome of Discussions
		considered which impact on the community close by. These should include viewpoint 2, 3a- c, 7, 8, 11 and 13 for winter views. NYCC agreed with the suggested verified views and added viewpoint 3b, 10b and 12c.
		Viewpoints 2, 3a, 3b, 3c and 3c, 7, 8 and 11 are to be considered for winter views and the following viewpoints 3b, 10b and 12c in addition to the suggested views for visualisations / photomontages.
		Now winter viewpoints 2, 3, 4, 5, 9, 10, 14 and 17 and photomontages 3, 5, 6, 13 and 15 refer to Figure 10.10 viewpoint location plan.
EROY	12/10/2017(Email) Pre Application	ERoY confirmed that they were happy for the LVIA to take its course and identify which viewpoints should be used when the fieldwork is undertaken. Recommended visualisations / photomontages near the Barmby Barrage/Barmby on the Marsh (the VP3 family), and along the Trans Pennine Trail near Asselby (VP4b).
		Viewpoints 3a, 3b and 4b were considered for visualisations /photomontages now 3, 4 and 6 on Figure 10.10 viewpoint location plan.
EROY	13/10/2017 (Email) Pre Application	ERoY sent datasets on Conservation Areas and ILAs. Information included in figure set.
SDC	17/10/2017 (Email) Pre Application	SDC had no further comments and were in agreement with the representative viewpoints discussed with NYCC. Datasets received regarding Conservation Areas and ILAs No action – information included in figure set
SDC	24/10/2017 (Email) Pre Application	Information request on Locally Important Landscapes received and incorporated into ES chapter
NYCC	8/11/2017 (Email and phone) Pre Application	Further consultation took place over potential changes to the Study Area based on a potential stack height of 120 m – NYC stated that they were comfortable that the key viewpoints have been covered. No action required.



Body / Organisation	Meeting Dates and other Forms of Consultation	Summary of Outcome of Discussions
DMBC	8/11/2017 (Email and phone) Pre Application	DMBC confirmed that the Study Area as proposed and the viewpoints proposed are still regarded as satisfactory in the context of 120 m stack height. No action required.
EROY	8/11/2017 (Email and phone) Pre Application	ERoY confirmed that they agreed with the Study Area remaining at 10 km in light of the potential change in the stack height and do not feel that a wider study area would particularly offer anything more to the identification and understanding of the likely effects of the proposal in our area. No action required.
SDC	9/11/2017 (Email and phone) Pre Application	SDC confirmed that they still agreed with a 10 km Study Area based on a change in stack heights to 120 m. No action required.
Natural England	1/12/2017 (Meeting and site visit) re Application	Confirmation that NE would expect the Landscape and Visual Impact Assessment to meet the Landscape Institutes Guidelines for this topic.
ERoY	4/12/2017 (Email) Pre Application	ERoY confirmed that they agreed with the sensitivity criterion afforded to the landscape resource and visual receptors which was circulated to LPAs for comment on 28/11/2017
NYCC	6/12/2017 (Email and phone) Pre Application	Clarification sought on representative views how such viewpoints had been agreed and the location of winter views and photomontages.
NYCC	6/12/2017 (Email and phone) Pre Application	Queries over representative viewpoints, request for further information on visual sensitivity criteria and the use of judgement rather than merely tables as well as clarification over baseline and cumulative effects. WPS referred to the publication of the PEIR which covered the points raised above.
NYCC	11/12/2017 Phone) Pre Application	Briefing session to outline the nature of the LVIA, associated methodology, scenarios, baselines and options.
NYCC	19/12/2017 (Email and phone) Pre Application	Clarification sought on viewpoint location plan. NYCC requested more detailed location plans for the viewpoints and queried whether alternative locations had been considered for Units X and Y. WSP referred to the PEIR issued in January which included amended viewpoint location plans and consideration of alternatives.



Body / Organisation	Meeting Dates and other Forms of Consultation	Summary of Outcome of Discussions	
NYCC /SDCC	7/03/218. (Email re additional verified views) Post PEIR	WSP sought clarification over the comments within NYCC's letter dated 27/02/2018. Specifically in relation to the following points: i) The presentation and format of views chosen for different seasons is confusing and the verified views and photomontages seem inconsistent. Additional verified views should be considered to better explain the landscape effects and visibility Consideration should be given to the appropriate level of visualisation rendering to fully describe and explain the development.	
NYCC /SDCC	15/03/218. (Conference call re comments on viewpoints and remaining LVIA comments re the PEIR) Post PEIR	 WSP sought clarification over comments in the PEIR covering the following points: 1. Original power station design. 2. Scheme design. 3. Consequential impact on local landscape character. 4. Visual receptors – identification and avoidance of averaging results/representative views. 5. Cumulative effects in terms of the implication of build-up and accumulation of development on Drax Power Station. 6. Mitigation. 7. Photographs, visuals and photomontages. 	

Scope of the Assessment

- 10.3.5. This section explains how the scope of the assessment has developed, and re-iterates the evidence base for insignificant effects (which have therefore been scoped out of the assessment), following further iterative assessment.
- 10.3.6. An EIA Scoping Report was submitted to the SoS in September 2017, as presented in Appendix 1.1.
- 10.3.7. As explained in Chapter 1 (Introduction), a Scoping Opinion was received by the Applicant from the Planning Inspectorate (PINS) (on behalf of the SoS) on 23 October 2017, including formal responses from statutory consultees. The responses from the PINS /SoS in relation to landscape and visual, and how those requirements should be addressed by the Applicant, are set out in Table 10-2 below:



Table 10-2 - Scoping Opinion Summary Table

Section	Applicants Proposed Matter	PINS Comments	Summary of Response
7.6.2	Changes to landscape character and visual amenity associated with operation of the Gas Pipeline.	PINS agrees that the operation of the Gas Pipeline itself is unlikely to result in any significant effects on landscape character and visual amenity. However, the Scoping Report acknowledges the potential for loss of hedgerows during construction; the effects of which the Inspectorate considers would likely last into the operational phase. The Inspectorate agrees that operational effects of the Gas Pipeline can be scoped out of the ES on the basis that any loss of hedgerows that is caused by the construction of the pipeline is appropriately assessed having regard to the longevity of impacts.	
		PINS welcomes that the likely significant effects on landscape character and visual amenity resulting from operation of the aboveground pipeline structures (i.e. the pig trap facility, minimum offtake connection and the pressure reduction and metering station) would be assessed.	Noted
7.6.2	landscapes and the setting of cultural	PINS accepts this approach. The applicant is advised to include clear cross referencing between the two chapters.	Noted Consideration was given to the visual receptors adjacent to heritage assets where the appreciation of the view is key to the experience.



Section	Applicants Proposed Matter	PINS Comments	Summary of Response
7.6.1	Receptors	In addition to the sensitive receptors outlined in section 7.6.1 of the Scoping Report, the applicant is advised to consider the potential visual impacts on users of leisure facilities, such as the Drax Golf Club and recreational users of the River Ouse. The applicant's attention is drawn to the comments of North Yorkshire County Council and Selby District Council regarding sensitive receptors to be considered within the assessment.	Leisure users were considered and an additional viewpoint taken from Drax Golf Club as part of the winter views
7.6.4	Sensitivity of receptors	The applicant should agree the sensitivity of the landscape and visual receptors with the relevant local planning authority.	Noted: This was reviewed with the LPAs and comments received.
7.6.4	Landscape character and visual amenity	PINS advises that any potential damage to existing mature farmland pattern should be assessed.	Noted and has been considered in terms of impacts on Development Parcel A and the Pipeline Study Area
7.6.5	Photograph	The applicant proposes that photography used to inform the assessment will be taken during the summer, with the need for winter photography to be determined using professional judgement. To allow for identification of a worst-case scenario, the Inspectorate considers that photographs should be taken from the selected viewpoints during winter unless otherwise agreed with the relevant consultees.	Autumn and winter viewpoints have been agreed with the LPAs and photomontages have been taken to demonstrate the location of both Units X and Y



Section	Applicants Proposed Matter	PINS Comments	Summary of Response
7.6.5	Photomontages	The Scoping Report explains that the need for photomontages will be determined through discussions with the relevant local planning authorities. The Inspectorate considers that photomontages would be a useful aid to the assessment. The locations of the photomontages should be agreed with the relevant local planning authority.	Verified viewpoints have been agreed with the LPAs and photomontages prepared to demonstrate the location of both Units X and Y
	Sludge lagoons	Section 5.3.8 of the Scoping Report proposes to relocate the existing sludge lagoons (currently located within the curtilage of Drax Power Station). However it is unclear where these would be located to. This should be explained within the ES, along with details of any changes to topography from these works. The resultant potential landscape and visual effects should be assessed.	The sludge lagoons would only be relocated when Stage 2 goes forward to accommodate Unit Y and would not be considered as part of a separate planning application. The sludge lagoons would be moved from Area F to E. Potential landscape and visual effects are considered as part of the assessment.
	Temporary Structures	The ES should consider the potential landscape and visual effects resulting from any temporary construction-related structures (such as the mobile crane and the pedestrian bridge).	Temporary structures are considered as part of the assessment
	Reinstatement of pipeline	The ES should include proposals for the reinstatement of the pipeline route as close to the original state as possible.	Noted

10.3.8. The responses from statutory consultees to the statutory consultation on the PEIR (Regulation 14 (2)) and how those requirements would be addressed by the Applicant, are set out in Table 10-3.



Table 10-3 - Statutory Consultation Summary Table of the PEIR

Body / Organisation	Comments	Response
Natural England	The proposal is not located within or in the vicinity of any nationally designated landscapes. We support the use of the Guidelines for Landscape and Visual Impact Assessment (3rd Edition) in carrying out the landscape and visual assessment as set out in Section 10.2.33 of the PEIR.	Noted and is referred to within the LVIA ES Chapter
Forestry Commission	We recognise the ambition for the proposed scheme to be designed to reduce its impact and protect biodiversity and landscape in sections 9 and 10 of the Preliminary Environmental Information Report. There are mentions in section 10.2.1 of woodland creation we would recommend that these are in accordance to the UK Forestry Standard (4th edition published 2017) we also suggest that a management plan is required, to ensure long term viability of created habitat. There is a reference in section 10.2.3 of clearance of existing woodland in development area we would like to hear more about this proposed clearance.	In terms of woodland creation we have referred to UK Forest Standard within the ES chapter and to the need for a management plan which would be covered by a DCO condition and relate to the long term management plan for newly created habitats. It should be noted that the ES is seeking to retain blocks of woodland and these would only be lost if the CCS comes forward in the future
MMO	Para 6.1: Further to our comments made above in relation to the jetty and supporting activities if other works are required within the UK marine area, the ES should include but not be limited to assessment and consideration of visual impacts.	The option to transport material by the jetty has been scoped out and is not considered as part of the ES.
North Yorkshire County Council and Selby District Council	Considerable effort went into the original 1960's Power Station Design and aesthetics and the setting and treatment of the buildings and structures was considered of utmost importance; to reduce visual coalescence; the layout and grouping	The WSP landscape team has undertaken initial correspondence with NYCC to locate the Weddle Report. A copy of the Weddle report (original design for the power station) and associated documents has been



Body / Organisation	Comments	Response
	of the cooling towers; to reduce site clutter; building design and massing; materials and colours. Therefore the ES should refer to and demonstrate that the original ethos behind landscape and mitigation contained in the A E Weddle July 1966 Report has been considered and the scheme designed to take account of that original composition of the layout of cooling towers, turbine and boiler houses. The ES should identify the nature of and explain any operational constraints of the existing site layout as to how the proposed locations of the new gas fired turbines and Heat Recovery Steam Generators (HRSGs) have been influenced.	received and considered as part of the LVIA and supporting appendices. A skype meeting was held with North Yorkshire's Landscape Officer on 15/03/2018. This discussed the content of the Weddle Report (original design of the power station) and the need to acknowledge any constraints associated with the Proposed Scheme.
North Yorkshire County Council and Selby District Council Stacks in the vicinity of the northern cooling towers have the tendency to jar and conflict with the symmetry. For example, the preliminary character assessment 10.6.9 states that the eight stacks would protrude above the cooling towers, forming a strong contrast, visual clutter and discordant views. This could adversely affect landscape character and needs to be justified in the light of the comments above.		The WSP landscape team has undertaken initial email correspondence to acknowledge this comment and it was discussed at a meeting with North Yorkshire's Landscape Officer on 15/03/2018. It was acknowledged during the meeting on 15/03/2018 with North Yorkshire's Landscape Officer that there would be localised adverse effects on landscape character. Further, it was agreed that there would be significant effects on specific localised visual receptors and these are considered in the ES.
North Yorkshire County Council and Selby District Council	Any adverse effects are likely to be more significant and pronounced at closer distances to the development. Thus, care should be taken to identify those receptors or part of receptors most affected and to avoid general averaging of results (summary tables in Appendix F)	This comment was discussed in a meeting with North Yorkshire's Landscape Officer on 15/03/2018. It was agreed that there would be significant effects on specific localised visual receptors and these are considered in the ES. Care has been be taken to avoid an averaging of results.



Body / Organisation	Comments	Response
North Yorkshire County Council and Selby District Council	Clarity and consistency is needed when considering the 10km study area and those receptors affected (10.5.46 + 10.5.47+ 10.5.50 uses 2, 3 & 5 km for Listed Buildings, Conservation Areas and trees).	This comment is noted. The majority of effects on these receptors are localised, therefore the study area has been narrowed to 3 km to pick up on such specific features.
North Yorkshire County Council and Selby District Council	Representative viewpoints should not form the sole basis of the assessment (10.6.54 – 10.6.56). Effort should be taken to describe the full effects of the development, particularly for the more sensitive receptors such as residential	The WSP landscape team has had phone and email correspondence on the statutory consultation response and this comments was also discussed as part of meeting with North Yorkshire's Landscape Officer on 15/03/2018.
	properties, hamlets and settlements.	The assessment acknowledges that there would be a wide range of effects within the 10 km study area.
		The LVIA includes a comprehensive visual assessment describing and assessing the effects from all the potentially affected visual receptors (settlements, groups of receptors and individual isolated receptors) within the study area. This is illustrated with photographs from a series of representative viewpoints to give a clear picture of the anticipated effects, with photomontages from selected key viewpoints.
North Yorkshire County Council and Selby District Council	Chapter 15 considers the combined effects of the proposed scheme and other developments within the wider study area. However, the implications of a gradual build up and accumulation of development on the Drax Power Station site should also be considered.	Reference to the build-up and accumulation of development on the Power Station Site is considered within the LVIA section on cumulative effects.
North Yorkshire County Council and Selby District Council	The Councils are concerned that within the LVIA the embedded mitigation is not really defined nor the mitigation of residual effects. For example, if off site planting is being	The WSP landscape team has undertaken initial email correspondence to acknowledge this comment and it was discussed



Body / Organisation	Comments	Response
	mooted this needs to be defined and itemised so that it might be the subject of control through the DCO/ or the method of control can be considered. This applies to all points at paragraphs 10.4.16 – 10.4.19. It is acknowledged that the embedded and residual mitigation appears to be a 'wish list' at the moment since much of the survey/investigation is still being carried out which will inform the ES.	in a meeting with North Yorkshire's Landscape Officer on 15/03/2018. Onsite mitigation is discussed in the LVIA and is referred to in further detailed within the Indicative Landscape and Biodiversity Strategy and associated mitigation plans. Offsite mitigation has not been considered due to constraints by the Site Boundary and third party ownership.
North Yorkshire County Council and Selby District Council	Due to the scale and proposed arrangement of the turbine buildings and flues, the proposal will be visible from particular directions and viewpoints. Although partly obscured by existing buildings and cooling towers, there are additional issues of coalescence and 'clutter' which the ES should consider. Thus there should be an underlying emphasis on good design and site layout to reduce the propensity for 'clutter' of structures, scale and massing of buildings, and any adverse visual effects of the development. It is important that the ES explains what efforts have been made to reduce the height and number of flue stacks.	This comment is noted. Good design and layout will be covered in Chapter 4 (Consideration of alternatives). The Proposed Scheme is deliberately positioned as close as possible to the existing steam turbines in order to minimise efficiency loss and enable ongoing operations of Drax's biomass and coal units until such time as they are decommissioned. Stack heights associated with Units X and Y are fixed at 120 m high in response to air quality impacts. The LVIA acknowledges that as a consequence of these environmental and engineering constraints the Proposed Scheme will jar and conflict with the symmetry of the original Weddle's design resulting in visual clutter and discordant views as well as visual coalescence.
North Yorkshire County Council and Selby District Council	The Station site is too restricted for extensive on-site planting except for lower level buildings and infrastructure. Off-site planting guided by a clear landscape strategy should be considered to improve landscape character and screen key views. Thus, any off site mitigation needs to	The WSP landscape team has undertaken initial email correspondence to acknowledge this comment. Further, this comment was discussed with North Yorkshire's Landscape Officer on 15/03/2018.



Body / Organisation	Comments	Response
	be a part of the application; within the Order Limits and to be identified how it would be controlled or implemented if it is reliant upon third party land.	Onsite mitigation is proposed with further detailed included in an Indicative Landscape and Biodiversity Strategy and associated mitigation plans
North Yorkshire County Council and Selby District Council	The effects upon any existing trees and screening vegetation located within areas proposed for site reconfiguration and contractor's laydown areas needs to be identified. Protection of existing established screen planting is extremely important. Although a tree survey and arboricultural impact assessment to BS 5837:2012 'Trees in relation to design, demolition and construction—Recommendations' has not been requested suitable development, protection and mitigation measures will be sought.	This comment is noted.
North Yorkshire County Council and Selby District Council	Clarity is needed to assess the temporary works, how the areas will be affected and restored, including those areas to be safeguarded for carbon capture, and the timescales (83 months, compared with the assessment of short term effects 1 year 10.4.14).	This comment is noted and further information will be given in the upfront sections of the ES.
North Yorkshire County Council and Selby District Council	Generally the Council's would agree with the range and type of representative viewpoints used to illustrate the development. However, the presentation and format of views chosen for different seasons is confusing and the verified views and photomontages seem inconsistent. The clarity of the photographs could be improved. Several of the photographs show misty conditions (eg.View19), with the development hidden unnecessarily behind obstacles and hedgerows	The WSP landscape team has undertaken email/phone correspondence on 06/03/2018 to acknowledge this comment. Further, this comment was discussed in a meeting with North Yorkshire's Landscape Officer on 15/03/2018. The sequence of viewpoints in the PEIR was discussed on 15/03/2018. In the ES, the sequence of images has been revised so that autumn views are followed where appropriate by winter views, field verified existing



Body / Organisation	Comments	Response
	(eg.View18), or out of focus (eg.View12) Additional verified views should be considered to better explain the landscape effects and visibility. Consideration should be given to the appropriate level of visualisation rendering to fully describe and explain the development.	views and then photomontages - referred to as a, b, c and d respectively. It is noted in the ES that two different cameras were used at two different focal lengths. In response to the misty viewpoints, this is to be agreed with Drax Limited and new views may be taken following completion of the ES and as an addendum. New photographs have replaced those which are out of focus. In terms of viewpoints with obstacles, views were checked in March 2018 and in most cases they were in the best position to represent the view. It was agreed that additional verified views are not required.
National Grid	Guidance on landscaping in proximity to overhead lines	The LVIA has referred to restrictions associated with overhead lines in this chapter and accompanying Indicative Landscape and Biodiversity Strategy and associated Mitigation Plans.

Insignificant Effects

- 10.3.9. The following effects have been considered insignificant and have therefore not been considered within the ES:
 - Aside from the siting of the Above Ground Installation (AGIs) which includes a Pig Trap Launching Station (PTF-L) and a Minimum Offtake Connection (MOC), which could generate significant effects, land associated with the Gas Pipeline which would cross large open fields of intensive agriculture which would be reinstated and thus returned to its previous use. The Scoping Opinion agrees that the operational effects of the Gas Pipeline can be scoped out of the ES on the basis that any loss from the construction of the Gas Pipeline is appropriately assessed having regard to the longevity of impacts. Due consideration was therefore given to the longevity of the impacts of the Gas Pipeline on hedgerow loss during construction and operation.
- 10.3.1. In order to mitigate against noise levels, a temporary 2.2 m site hoarding would be installed with a minimum length of 100 m and 50 m on either side of Wren Hall and Briden Bungalow along the boundary of the Gas Pipeline works, Whilst such a structure is a temporary feature in the landscape it will be considered in terms of effects on both landscape character and visual amenity.



Potentially Significant Effects

10.3.2. The scoping report identified the following potentially significant effects of the Proposed Scheme during construction and operation:

Construction Phase

- 10.3.3. Potentially significant effects that have been assessed in this Chapter during construction include:
 - Effects on landscape character within and surrounding the study area, based on a current and future baseline, from construction and plant activities.
 - Effects on visual amenity of surrounding visual receptors, based on a current and future baseline, from construction and plant activities.

Operation Phase

- 10.3.4. Potentially significant effects that have been assessed in the Chapter during operation include:
 - Effects on landscape character within and surrounding the study area due to new built form and landscaping during operation.
 - Effects on the visual amenity of surrounding visual receptors due to new built form and landscaping on operation.

10.4 Assessment Methodology and Significance Criteria

Stages / Scenarios Assessed and LVIA Assumptions

- 10.4.1. A number of stages are assessed as part of the ES as summarised in Chapter 3 (Site and Project Description). In terms of the LVIA, key assumptions were made associated with each Stage as summarised in Table 10-4 below. The LVIA assessed five stages:
 - Stage 0 = Site reconfiguration works
 - Stage 1 = Construction of Unit X, Gas Pipeline, AGI and GRF
 - Stage 2 = Operation of Unit X and construction of Unit Y
 - Stage 3 = Operation of Unit X and Y
 - Stage 4 = Decommissioning
- 10.4.2. It should be noted that the assessment considered the landscape and visual impacts associated with Gas Pipeline, and during construction the transportation of materials by road.
- 10.4.3. Through the design process, provision was made to accommodate the CCS at a future date and consideration was given to the need for further mitigation planting within the Site Boundary to screen the CCS. The LVIA has however not assessed the implications of vegetation clearance as a result of the CCS on landscape and visual amenity or the additional mitigation planting proposed if the CCS was developed. Drax would need to apply for a separate consent for a carbon capture facility on Development Parcels A and B (Figure 1.3).



Table 10-4 - Stages and LVIA Assumptions

Stage	Title	Description	LVIA assumptions
-	Current Baseline	Three biomass fired units and three coal fired units will be operational at the Existing Drax Power Station Complex until late 2018.	It is assumed that there would be no change in existing vegetation, topography and drainage on site. The LVIA considers that there would be no difference between the current and future baseline and on this basis a separate assessment for each baseline has not been undertaken. For both the current and future baseline the assessment takes into consideration the nature of the existing Drax Power Station Complex which is an active, operational, industrial site.
-	Future Baseline	From late 2018 four biomass fired units and two coal fired units will continue to operate at the Existing Drax Power Station Complex. After 2025 the coal fired units will meet more stringent emissions standards prescribed by the Government, however no additional consents are required for this.	It is assumed that there would be no change in existing vegetation, topography and drainage on site in response to accommodating biomass versus coal fired units. The LVIA considers that there would be no difference between the current and future baseline and on this basis a separate assessment for each baseline has not been undertaken.
0	Site Reconfiguration works	Works may be completed via two possible mechanisms as follows: • A TCPA application, applied for in 2018. • As part of the DCO Application. This ES considers the scenario where this is completed under the DCO.	The LVIA assumes that the Site Reconfiguration Works include the demolition and relocation of existing facilities (the turbine outage stores, learning centre, contractor's compound and welfare facilities, leisure facilities (a private squash court)). A 10 m high cooling spray screen would be constructed between the relocated facilities and the southern cooling towers. All the structures to be demolished (and relocated) are under 18 m in



Stage	Title	Description	LVIA assumptions
			height. The turbine outage store and learning / visitor centre are 18 m high with other structures varying from 2.5 to 5 m. All works would take place within the Existing Drax Power Station Complex. Works will be concentrated in areas of hardstanding and amenity grassland. There will be some vegetation lost (a mix of ornamental hedgerows, trees and grassland to accommodate the relocated structures within Development Parcel H). There would be a greater number of movements on site during the Site Reconfiguration Works. However, this would be perceived in the context of an active operational site which already experiences low levels of tranquillity, associated with vehicular movements and variations in air flows due to the plumes from the cooling towers and main chimney.
1	Construction of Unit X	This stage assumes that the Site Reconfiguration Works have been completed by either consenting route. This stage refers to the construction of Unit X, along with the construction of the Gas Pipeline, the Battery Storage Facility, GRF which includes the Compressor Building. There would be a new access point off Rusholme Lane to the AGI which consists of -a PIG Trap Launching Station and a Minimum Offtake Connection.	The LVIA assumes there is a construction period of approximately 34 months (per unit) followed by commissioning. Construction of Unit X would commence in 2019. Existing vegetation to accommodate Unit X and associated construction areas within the Power Station Site would be removed or disturbed. One disused sludge lagoon would be brought back into operation and the southern sludge lagoon filled in to



Stage	Title	Description	LVIA assumptions
		In addition there will be a temporary pedestrian bridge or alternative pedestrian crossing to avoid staff crossing New Road. During this stage one coal unit (either 5 or 6) continues to operate while Unit X is being constructed.	accommodate a construction laydown. The majority of vegetation and disturbance associated with the Pipeline Area would be temporary with vegetation reinstated. The extent of landtake outside the confines of Existing Drax Power Station Complex would be the same for Stage 1 and 2. The LVIA assumes that some new mitigation measures would be implemented within the Existing Drax Power Station Site and the Pipeline Area during the 34 month construction period of Unit X (2019-2022). This includes reinstatement of the Pipeline Area, mitigation associated with the GRF/compressor building and AGIs.
2	Operation of Unit X and Construction of Unit Y	The stage refers to the operation and maintenance of Unit X, the Gas Pipeline and the battery storage facility and the construction of Unit Y. The construction of Unit Y is assumed to take place 12 months after Unit X is complete, however this could be longer. If Unit Y is not built then this stage 2 is a worst case assessment of the operation of Unit X.	The LVIA assumes there is a construction period of approximately 34 months (per unit) followed by commissioning. Unit X will be constructed with OCGT capability by 2012/22 and will be CCGT ready by 2022/23. Construction for Unit Y would commence in 2024 and be completed by 2027. Existing vegetation to accommodate Unit Y would be removed or disturbed and sludge lagoons relocated to Area E. The extent of landtake outside the confines of Existing Drax Power Station Complex would be the same for Stage 1 and 2.



Stage	Title	Description	LVIA assumptions
			The LVIA assessed this stage based on the worst case scenario whereby only Unit X is in operation.
			The LVIA assumes that some new mitigation measures would be implemented within the Existing Drax Power Station Complex and the Pipeline Area during the 34 month construction period of Unit Y (2024-2027).
3	Operation of Unit X and Y	This stage refers to the operation and maintenance of Unit X, Unit Y, the Gas Pipeline and the Battery Storage Facility. The construction laydown / parking areas would be reinstated after Unit Y is built.	Both units would be operating by 2027. The LVIA assumes that all new mitigation measures has been implemented. An assessment of the effects following completion of planting 15 years after the commencement of operation of both Unit X and Y considered under residual effects.
4	Decommissioning	Pipeline left in situ and all above ground infrastructure removed / reused / recycled etc	The LVIA assumes that the decommissioning of the Proposed Scheme (which covers demolition and removal of the structures comprising the Proposed Scheme) would take place approximately 25 years post Stage 3 of the Proposed Scheme. All structures would be removed other than the Gas Pipeline and AGI under National Grid's ownership which is assumed to remain in situ.

10.4.4. The LVIA considers that the degree of effect on landscape character and visual amenity arising from Stage 2 would be similar to that arising from Stage 3, despite Stage 2 comprising a smaller mass of development and fewer elements.



10.4.5. Four stacks (rather than eight) would protrude above the horizontal lines created by the tops of the cooling towers, but this would still form a strong contrast to the existing mass, and visually "clutter" the top of the towers resulting in a slightly discordant view from certain angles. For reference the number and height of some of the proposed facilities are outlined in Table 10-5 below.

Table 10-5 - Number and Height of Proposed Facilities Based on Completion of Stages 2 and 3

Proposed Facilities	Stage 2 (Unit X)	Stage 3 (Unit Y)	Maximum height (m AOD)
Power Station Parameters	Parameter Details		
Heat Recovery Steam Generators (HRSG)	2 buildings / up to 38 m high (48 m x 23 m)	4 Buildings / up to 38 m high (48 m x 23 m)	44 m
Combined Cycle Gas Turbine Hall Building	1 building / up to 28 m high (92 m x 22 m)	1 building / up to 28 m high (92 m x 22 m)	34 m
Number of Stacks associated with the above (exhaust Emission stacks and Bypass stacks)	4 up to 120 m in height	8 up to 120 m in height	126 m
Battery Storage Facility	10 m high (180 m x 60 m)	10 m high (180 m x 60 m)	16 m
Turbine outage store building	28 m high (113 m x 43 m)	2 m high (113m x 43m)	34 m
Transformers	11 m high (36 m x 17 m)	11 m high (36 m x 17 m)	17 m
Gas Compressor Building	35 m x 30 m and 10 m in height with 1 stack up to 10 m in height	50 m x 75 m and 10 m in height with 1 stack up to 10 m in height	16 m
Gas Receiving Facility (GRF) which will include a Pipeline Inspection Gauge (PIG), Pipeline Trap Facility (PTF) and on site Pressure Reduction and Metering Station (PRMS).	J	The GRF will be 85 x 85 m and includes two boiler houses 10 m in height (16 x 412 m) as well as four flue stacks to be arranged in two pairs (10 m height)	16 m
Two Above Ground Installations (AGIs)	PTF-1: 5 m in height (30 m x 30 m)	PTF-1: 5 m in height (30 m x 30 m)	10 m



Proposed Facilities	Stage 2 (Unit X)	Stage 3 (Unit Y)	Maximum height (m AOD)
consisting of a Pig Trap Launching Station (PTF-L) and a Minimum Offtake Connection (MOC).	MOC 5 m in height (30 m x	MOC 5 m in height (30 m x 30 m)	
Sludge lagoons	sludge lagoon (82 x 55 m) to serve the existing power station whilst the southern sludge lagoon will be	Decommissioning of existing sludge lagoon and filled in to enable construction of Unit X. Two new sludge lagoons constructed in Area E	-
Temporary pedestrian footbridge	10 m high (8 x 20 m)	11.5 m high (8 x 20 m)	17 m

Embedded Mitigation

- 10.4.6. Mitigation of adverse environmental impacts can be achieved by avoidance, reduction, remedying of, or compensation. Embedded primary and tertiary mitigation measures form an intrinsic part of the Proposed Scheme design through an iterative process.
- 10.4.7. This assessment has taken into account the delivery of embedded mitigation measures as part of the Proposed Scheme. The following mitigation measures summarised in the following paragraphs below are either incorporated into the design (primary mitigation) or are standard construction or operational methods and would be implemented within the confines of the Site Boundary (tertiary mitigation). Also noted within this section are the environmental and engineering constraints which have influenced the siting, technology and height of the Proposed Scheme detailed below.

The Proposed Scheme Design (Location, Technology, Height, Materials and Colour)

Proposed Scheme Requirements:

- 10.4.8. The full scope of the Proposed Scheme is to repower up to two existing coal-powered generating units (Units 5 and 6) with up to 4 new Gas Turbines (GTs) (so up to two for Unit X and up to two for Unit Y) that can operate in both combined cycle and open cycle modes. Each unit would have up to four stacks, two for bypass (open or simple cycle) operation and two for combined cycle operation, resulting in a total of eight stacks for both Unit X and Unit Y.
- 10.4.9. The bypass stack vents the GT exhaust gas into the atmosphere bypassing the HRSG which is equivalent to a boiler. The bypass stack enables the GT to start up in an open cycle mode achieving faster start up loading rates (megawatts onto the grid). This is possible because



there are no constraints related to the thermal stress profiles of the HRSG, which would limit the GT ramp rate while the HRSG warms up slowly. The other major reason for having a bypass stack is it allows maintenance works to be carried out on the steam turbine and the HRSG independent of operation of the GT.

10.4.10. The combined cycle stack is required to exhaust the gases after they have passed through the HRSG. This is a fundamental function of the combined cycle gas power station and without it the efficiency would drop significantly as there would be no steam cycle.

Location:

10.4.11. In terms of layout, Units X and Y have been positioned as close as possible to the existing steam turbines in order to meet the Applicant's objective of re-using existing infrastructure and to maximise efficiency and enable ongoing operations of Drax's coal units until such time as they are decommissioned. Only areas not currently occupied or that could accommodate the units were considered as locations for the units. Alternative development sites or layouts were not considered feasible nor in accordance with the objectives of the Proposed Scheme in relation to maximising Drax Power Station's generation efficiency and utilising existing operational land, for reasons outlined in Chapter 4 (Alternatives).

Technology:

- 10.4.12. GT selection was based on achieving higher efficiency electricity production and lower emissions of CO₂ per MW. High efficiency combined cycle plants are required to support the grid to maintain stability and fast ramp rates are required to balance out the instability of intermittent renewables.
- 10.4.13. The Proposed Scheme uses vertical HRSGs, and for this type of design the combined cycle stack is mounted on top of the HRSG. The primary benefit of vertical HSRG is that a vertical boiler is compact and covers a smaller footprint than a horizontal type of unit. This is beneficial for the Proposed Scheme given the space restrictions. The consideration of alternate technologies is set out in Chapter 4 (Alternatives).

Stack Heights:

10.4.14. Stack heights associated with Units X and Y would have a maximum height of 120 m (126 m AOD) in response to air quality impacts and associated stack height sensitivity modelling. Consideration was given to connecting the new units into the existing 259 m (265 m AOD) main stack, however this was not viable with the proposed vertical HRSG (refer to Chapter 4 (Alternatives) for further details).

Materials:

- 10.4.15. Suitable materials would be used, where possible, in the construction of structures to reduce reflection and glare and to assist with breaking up the massing of the buildings and structures. Materials include GRP Construction or Brick for the PTF, PRMS and Compressor Building and all other buildings are likely to be steel structures with concrete walls or metal / GRP cladding. Stacks up to 120m high are likely to be steel frame with a reinforced concrete shell.
- 10.4.16. Requirements in Schedule 2 of the draft DCO (Document Ref. 3.1) require the approval by the relevant LPA of the details of the external appearance of Units X and Y, including colour,



materials and surface finishes of all new permanent buildings and structures, prior to commencement of development.

Colour:

10.4.17. The colours for the Proposed Scheme at this stage are indicative, and details would be agreed with the LPA pursuant to a DCO requirement prior to construction (as detailed above). The proposed colours have drawn on the original colour palette used in the original Drax design.

Table 10-6 - Colour Palette for Structures

Structure	BS Colour	Colour
Main turbine buildings and other structures	BS2660-9-098	Blue Grey
Air Inlet Filer Houses	BS4800 02-A-03	Grey
HRSG buildings	BS4800 02-A-03	Grey
All Stacks	BS4800 10 B17	Oatmeal/ Greystone / Hopsack
Battery Storage Facility	BS4800 02-A-03	Grey
GIS Building	BS2660-9098	Blue Grey
Gas Compressor Building	BS4800 02-A-03	Grey
Turbine Outage Store Building	BS2660-9098	Blue Grey

10.4.18. It should be noted that whilst the electric kiosks and pipework associated with the AGIs would be in a grey, the BS colour palette is yet to be agreed. All structures would be surrounded by security fencing, grey/black in colour.

Lighting:

- 10.4.19. Permanent lighting would be required on the Power Station Site (including road and area lighting), the AGIs and GRF/compressor station. New lighting would seek to minimise any off site effects and use specifically designed lighting equipment that reduces the upward spread of light and minimises glare. It is assumed proposed lighting would comply with existing standards applied to the Existing Drax Power Station Complex.
- 10.4.20. The following mitigation with regards to artificial lighting would be implemented:
 - Specific working hours, particularly during night working, would be agreed with the local planning authority and the local communities would be made aware of this.
 - Lighting would be switched off when not in use, where possible. This would include lighting associated with the AGIs and the GRF / Compressor Station.
 - The lighting would be designed to reduce unnecessary light spill outside the Site Boundary and avoiding unnecessary sky glow.
- 10.4.21. Requirements are included in Schedule 2 of the draft DCO (Document Ref. 3.1) requiring submission and approval of lighting strategies both in relation to temporary lighting during construction and permanent lighting once the Proposed Scheme is operational.

Existing Pylons:



- 10.4.22. To accommodate the new infrastructure it would also be necessary to remove existing 132 kV pylons and foundations in the north of the Power Station Site and de-string the adjacent pylons. Most new electrical connections would be underground which would contribute to reducing visual clutter at a lower level.
- 10.4.23. An underground cable that terminates in a new cable sealing end compound outside of the fence line of the existing National Grid 400 kV substation is connected to the existing equipment using overhead conductors. The cables span a short distance within Development Parcel F and it is considered that given the length of cable and the backdrop of the Proposed Scheme, impacts on visual amenity would be minimal. Pylons and associated cables running North West South East across Development Parcels C, E and F (Chapter 1, Introduction, Figure 1.3) would not be removed.

Retention of Existing Vegetation:

- 10.4.24. The Proposed Scheme seeks to retain existing blocks of woodland on and off site which were identified through the original Weddle's landscape proposals and serve an important screening function in local view. Specific areas which have been retained through changes in the design process include:
 - The retention of North Station Wood (north of the materials handling entrance) during construction and operation of the Proposed Scheme (without CCS) which would reduce localised visual impacts. This can be classed as embedded mitigation for as long as CCS is not required.
 - The retention of a 15 m wide woodland buffer within the Power Station Site, adjacent to the northern boundary during construction providing a continuous belt of woodland during the construction and operation of the Proposed Scheme (without CCS) which would reduce visual impacts. This can be classed as embedded mitigation for as long as CCS is not required. A 15 m wide buffer zone would be considered between the retained woodland in Development Parcel B (Figure 1.3) and the Laydown Area to protect it during construction.
 - The retention of existing planting along the southern road entrance and within the Site Boundary resulting in revisions to the arrangement of the contractor's village access road.
 - The diversion of the Gas Pipeline to avoid TPO woodland which lies on the disused railway embankment to the north of the Site Boundary.
- 10.4.25. An allowance has been made within the Site Boundary for further mitigation if the CCS goes ahead at some future date and is therefore not considered to be embedded mitigation. This includes the creation of an additional 20 m wide woodland buffer within and close to the north eastern edge of the Site Boundary and within the Power Station Site which would be sufficient for screening and relocation of PRoW 35.47/6/1 to north of the new planting. PRoW 35.47/1/1 will be rerouted if CCS goes ahead.

Flood Alleviation:

10.4.26. A flood alleviation channel would wrap around the battery storage facility and the relocated sludge lagoons as indicated on Figure 3.2. The channel would be 5 m in width and grassed. The bed level at the upstream end of the channel is 4 m AOD and 4 m AOD at the downstream end, representing an average depth of 0.75 m.



10-30

Pipeline Route Options and AGIs:

- 10.4.27. Six route options were originally considered for the Gas Pipeline, with two assessed as part of the PEIR. In terms of the LVIA it was considered that for both routes there were effects on both landscape character and visual amenity. These effects varied from impacts on landscape features and hedgerows to impacts on visual receptors. The preliminary LVIA which formed part of the PEIR considered that route option B had a more immediate impact on specific landscape features and local visual receptors whilst route option A would impact on visual receptors within Airmyn, Little Airmyn and Asselby as well as users of PRoWs and the Trans Pennine Trail. Neither pipeline route option had clear advantages over the other in terms of landscape and visual impacts, and these impacts were therefore not determinative in the selection of option A as the Gas Pipeline.
- 10.4.28. Through the design process, the position of the AGIs has been deliberately pulled back away from Rusholme Lane and located in the south western corner of an open arable field with no natural landscape features. The access road to the AGIs runs off Rusholme Lane along eastern and southern field boundaries and an open ditch with no surrounding vegetation. The siting of the AGI set back off the lane has been in response to a need to reduce visual impacts on immediate residential receptors and recreational users utilising the Trans Pennine Trail/PRoWs on the northern banks of the River Ouse.

Movement, Access and Recreation:

Traffic Options:

10.4.29. Alternative transport routes were considered as part of the PEIR, including an option (which has been scoped out) to transport materials by river during construction utilising Drax jetty. The transportation of all construction materials would now be via the road network from Junction 36 of the M62. Abnormal Indivisible Loads (AILs) would arrive via the Port of Goole, along the Goole Bypass, the M62 and then the A645 to Drax. Highways powers are sought as part of the draft DCO submitted with the DCO Application (Document Ref. 3.1) to temporarily close roads and/or remove barriers to enable HGVs and AILs to pass unhindered.

Public Rights of Way:

10.4.30. In terms of recreation, a PRoW bisects Development Parcel Area A (Figure 1.3), travelling south east. The use of Development Parcel A for construction laydown would not require the closure of this footpath and it would remain operational, protected by fencing. Additionally, a PRoW travels along the boundary of Development Parcel B. Again this would remain open during construction. Land forming part of the CCS would entail rerouting of the two existing PRoW and this would be supported by landscape mitigation (the draft DCO includes provisions for the permanent diversion of the two PRoWs in the event the Carbon capture readiness reserve space was required for CCS). PRoWs also cross the Gas Pipeline. These would be temporarily diverted whilst the Gas Pipeline is being constructed or, worst case, temporarily closed for a short period and then reinstated.

External and Internal Vehicular Access:

10.4.31. Internal vehicular and pedestrian access circulation systems are designed as part of the Proposed Scheme including car parking, cycle parking and hardstanding. It is assumed that,



- in accordance with the original Weddle plans, kerbs to new roads would be flush and the surface materials would marry with the surrounding roads.
- 10.4.32. Temporary access points would be created on Development Parcel A (Figure 1.3) for use as a construction Laydown Area (the Carbon capture readiness reserve space) resulting in a break through an existing hedgerow. Development Parcel A is separated from the Existing Drax Power Station Complex by New Road, which is a public highway. To avoid construction workers crossing this road on foot from the construction carpark, a temporary pedestrian bridge would be constructed. It is assumed that the stair access system associated with the bridge would be accommodated without affecting existing vegetation.
- 10.4.33. In terms of the AGIs a shared temporary access road would lead to two construction Laydown Areas, one for Drax and one for National Grid. A temporary passing place on arable land would be provided during construction off Rusholme Lane and near to Scurff Cottages (Development Parcel L the Rusholme Lane Area). Where the road widens naturally these areas shall also be used for passing places to minimise impacts on local traffic.
- 10.4.34. In terms of operation three new access points would be created, one to serve the AGIs off Rusholme Lane, another off New Road to access the GRF and one to access Development Parcel H (Figure 1.3) off the southern entrance to the Existing Drax Power Station Complex. The latter two access points would result in the loss of existing vegetation in terms of hedgerows and tree planting. Access across to the AGI is over an open field.

Consequences of the Proposed Scheme on the Original Scheme Design:

- 10.4.35. The LVIA acknowledges that as a consequence of the environmental and engineering constraints detailed above, the Proposed Scheme would jar and conflict with the symmetry of the original Weddle's design from specific directions resulting in visual clutter and discordant views (refer to Appendix 10.4 and the outline Landscape and Biodiversity Strategy).
- 10.4.36. Existing mitigation in the form of onsite and offsite structure planting, discussed above and referred to in Appendix 10.4, however, would be maintained through the Proposed Scheme and this would continue to serve an important function in screening at a lower elevation some of the structures in local to middle distance views.
- 10.4.37. It should be noted that since the Weddle's original design there have been other developments on the Existing Drax Power Station Complex which have eroded the original symmetry and widened the footprint of development. Such developments include the biomass co-firing facilities, the biomass storage domes as well as the more recent Lytag plant to the north west of the Existing Drax Power Station Complex.

Construction

10.4.38. The construction phase environmental impacts of the Proposed Scheme would be managed through the implementation of a CEMP, an outline of which forms part of this DCO application. A requirement in Schedule 2 of the draft DCO (Document Ref. 3.1) secures the final approval and implementation of the CEMP. The outline CEMP outlines measures based on best practice to control the environmental effects of construction of the Proposed Scheme. Such measures include the following:



- The retention and protection of existing vegetation considering temporary fencing to demarcate the construction footprint and consideration of trenchless construction techniques. BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (Ref. 10.16).
- Where practicable storage of topsoil will take place, with siting, to screen and/or provide a physical buffer between the construction works and more sensitive receptors.
- Agreed site access points.
- Retention of an existing PRoW cutting through Development Parcel A (Figure XX) which
 would remain open during construction and only diverted if CCS is taken forward in the
 future.
- The design and layout of site construction areas will reduce adverse impacts arising from temporary security fencing and lighting.
- Measures for controlling noise through site hoardings.
- Agreed site access point to limit impacts on existing vegetation.
- Maintenance of a tidy and contained site compound.
- Temporary measures including the removal of temporary structures and stockpiles when no longer required.
- Prompt reinstatement of temporary construction areas notably upon completion of the gas pipeline installation.
- Measures to avoid infringing legislation to prevent the spread of Himalayan Balsam and ornamental Cotoneaster.
- Spreading of topsoil, reseeding and planting within the Project and adjoining areas that are to be reinstated as soon as possible after sections of work are complete.
- The prompt reinstatement of temporary construction areas when no longer required. Where feasible, perimeter planting will be undertaken in advance of the works to be effective on completion of the construction works.
- 10.4.39. Such measures are expected to form an important part of efforts to control construction phase impacts on landscape character and visual amenity.

Operation

10.4.40. During Stages 0 to 3 various secondary mitigation measures would be considered, discussed further in section xxx. Mitigation would be at varying levels of growth and therefore the benefits associated with mitigation are considered within the assessment of residual effects of operation of both Units X and Y during Stage 3. An assessment is undertaken at year 0 and year 15, once landscape mitigation measures have matured.

Decommissioning

10.4.41. Decommissioning would comprise the removal of all elements of the Proposed Scheme located on the Power Station Site (save for the electrical connection within the ownership of National Grid). In terms of the Pipeline Area, it is assumed that the Gas Pipeline and AGI under National Grid's ownership would be left in situ, and all other structures would be removed. Where structures are removed, it is assumed the relevant areas would be reinstated, and that this process would involve the same construction requirements and specification as used during construction (during Stages 0-2).



Extent of the Study Area

- 10.4.42. The Guidelines for Landscape and Visual Impact Assessment (GLVIA 3) (Ref.10.12) clarifies how study areas should be determined on a project specific basis. Paragraph 5.2 of GLVIA 3 states that the study area extent should be "... Based on the extent of Landscape Character Areas likely to be significantly affected either directly or indirectly" or "on the extent of the area from which the development is potentially visible, defined as the Zone of Theoretical Visibility, or a combination of the two."
- 10.4.43. For the purposes of this assessment, the "study area" was defined by a combination of professional judgment, discussions with the LPAs and analysis of ZTVs. As there is no clear guidance on the extent of study areas for power stations and associated stacks, guidance from Scottish Natural Heritage (Ref. 10.17) was initially considered which refers to a study area of 35 km for 120 m height wind turbines including the rotors.
- 10.4.44. Discussions were had with LPAs over the need to follow such guidelines and it was agreed that a smaller study area of 10 km for both landscape character and visual amenity should be defined. The decision was justified based on the type of development (power stations are static objects whilst turbines are moving objects which attract the eye), the relative position of the Proposed Scheme to existing structures (of a greater mass) and that the surrounding landscape is relatively flat.
- 10.4.45. Through a baseline review the LVIA narrowed the key landscape features and assets which contribute to character to a 3 km inner search area covering heritage and biodiversity assets (refer to Appendix 10.4 for further details).

Method of Baseline Data Collation

- 10.4.46. The purpose of the baseline is to provide an understanding of the landscape in terms of its constituent elements/features and character, its condition, how it is experienced and the value attached to it. This stage also determines the area over which the Proposed Scheme may be visible and those groups of people who may experience views of the Proposed Scheme. The following tasks are undertaken as part of the baseline appraisal:
 - An overview of statutory plans and other data regarding relevant designations and planning policies for the study area.
 - A consideration of the landscape character of the Site with reference to published landscape character assessments and verified through fieldwork.
 - Agreement with the LPAs over the extent of the area of landscape that needs to be covered in assessing landscape effects.
 - GIS visual mapping of the Site, subsequent identification of representative viewpoints and agreement over representative viewpoints and the extent of the visual study area.
 - A visual appraisal of the Site and its surroundings which was carried out in November 2017. At the time of the survey deciduous trees and hedgerows were in leaf. The visual appraisal was repeated in December 2017 following leaf fall to provide a worst case scenario.

Assessment Methodology

10.4.47. The LVIA has been based on best practice guidance referred to in paragraph 1.2.32. A detailed description of the assessment methodology is included within Appendix 10.3. The assessment of landscape and visual effects is both a subjective and objective process. Whilst



- subjectivity can never be removed from the assessment process, by following a systematic and structured framework of assessment, a more robust assessment can be performed and more transparent conclusions drawn.
- 10.4.48. The assessment process includes the consideration of both tangible and intangible aspects of the environment. For example, intangible factors such as disturbance and tranquillity (including light pollution) are important factors in influencing how the landscape is interpreted and experienced. Direct and indirect effects of the development upon landscape character and visual amenity are also identified where they occur.
- 10.4.49. The assessment considered primary and tertiary mitigation measures as built into the design, as set out above. Following the assessment of baseline landscape and visual context the LVIA assessed:
 - The sensitivity of the landscape resource and visual receptors.
 - The magnitude of change.
 - Significance of effect based on a comparison of the sensitivity of the resource/receptor against the magnitude of change.

Sensitivity

- 10.4.50. Sensitivity is the extent of which the resource or receptor can accept a change associated with the Proposed Scheme. Sensitivity varies between the landscape resource and receptor types:
 - Landscape sensitivity will vary according to the contribution the landscape resources make to landscape character, existing land use and features and their pattern, scale, quality and condition as well as the value placed on the landscape and scope for mitigation.
 - Visual sensitivity will be judged based on location and context of the viewpoint, the
 expectations and occupation or activity of the receptor and importance or value of the
 view experienced.
- 10.4.51. Refer to Appendix 10.3 for further details.

Magnitude of Change

- 10.4.52. The magnitude of change affecting the landscape resource or visual receptor depends on the nature, scale and duration of a particular change that is expected to occur. Factors taken into account include:
 - Changes to the visual appearance of the site (proportion, scale, enclosure, colour and views).
 - Changes to the character of the site, including the physical structure of the buildings and development patterns.
 - Perceived changes to surrounding buildings, street scene, routes or open space resulting from any changes to context and setting.
 - Changes to the quality and condition of the landscape character perceived by the public.
- 10.4.53. The magnitude of change will vary from large, where there is the irrevocable or permanent loss and notable change to the landscape character or view to negligible where the change is barely perceptible. Refer to Appendix 10.3 for further details.



Significance Criteria

- 10.4.54. The assessment of potential effects as a result of the Proposed Scheme has taken into account both the construction and operational phases including Year 0 and Year 15 once landscape mitigation measures have matured. The construction phase includes enabling works, demolition, earthworks and construction activities as set out in Chapter 3 (Site and Project Description). The significance level attributed to each effect has been assessed based on the magnitude of change due to the Proposed Scheme and the sensitivity of the affected landscape resource and visual receptor refer to Appendix 10.3 for further details. The sensitivity of the affected landscape resource and visual receptor is assessed on a scale of high, medium, low and negligible, and the magnitude of change is assessed on a scale of large, medium, small and negligible.
- 10.4.55. Table 10-7 below illustrates how the significance of landscape and visual effects is determined (refer to Appendix 10.3 for further details). It should be noted that Table 10 7 is intended to be a framework for assessment only and that the level of effect (significance) will vary depending on the circumstances, the type and scale of development proposed, the baseline context and other factors. The gradations of magnitude of change and level of effect used in the assessment represent a continuum; the assessor uses professional judgement when gauging the level of effect and determining whether or not an effect should be considered significant.

Table 10-7 - Matrix for Determining Significance of Landscape and Visual Effect

		Sensitivity (Value / Importance)			
High Medium Low Neg				Negligible	
	Large	Major	Moderate – Major	Minor – Moderate	Negligible
Magnitude of change		Moderate – Major	Moderate	Minor	Negligible
		Minor – Moderate	Minor	Negligible – Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

- 10.4.56. The dark grey shaded cells are generally considered to be "significant" in the context of the EIA Regulations 2017. The light grey shaded cells denote effects which may be significant or not significant, depending on the project being assessed and the factors relating to the context and the specific landscape or visual receptor in question. Where there is a significant effect this is stipulated within the assessment.
- 10.4.57. Unshaded cells denote effects that would be 'not significant' and therefore ones which are generally considered to be not material to the planning decision.
- 10.4.58. Effects can be described in a variety of ways depending on the assessment:
 - Adverse (negative) or beneficial (positive).



- Direct (e.g. actual physical change and close perceptual changes) or indirect (e.g. perceptual change at a distance).
- Permanent or temporary (short, medium or long term).
- Reversible or irreversible.

Effect Significance

- 10.4.59. The following terms have been used to define the significance of the effects identified:
 - Major effect: where the Proposed Scheme could be expected to have a very significant effect (either positive or negative) on the landscape resource or visual receptors.
 - Major to moderate effects: where the Proposed Scheme may have a very significant effect (either positive of negative) on the landscape resource or visual receptors subject to the nature of the resource/receptor and context.
 - Moderate effect: where the Proposed Scheme could be expected to have a noticeable effect (either positive or negative) on the landscape resource or visual receptors.
 - Minor to moderate effect: where the Proposed Scheme may have a noticeable effect (either positive or negative) on the landscape resource or visual receptors subject to the nature of the resource/receptor and context.
 - Minor effect: where the Proposed Scheme could be expected to result in a small, barely noticeable effect (either positive or negative) on the landscape resource or visual receptors.
 - Negligible: where no discernible effect is expected as a result of the Proposed Scheme on the landscape resource and visual receptors.

Baseline Conditions

10.4.60. The current landscape and visual amenity baseline outlined below provides a summary of the key landscape resources, landscape features and visual receptors to be assessed. Refer to Appendix 10.4 for further details and Figures 10.1 to 10.4.

Current Landscape Baseline

National, County and Local Landscape Character

- 10.4.61. The landscape character at a national, county and local level throughout the study area is summarised below. Refer to Appendix 10.4 and 10.5 for further details covering the key characteristics, management strategy, landscape value, susceptibility to change and sensitivity of each National Character Area, Landscape Character Type and Landscape Character Area and Figure 10.1 Landscape Character (National, County and Local).
- 10.4.62. It should be noted that the assessment is primarily based on the more recent county level assessment (North Yorkshire and York Landscape Characterisation, 2011) rather than a previous Landscape Character Assessment of Selby District Council prepared in 1999.

National

10.4.63. The Site and the study area lie within National Character Area (NCA) Profile 39 Humberhead Levels (Ref 10.18) which is described as an area with: "big expansive skies, and vertical elements like water towers, power stations and wind turbines are very prominent".



10.4.64. The NCA are at a large scale and cover a considerable area. It is considered that for this scale of assessment both the county and local landscape character assessments are a more appropriate tool by which to determine landscape character.

County

- 10.4.65. The North Yorkshire and York Landscape Characterisation (Ref.10.19) covers the northern and western part of the study area including the Site. The Site lies within the Farmed Lowland and Valley Landscape Primary Landscape Unit (PLU) which forms a belt running north south through North Yorkshire and is divided up into 11 Landscape Character Types (LCTs). The following LCTs are relevant to the Site and study area:
 - Levels Farmland (23) (includes the Power Station Site and the western part of the Pipeline Area).
 - River Floodplain (24) includes the middle and eastern end of the Pipeline Area.
 - Vale Farmlands with Plantation Woodlands and Heathland (28).
 - Urban Landscape (PLU) Selby.

Local

10.4.66. The eastern part of the study area falls within East Riding of Yorkshire Landscape Character Assessment (Ref. 10.20) and is covered by five LCTs. Each LCT is divided into a number of Landscape Character Areas (LCAs) and those which fall within the study area are summarised below:

Landscape Character Type 4: River corridors

- 4A Derwent Valley Barmby on the Marsh to Pocklington Canal Reach.
- 4B River Ouse Corridor, Barmby on the Marsh to M62 bridge.
- 4C River Ouse Corridor Howden Dyke to Trent Reach.
- 4D River Aire Corridor.

Landscape Character Type 5 Open Farmland

- 5A Howden to Bubwith Farmland.
- 5B West of Holme on Spalding Moor Farmland.

Landscape Character Type 7 – Foulness Open Farmland

7B Eastrington Farmland).

Landscape Character Type 8 M62 Corridor Farmland

- 8A Howden to Gilberdyke.
- 8C M62 Corridor Hook to Pollington.

Landscape Character Type 9 Drained, Open Farmland

- 9A Thorne Moors.
- 9B Goole Fields.
- 9C Twin Rivers Farmland.
- 9D Blacktoft and Laxton Farmland.
- 10.4.67. The southern part of the study area falls within Doncaster's administrative area and the LCTs and associated Landscape Character Areas which lie within the study area as referred to in the Doncaster Landscape Character Assessment (Ref. 10.21) include the following:

LCT Settled Farmlands

F2 Owston to Sykehouse Settled Clay Farmlands.

Landscape Character Type Peat Moorlands



G2 LCA Thorne and Hatfield Peat Moorlands.

Landscape Context

Vegetation cover

- 10.4.68. The study area is characterised by small woodland blocks with intermittent hedgerow and hedgerow trees along the majority of routes. Vegetation is often found along the main arterial routes. Larger areas of tree planting are also associated with historic estates.
- 10.4.69. Vegetation around the edge of the Existing Drax Power Station Complex includes numerous mature belts of mixed woodland and areas where hedgerows have been strengthened, many of which have been implemented in connection with previous planning consents for development on the Existing Drax Power Station Complex, including planting associated with the Skylark Centre to the west of the Existing Drax Power Station Complex (refer to Appendix 10.4 for further details). The main blocks of woodland are concentrated to the northwest between Barlow and the Power Station Site, along either side of the A645 to the southwest, south and south east as well as along smaller lanes to the east including Carr Lane and Wren Hall Lane. There is also a strong belt of woodland running on either side of a disused railway line which runs to the east of the Power Station Site and north of Drax village, some of which is covered under a Tree Preservation Order (TPO).
- 10.4.70. Further information on existing vegetation with the Existing Drax Power Station Complex and Pipeline Area is covered in the following paragraphs. Key landscape features within the Proposed Scheme which are assessed further include:
 - Plantations / trees belts and groups of trees.
 - Hedgerows.
 - Grassland.
 - Ornamental Planting.

Topography and Drainage

- 10.4.71. The topography within the study area is relatively flat, lying between 5 m and 15 m AOD (refer to Figure 10.2). There are small isolated pockets of high ground to the northwest, north east and south west including Hambleton Hough (approximately 40 m AOD) and Brayton Barff (55 m AOD) to the northwest and High Eggborough and Great Heck to the south west, 15 m respectively. In specific locations land has been raised as a form of flood defence. Barlow Mound, to the west of the Existing Drax Power Station Complex is a prominent local landmark and is approximately 30 m in height, built in the 1970s using residue material from the power station.
- 10.4.72. The topography of the Existing Drax Power Station Complex is varied. Land close to the southern entranceway and forming part of Development Parcel H (Figure 1.3) sits at a lower level than the A645 whilst land to the north of the northern entrance is raised, some areas were formerly a disused tip. An extensive coal storage area partially screens land to the south west whilst ash mounds partially screen land to the northwest.
- 10.4.73. Widespread evidence of drainage is prevalent throughout the study area. The River Aire, River Ouse and River Derwent cut across the study area. Other smaller tributaries, canals, drains and ditches either feed into these rivers or cut through the area. Such features often



- form field boundaries and are prominent within the landscape alongside bridges and pumping stations. Isolated ponds are also noticeable particularly within the centre of the study area.
- 10.4.74. Topography is a key landscape feature within the Proposed Scheme which is assessed further. It is considered that the impact on drainage would be negligible. The Gas Pipeline whilst crossing field drains is expected to use trenchless crossing techniques to avoid adverse long term landscape effects; elsewhere open cut techniques would be used.

Settlements

- 10.4.75. The study area is characterised by small to medium sized settlements and isolated residential properties and farmsteads. Settlements close to the Existing Drax Power Station Complex and Site include:
 - Drax (south east of the Existing Drax Power Station Complex).
 - Camblesforth (south / south west of the Existing Drax Power Station Complex).
 - Carlton (south / south west of the Existing Drax Power Station Complex).
 - Newlands, Rawcliffe, Snaith, West Cowick, East Cowick and Moorends (south of the Existing Drax Power Station Complex).
 - Barlow (north west of the Existing Drax Power Station Complex).
 - Hemingbrough, Cliffe and Long Drax (north / north east of the Existing Drax Power Station Complex).
 - Barmby on the Marsh, Asselby and Knedlington (north east of the Existing Drax Power Station Complex).
 - Little Airmyn and Airmyn (east of the Existing Drax Power Station Complex).
 - Howden (east of the Existing Drax Power Station Complex).
- 10.4.76. There are a number of other smaller settlements scattered throughout the study area and the larger urban areas of Selby which lies to the northwest and Goole to the east are located within the study area.

Transport Network

- 10.4.77. A number of motorways and A roads connect the larger settlements within and edging the study area, and a network of minor roads and tracks link smaller settlements, farmsteads and isolated properties.
- 10.4.78. Railway lines crisscross the study area connecting Selby with Leeds, York, Goole and Hull. One line runs north/south from Doncaster to Selby between Drax and Eggborough power stations and a spur line veers west to Leeds.
- 10.4.79. Numerous PRoWs are located within the study area. Several run in close proximity to the Existing Drax Power Station Complex linking Barlow, Camblesforth, Carlton, Drax and Long Drax. PRoWs which run close to or through the Proposed Scheme include the following (Figure 3.1c):
 - PRoW 35.47/11/1 and 35.6/11/1 lie to the west of the Existing Drax Power Station Complex.
 - PRoW 35.6/10/1 and 35.6/12/1 lie to the north west of the Existing Drax Power Station.
 - PRoW 35.47/6/1 lies to the north and run through the northern edge of Development Parcel B (Figure 1.3).



- PRoW 35.47/1/1 to the north east of the Existing Drax Power Station Complex and crossing Development Parcel A.
- PRoW 35.47/4/1, 35.47/5/1, 35.47/9/1 and 35.49/2/1 which cross the study area and Gas Pipeline.
- 10.4.80. The long distance Trans Pennine Trail runs through the study area. It forms two routes from Selby to the north of the study area and either follows the River Ouse to the east of the Existing Drax Power Station Complex, or south where it follows Burn Airfield before running along the banks of the River Aire, and heading southwards across the study area and along New Junction Canal refer to Figure 10.3.
- 10.4.81. Two National Cycle Routes cut across the study area following a similar course to the Trans Pennine Trail. Route 62 runs to the west of the Existing Drax Power Station Complex in a roughly north south direction whilst Route 65 runs through Selby to Hull along the River Ouse in a roughly east west direction.

Infrastructure

10.4.82. Power stations, pylons and wind farms are prominent features within the landscape particularly to the south west and south east, including Eggborough Power Station, Rusholme Wind Farm to the east of the Existing Drax Power Station Complex and two further wind farms close to Goole Fields and Balkholme Common.

The Site and its Immediate Surroundings

10.4.83. The full extent of the Proposed Scheme and associated Development Parcels are shown in Figure 1.3 and described in Chapter 3 (Site and Project Description). The following describes the Site in terms of its landscape character and visual amenity based on the Development Parcels. Descriptions are divided into the Existing Drax Power Station Complex and immediate surroundings, and the Gas Pipeline:

The Existing Drax Power Station Complex and Immediate Surroundings

10.4.84. The following Table, Table 10 - 8 describes the Existing Drax Power Station in terms of its landscape character and visual amenity based on the Development Parcels in Figure 1.3:

Table 10-8 - Development Parcels and Associated Description

Development Parcel	Description
A	This development parcel consists of a linear arable field edged by a ditch to the north, south and west. A native species rich hedgerow runs to the east of the field whilst another unmanaged hedgerow runs to the west with occasional hedgerow trees. A broadleaved woodland forms the southern boundary of Development Parcel A edging Carr Lane. The woodland links visually within a group of semi mature trees to the south. Field boundaries form a strong visual screen to the development parcel especially during summer months. A PRoW runs across the northern corner of the



Development Parcel	Description
	development parcel and this would be diverted if the CCS is taken forward in the future.
В	This parcel lies north of the northern entranceway into the Site and includes a mature deciduous plantation on the corner of New Road and the northern entranceway into the Site (formerly New Road landfill site and referred to as North Station Wood) and a mixed plantation on steep banks forming part of the Power Station Site's northern boundary. Both woodland plantations are strong landscape features and act as a visual screen for receptors in close proximity to the Site. The remainder of this parcel is a mix of scrub, improved grassland used for grazing and arable land. The latter lies outside the Existing Drax Power Station Complex's boundaries. Area B includes a PRoW to its northern edge which would be diverted to accommodate landscaping if CCS is taken forward in the future.
С	Parcel C sits within the Existing Drax Power Station Complex and includes five buildings, a car park with areas of hardstanding and groups of ornamental shrubs and trees. The northern part of this parcel is a wood yard, whilst land to the east includes a pond surrounded by dense scrub and woodland. An unmanaged hedgerow runs along the southern edge of this parcel. As referred to in Chapter 9 (Biodiversity) stands of Himalayan Balsam Impatiens glandulifera are present and ornamental Cotoneaster Cotoneaster sp.
D	This parcel includes New Road. The planting alongside the road and to the east of the Existing Drax Power Station Complex is a mix of small deciduous trees, hedgerows and improved grassland. The quality and condition of such planting is mixed.
E	Semi mature broadleaved woodland, scrub and semi improved grassland is prevalent within this parcel which is used for grazing.
F	This area includes land to the west of the cooling towers and comprises stores, contractor compounds and car parking. Vegetation is a mix of formal planting around car parks, roads and buildings consisting of mature and semi mature deciduous trees and a large area of scrub which lies between the switchgear and security fencing running along the edge of New Road.
G	No longer within the Proposed Scheme.
Н	This area is largely hardstanding with surfaces of concrete/gravel used for car parking and storage including fuel oil, and edged by security fencing with CCTV cameras. Along the A645 and the southern entrance into the Existing Drax Power Station Complex (used by visitors and staff) landscaping is a mix of improved grassland, native deciduous hedgerows and trees to the rear and along the bank. Internally landscaping edging the road access and hardstanding is a mix of amenity grassland with small areas of shrubs and isolated or small groups of trees.



The Pipeline Area

- 10.4.85. The Pipeline Area (referred to as Development Parcels,1, J, K and L, Figure 1.3) is predominantly arable with grazing pasture, semi improved grassland and scattered trees. Fields which the Gas Pipeline crosses are large and open, bounded either by fences or ditches.
- 10.4.86. The Pipeline Area would run north of Woodcock Wood and close to a fragmented historic hedgerow (protected under the Hedgerows Regulations 1997, Section 6.5) which lies south of Carr Lane, north of the proposed GRF and on either side of Wren Hall Lane (Chapter 8 Historic Environment Figure 8.2). Based on existing surveys the majority of field boundaries are ditches and only small sections of hedgerow would be affected.
- 10.4.87. The Pipeline Area would also run south of an area of woodland and individual trees consisting of oak, sycamore, ash, hawthorn and willow which edges part of the disused railway embankment and is protected under a 1983 TPO. It is expected that no trees forming existing or former field boundaries would be lost, subject to the micrositing of the Gas Pipeline route.
- 10.4.88. The Pipeline Area runs close to a number of properties including Wren Hall off Hall Lane, properties off Main Road (Baxter Hall, Woodlands, Poultry House, Briarden and Read School), Scurff Hall off Rusholme Lane, Rusholme Hall and Diamond Cottage. A small parcel of land allocated to accommodate road widening lies opposite Scurff Cottages (Development Parcel L). A number of PRoWs also cross the Gas Pipeline.
- 10.4.89. Development Parcel I which would accommodate the GRF, consists of an arable field edged by a native deciduous hedgerow along New Road. Pylon towers and associated lines cut across the south eastern edge of the Development Parcel running in a north east south west direction.
- 10.4.90. The AGI would be located within Development Parcel K (Figure 1.3) within agricultural land off Rusholme Lane. The AGI would each include an electrical kiosk and pipework associated with the PTF-L and MOC up to 5 m high, grey and narrow in structure.

Value of the Landscape Resource

Local Landscape Designations

- 10.4.91. Whilst there are no national statutory designations within the study area relating to landscape value there are five landscapes which are designated as Locally Important Landscape Areas (ILAs) or Areas of Special Landscape Value (ASLV) which fall within Selby District Council, East Riding of Yorkshire and Doncaster Metropolitan Borough Council, refer to Figure 10.4 and 10.5:
 - Hambleton Hough (SDC) to the north west of the Proposed Scheme.
 - Brayton Barff (SDC) to the north west of the Proposed Scheme.
 - Lower Derwent Valley (ERoY) to the north east of the Proposed Scheme.
 - Humberhead Levels (DMBC) to the south of the Proposed Scheme.
 - Thorne Moors (DMBC) to the south of the Proposed Scheme.



10.4.92. The closest local landscape designation is the Lower Derwent Valley which lies within East Riding of Yorkshire and sits approximately 0.75 km away from the Proposed Scheme. The ILA is described as a low lying flat floodplain of grassland pasture and meadow subject to seasonal flooding with riparian woodland and trees, organic medium sized fields forming an intimate, isolated corridor landscape (Ref. 10.22).

The Original Power Station Design

- 10.4.93. The LVIA recognises the considerable effort which went into the design, aesthetics and mitigation of the original 1960's Power Station (referred to as the original Weddle's design); the setting and treatment of the buildings and structures was considered of utmost importance. The original design focused on a reduction in visual coalescence. The layout and grouping of the cooling towers on either side of the turbine hall was deliberately designed to be symmetrical and simple in layout utilising a large footprint in order to separate the cooling towers and create the opportunity for views between the towers based on their relative position. A reduction in site clutter, particularly associated with smaller ancillary buildings was sought through the relative position of buildings, their grouping and use of on-site mitigation. Building materials and colours were carefully considered to reflect the surroundings with lighter colours for taller structures, and at a lower level, reflective materials were introduced to integrate the structures into their surroundings.
- 10.4.94. Substantial off-site mitigation in the form of planting was introduced at a scale reflective of the size of the original power station as identified in Weddle's 1987 / 1990 Landscape Management Report (refer to Appendix 10.4 and the outline landscape and biodiversity strategy for further details). Mitigation ranged from extensive plantations to hedgerows and avenues of trees to break up views at a local level. Planting was regimented and formal in approach and not necessarily reflective of surrounding landscape in terms of extent and structure.
- 10.4.95. Since the original Weddle design, there has been an erosion of the original symmetry and a widening of the original footprint increasing visual coalescence from some elevations and increasing visual clutter through an intensification of land use. This has been through incremental development on the Existing Drax Power Station Complex prior to this application, including the introduction of the biomass co-firing units, the biomass storage domes as well as the more recent Lytag plant to the north west of the Existing Drax Power Station Complex.

Heritage Assets

10.4.96. There are a number of Heritage Assets (including Scheduled Monuments, Listed Buildings and Conservation Areas), and biodiversity designations within the 10 km study area (refer to Figure 10.3 and Figure 10.5). Within 3 km of the Proposed Scheme there are four Scheduled Monuments, a number of Grade I, Grade II* and Grade II Listed Buildings, and two Conservation Areas. Due consideration of effects on such Heritage Assets is covered in Chapter 8 (Historic Environment).



Biodiversity Assets

- 10.4.97. Equally there are a wealth of sites designated for biodiversity including SPAs, SACs, SSSIs and Ramsar. Ancient woodlands are notable within the study area with two woodlands within 5 km of the Site. As outlined above, the Pipeline Area runs south of a number of isolated trees and two woodlands protected under a TPO, refer to Figure 10.4 and 5.
- 10.4.98. Refer to Appendix 10.4 for further details on the factors relating to landscape value specific to the Site.

Current Visual Amenity Baseline

- 10.4.99. The visual baseline establishes the area in which the Proposed Scheme may be visible, the different groups of people who may experience views of the Proposed Scheme, the places where they would be affected and the nature of the views and visual amenity at those points. Visual receptors are individuals and/or defined groups of people who have the potential to be affected by a proposal.
- 10.4.100. Visual receptors, such as users of buildings, recreational spaces, footpaths and transport routes, have differing sensitivities to their visual environment. Generally, this is dependent upon their interest in the visual environment, their viewing opportunity and duration, and the context of the views.
- 10.4.101. The LVIA includes a comprehensive visual assessment describing and assessing the effects from all the potentially affected visual receptors (settlements, groups of receptors and individual isolated receptors) within the study area based on a 1 km, 3 km and 10 km radius. This is illustrated through photographs from a series of agreed representative viewpoints to give a clear picture of the anticipated effects, with visualisations/photomontages from selected key viewpoints. A summary of the baseline conditions is outlined below, refer to Appendix 10.4 for further details.

Visual Baseline Conditions and Visual Receptors

- 10.4.102. The Existing Drax Power Station Complex consists of large industrial buildings edged by areas of offsite woodland plantation particularly to the north and northwest. Views of the Existing Drax Power Station Complex are extensive and span beyond 30 km. The largest structures noticeable on the skyline include the chimney, northern and southern cooling towers, boiler and absorber house which form a large rectangular mass between the cooling towers. Within more immediate local views and at a lower elevation is the switchgear fronting New Road. Plumes from the cooling towers are a temporary but notable feature on the skyline.
- 10.4.103. Visibility within the study area is widespread as a result of the low landform and limited intervening vegetation and built form. The extent of views available to receptors range from those in close proximity (local views) to long distance views. A number of receptors are located within villages and along roads that are located in relative close proximity to the Site. Views of the Proposed Scheme tend to be from the edges of settlements or along roads and routeways where there is limited intervening vegetation and structures restricting views.
- 10.4.104. The scale of the Proposed Scheme is similar or smaller than the existing developments found within the study area including the Existing Drax Power Station Complex, Eggborough



- Power Station and several wind farms. These are large scale structures and recognisable features within the local landscape. Due to the generally open nature of views and low topography of the study area, views of the Existing Drax Power Station Complex are commonplace.
- 10.4.105. It should be noted however that unlike the developments outlined above, the Proposed Scheme would change the form of the Existing Drax Power Station Complex but not its nature. Receptors would experience a change in the form of the industrial development they see (of the Power Station Site) as well as an introduction of further industrial elements into a largely open, rural view associated with AGIs forming part of the Pipeline Area.
- 10.4.106. In many areas, due to a combination of the flat landscape and size, such structures are viewed against the skyline which increases their visibility.
- 10.4.107. The screening and limiting of views of the Existing Drax Power Station Complex is generally only possible where screening elements are located close to the receptor.
- 10.4.108. Visual receptors who may see the Proposed Scheme include:

Residents

- 10.4.109. Residents closest to Drax Power Station and the Proposed Scheme are residents of individual properties off Wren Hall Lane, Carr Lane, Pear Tree Avenue, Main Road, Rusholme Lane, Redhouse Lane and Brier Lane as well as residents within the settlements of Drax, Long Drax, Barlow, Camblesforth, Carlton, Newland, Little Airmyn, Airmyn, Barmby on the Marsh, Hemingbrough and Asselby, north of the River Ouse. Where there are open views, structures associated with the Existing Drax Power Station Complex are clearly visible and prominent.
- 10.4.110. Residents of parts of other settlements throughout the study area experience views of the Existing Drax Power Station Complex to varying degrees sometimes filtered through intervening vegetation or partially screened by built form.
- 10.4.111. Refer to Appendix 10.2 and 10.3 which sets out the sensitivity of residential receptors.

Workers at Drax Power Station and workers to other premises

- 10.4.112. Workers at the Existing Drax Power Station Complex would experience direct and partial views across the Existing Drax Power Station Complex to varying degrees sometimes filtered through intervening vegetation and/or partially screened by built form.
- 10.4.113. Workers to other premises within the study area would also, to varying degrees, experience views of the Existing Drax Power Station Complex.
- 10.4.114. Refer to Appendix 10.2 and 10.3 which sets out the sensitivity of workers.

Users of the PRoW Network, National Trails, Cycle Routes and other Recreational Facilities

- 10.4.115. Users of the PRoW, National Trails and Cycle Routes (refer to Figure 3.1c and 10.3) as well as leisure users such as Drax and Selby Golf Club, experience sequential views of the Existing Drax Power Station Complex to varying degrees throughout the study area.
- 10.4.116. Within 1 km of the Proposed Scheme and where there are open views, structures associated with the Existing Drax Power Station Complex are clearly visible and prominent.



10.4.117. Refer to Appendix 10.2 and 10.3 which sets out the sensitivity of recreational receptors.

Users of Transportation Routes

- 10.4.118. Users of the main transport routes may gain sequential views towards the Existing Drax Power Station Complex to varying degrees dependent on intervening structures, screening vegetation, elevation and direction of travel. Key transport routes where users may experience views include:
 - The A19 (particularly between Burn and Eggborough south bound), A1014 (between Selby and Camblesforth south bound and between Camblesforth and Carlton north bound), the A63 to the east of the Existing Drax Power Station Complex (between Howden and Selby south and north bound), the M62 and A645 to the south.
 - Numerous local roads in close proximity of the Existing Drax Power Station Complex.
 - Users of the railway lines including the East Coast Main Line.
 - Users of numerous waterways used for leisure purposes.
- 10.4.119. Refer to Appendix 10.3 which sets out the sensitivity of users of transport routes.

Survey of Visual Baseline

- 10.4.120. In order to determine likely views of the Proposed Scheme, a GIS terrain model was generated from EA LiDAR (2 m resolution), OS Terrain 5 (resampled from 5 m to 2 m where LiDAR data is unavailable) and engineering drawings to provide Zones of Theoretical Visibility (ZTVs) based on an agreed radius of 10 km and from an observer height of 1.6 m. The ZTVs assumed fixed heights of the Proposed Scheme (refer to Appendix 10.4 for further details). Four ZTVs (Figure 10.6 to 10.9) were prepared illustrating:
 - The Proposed Scheme within the confines of the Existing Drax Power Station Complex.
 - The extent of the AGI within the Pipeline Area.
 - The visual extent of the proposed battery storage facility.
 - The visual extent of the GRF and associated stack.
- 10.4.121. Informed by the topography, a baseline review and the ZTVs, preliminary viewpoints were then identified throughout the study area. Sixteen preliminary viewpoints were proposed including two viewpoints outside of the 10 km study area. These viewpoints were selected on the request of LPAs based on their higher elevation, long distance views and proximity to Heritage Assets. As part of the initial round of discussions other viewpoint locations were suggested. The preliminary viewpoints were then reviewed in the field and refined in discussions with the LPAs.
- 10.4.122. Twenty representative viewpoints were agreed plus an additional viewpoint recommended by the SoS and taken in winter. The LPAs also requested eight winter views and five field verified visualisations/photomontages. Refer to Appendix 10.2, 10.4, Figure 10.10 Viewpoint Location Plan and Figures 10.11.1 to 10.11.21 for further details. Viewpoint figures suffixed by:
 - a) illustrate the autumn view;
 - b) winter views where agreed with the LPAs and on the request of PINs;
 - c) the existing view which is field verified; and
 - d) the field verified photomontages.



Future Baseline

10.4.123. The future baseline proposes the operation of four biomass units and two coal units which will continue to operate at Drax. It is anticipated that there would be no change to the landscape or to visual amenity in this future baseline scenario.

10.5 Assessment of Likely Significant Landscape and Visual Impacts and Effects

10.5.1. The assessment of likely significant landscape and visual impacts and the likely significant landscape and visual effects associated with the Proposed Scheme on the Power Station Site and Pipeline Area, based on the current baseline is summarised below. Refer to Appendix 10.2 for a description of each representative viewpoint and the sensitivity of receptors from these location and Appendix 10.3 for the LVIA methodology.

Likely Landscape and Visual Impacts

During Construction

- 10.5.2. Principal construction impacts are likely to include:
 - Erection of tree protection measures in accordance with BS 5837:2012 prior to commencement of ground works.
 - Site clearance, removal of vegetation and topsoil stripping from parts of the Power Station Site, the Carbon capture reserve space and the Pipeline Area and temporary stockpiling of turf, earth and storage of materials.
 - Site Reconfiguration Works (Stage 0 only).
 - Movement of construction related traffic, plant and machinery including the delivery of materials to and from the Site, off site road traffic including workers travelling to and from the Site.
 - General construction activities including the movement of large scale construction equipment, creation of site compounds to include construction offices, warehouses, workshops, open air storage areas and car parking as well as Laydown Areas and the presence of temporary hoardings and signage.
 - Erection of a temporary pedestrian bridge across New Road and between Development Parcels A and B (Figure 3.5).
 - Presence of four cranes including two main cranes, a 200 tonne mobile crane and an offloading and positioning crane to assist in the large scale structures.
 - Construction site lighting to illuminate site operation, in particular the winter months.
 - Construction of the Proposed Scheme including Units X and Y, battery storage facility, GRF, laying of the pipeline and two AGIs, other smaller structures and associated infrastructure (including site hoarding) and construction laydown areas.

During Operation

- 10.5.3. The likely principal operational or permanent impacts on the landscape resource and visual receptors associated with the Proposed Scheme would include:
 - Introduction of permanent large scale structures including up to four gas turbines that would operate in both combined cycle and open cycle modes and up to four heat recovery steam generators (HRSGs) with up to 4 associated stacks, and up to 4 emissions stacks, with all 8 stacks being up to 120 m high within Development Parcel F.



- Construction of a battery storage facility up to 10 m high for each of Unit X and Unit Y
 within Development Parcels C / E. This would be one building for both units but only
 100 MW of battery equipment would be installed in the event only Unit X is constructed.
- A GRF / gas compressor building on land to the east of New Road (Development Parcel
 I) with associated stacks up to four stack in two pairs at 10 m high for the GRF and
 one stack at 10 m high for the compressor building.
- A cooling water spray screen up to 10 m high to prevent drift of moisture from the cooling towers onto the contractor's compound.
- Introduction of a permanent compound and car parking areas.
- Gas pipeline and two AGIs one housing a Minimum Offtake Connection (MOC) and the other a Pipeline Trap facility (PTF-L)
- The creation of new and soft landscaping elements associated with the Proposed Scheme.
- Increased vegetation cover following tree and shrub mitigation planting.
- Operational traffic.
- Lighting.

Decommissioning

10.5.4. Temporary landscape and visual impacts likely to arise during decommissioning associated with the Proposed Scheme and which cover demolition and removal of proposed structures and associated infrastructure are similar to those described for construction. Where relevant these are covered in further detail in the assessment of likely effects on the landscape resource and visual receptors summarised below.

Assessment of Likely Landscape Effects

10.5.5. Significant landscape effects on landscape character, local landscape designations and local landscape character associated with the Proposed Scheme are summarised below. Appendix 10.3 provides a summary of the LVIA methodology whilst Appendix 10.5 includes a summary of each LCT and LCA within the 10 km study area and their sensitivity. As only LCTs within the most recent Landscape Character Assessment were assessed; the more recent North Yorkshire and York Landscape Character Assessment, 2011 as opposed to Selby District Council's Landscape Character Assessment, 1999.

Stage 0 – Reconfiguration Works

- 10.5.6. This section considers the landscape effects of the Site Reconfiguration Works.
- 10.5.7. Site Reconfiguration Works would entail the demolition, removal and relocation of existing facilities. Works would be localised; concentrated to two specific areas of the Existing Drax Power Station Complex, namely Development Parcels F and H.
- 10.5.8. New structures, associated infrastructure as well as a contractor's compound and site contractor's village would be located within Development Parcel H, to the north of the A645 and west of the southern entrance into the Existing Drax Power Station Complex. A new internal access road would be constructed off the southern entrance running to the east of the southern cooling towers. The highest structure in the Site Reconfiguration Area would be the contractor's store / workshop at 11 m in height (17 m AOD). All other structures such as the cooling water spray screen would be 10 m high (16 m AOD) or lower.



10.5.9. It is considered that the impact of such works would only generate significant effects on local landscape features within the Existing Drax Power Station Complex (refer to Table 10-9 below). Effects on landscape character and local landscape designations are negligible given the concentrated level of activities within the Existing Power Station Complex and the relatively low heights of proposed and existing structures which are being relocated. This is seen against a backdrop of an active operational site which already experiences low levels of tranquillity, the movement of vehicles and variations in air flows associated with the plumes from the cooling towers and main chimney.

Local Landscape Character and Features Associated with the Existing Drax Power Station Complex

10.5.10. During Site Reconfiguration Works the following local landscape features would be permanently lost as a result of the built footprint of new infrastructure and associated construction laydown areas/car parking refer to Table 10-9 below. The consequences of these losses on local landscape character and associated features is considered in the paragraphs below.

Table 10-9 - Stage 0 – Development Parcel Landscape / Habitat Losses
--

Scheme Area	Landscape Features / Habitats present	Predicted extent of landscape / habitat loss (ha)
Н	Broadleaved Parkland/scattered trees	0.08
	Amenity grassland	2.85
	Introduced shrub	0.01
	Intact hedge – species poor	48.51 (linear m)
	Tall herb and fern - ruderal	0.3
	Hardstanding	1.78
	Bare Ground	0.01
	Standing water forming a ditch	0.07
	Building	0.01
	Fence	0.01 (linear m)

Ornamental planting (Broadleaved parkland / scattered trees, shrubs and hedgerows):

10.5.11. The new works would result in the loss of some ornamental vegetation (trees, shrubs and hedgerows of varying condition) which serves an important function in providing low level screening and minimising the impact of visual clutter as identified in Weddle's original design and the 1987 / 1990 Landscape Management Report, Figure 4 (Appendix 10.4 refer).



Amenity Grassland:

10.5.12. Areas of well-maintained amenity grassland wrap around the southern cooling towers which are overlooked by the A645. Whilst the grassland has limited value in terms of character it contributes to a transition between the industrial landscape and surrounding countryside, forms the setting of the towers, adds to the sense of scale and given its uniform appearance reduces "visual clutter", an aspiration in Weddle's original design. Amenity grassland would be lost permanently as a consequence of Stage 0, the extent of which is listed in Table xx above.

Hardstanding and Watercourses:

10.5.13. Existing areas of hardstanding wrap around the southern edge of the cooling towers and a ditch runs to the eastern edge of Development Parcel H, alongside a hedgerow most of which would be retained. Such areas would be lost to accommodate permanent structures.

Local Landscape Character

- 10.5.14. It is considered that the sensitivity of local landscape character is medium and the magnitude of change prior to mitigation is medium. Therefore, there is likely to be a direct, permanent, long term effect on local landscape character of moderate adverse significance prior to the implementation of secondary mitigation measures, given the designed nature and function of the landscape features described above and the extent of changes within a localised area. It should be noted that in this context, moderate is considered a significant effect.
- 10.5.15. Proposals in the outline landscape and biodiversity strategy (Document Ref. 6.7) and associated mitigation plans would reinstate some vegetation lost within this location.

Stage 1 – Construction of Unit X

- 10.5.16. This section considers the landscape effects of the construction of Unit X.
- 10.5.17. The construction of Unit X, associated structures, site clearance and construction works would result in the temporary and permanent land take and removal of landscape features within Development Parcels A, C, D, E and F as well as along the Pipeline Area including the AGIs including Development Parcels I, J and K. It should be noted that the construction Laydown Areas and parking areas would be in use from 2019 to 2022, and until 2027 if Unit Y was also to be constructed.

Landscape Character

- 10.5.18. During construction there would be no significant effects on the landscape character's aesthetic and perceptual qualities for LCTs and LCAs within which the Proposed Scheme sits or lies adjacent to.
- 10.5.19. Construction works would generate a slight impact on the perceptive qualities of landscape character. Effects are associated with the movement of construction vehicles and plant on or in close proximity to the Site (and associated noise/disturbance/tranquillity levels) and the introduction of temporary structures into the landscape including cranes to erect large scale structures and temporary site hoarding to reduce noise levels along specific parts of the route.
- 10.5.20. In addition there would be a temporary or permanent change in land use resulting in the loss of arable land and vegetation (woodland, scrub, grassland and hedgerows) to accommodate



- construction Laydown Areas, car parks and site compounds, a battery storage facility and the GRF/compressor building. There would also be construction Laydown Areas, a contractor's compound, a site compound, temporary passing place and AGI associated with the Gas Pipeline.
- 10.5.21. Such construction activities need to be considered in the context of an already active operational site which experiences low levels of tranquillity, the movement of vehicles and variations in air flows associated with the plumes from the cooling towers and main chimney and the Pipeline Area which in contrast is relatively tranquil.
- 10.5.22. The sensitivity of LCTs and LCAs within the 10 km study area ranges from medium to negligible, and the magnitude of change prior to mitigation, is considered to be small. Therefore, there is likely to be a direct, temporary, short term effect on LCTs and LCAs within the 10 km study area of minor adverse to negligible significance prior to the implementation of secondary mitigation measures. There would be small changes within a limited area (3 km) of the LCT and LCAs which would not alter the overall impression of their character.

Local Landscape Designations

- 10.5.23. The Lower Derwent ILA is considered to be an "intimate isolated corridor landscape" (Ref. 10. 22). Effects upon the ILA are associated with changes in landscape character's aesthetic and perceptual qualities through the movement of construction plant within close proximity to the Site (and associated noise/disturbance/tranquillity levels), and the introduction of temporary structures into the landscape including cranes to erect large scale structures. Construction work associated with the AGIs would be a notable feature in localised areas altering perceptual characteristics.
- 10.5.24. The sensitivity of the Lower Derwent ILA is considered to be high, and the magnitude of change prior to mitigation, is considered to be small. Therefore, there is likely to be a direct, temporary, short term effect on the Lower Derwent ILA of minor moderate adverse significance prior to the implementation of secondary mitigation measures. It should be noted that the LVIA considers that there would be a small change to the nature of the landscape and the overall impression of its character. Such changes would be concentrated within a 3 km radius of the Proposed Scheme and effects would diminish with distance. The effect is not considered to be significant.
- 10.5.25. The LVIA considers that there would be no significant effects on any other local landscape designation within the study area due to their relative distance with no discernible impact on perceptual qualities such as tranquillity levels.

Local landscape character and features associated with the Power Station Site and Pipeline Area

10.5.26. The approximate extent of landscape features lost within the construction footprint and covering both the Power Station Site and Pipeline Area is summarised in Tables 10 - 10 and 10-11 below and the consequences of these losses on local landscape character are considered.



Table 10-10 - Stage 1 – Temporary Development Parcel Landscape / Habitat Losses from Construction of Unit X

Landscape / Habitat type	Predicted Extent of Landscape / Habitat Loss (ha)	Relevant Development Parcels
Broadleaved woodland - semi-natural	0.24	А
Broadleaved Parkland/scattered trees	0.33	C, F
Introduced shrub	0.27	C, F
Poor semi-improved grassland	0.22	С
Improved grassland	0.08	Α
Amenity grassland	0.79	C, F
Arable	8.7	A, D
Marsh/marshy grassland	0.29	F
Other tall herb and fern - ruderal	0.23	A, C
Hard Standing	3.54	A, C, D, F
Bare ground	0.26	A, F
Intact hedge - native species-rich	52.69 (linear m)	А
Defunct hedge - species-poor	581.57 (linear m)	A, C, D
Dry ditch	708.96 (linear m)	A, D

Table 10-11 - Stage 1 – Permanent Development Parcel Landscape / Habitat Losses from Construction of Unit X

Landscape / Habitat type	Predicted Extent of Landscape / Habitat Loss (ha)	Relevant Development Parcels
Broadleaved parkland/scattered trees	2.02	C, E, F
Scrub - dense/continuous	0.28	C, E
Introduced shrub	0.08	F
Poor semi-improved grassland	2.17	C, E
Amenity grassland	0.27	C, E, F
Marsh/marshy grassland	0.19	F
Hard standing	6.67	C, E, F



Landscape / Habitat type	Predicted Extent of Landscape / Habitat Loss (ha)	Relevant Development Parcels
Bare ground	0.02	С
Buildings	3.17	F
Standing water	0.18	С
Intact hedge - species-poor	267.09 (linear m)	C, E
Running water	215.51 (linear m)	C, E
Defunct hedge - species- poor	110.37 (linear m)	С

Table 10-12 - Stage 1 – Temporary and Permanent Landscape / Habitat Losses from Construction of Gas Pipeline and AGIs

Landscape / habitat type	Predicted Extent of Landscape / Habitat Loss (ha)	Type of Habitat Loss
Broadleaved parkland/ scattered trees	0.008	Permanent
Broadleaved woodland - plantation	0.09	Temporary
Broadleaved parkland/ scattered trees	0.1	Temporary
Defunct hedgerow – species poor	190.19 (linear m)	Temporary
Standing water	0.02	Temporary
Dry ditch	260.9 (linear m)	Temporary
Hardstanding	0.06	Temporary
Tall herb and fern – ruderal	0.07	Temporary
Arable land*	2.73	Permanent
Arable land	22.27	Temporary
Improved grassland	0.08	Temporary

^{*}Indicates permanent habitat loss as per construction of AGIs. Please note that Stage 1 includes the temporary landscape/ habitat loss for Development Parcel F on the assumption only Unit X would be constructed and land is set aside for construction laydown.

10.5.27. The LVIA assumes that over the three year construction period mitigation planting would have been undertaken in accordance with the outline landscape and biodiversity strategy and accompanying landscape and biodiversity mitigation plans included within the DCO application (Document Ref.6.7).

Vegetation –Broadleaved woodland / trees belts, groups of trees and scrub associated with the Power Station Site and Pipeline Area:



- 10.5.28. Broadleaved woodland plantations, tree belts and groups of trees and scrub on the Existing Drax Power Station Complex (some of which serve an important screening function) would be lost as a consequence of the Proposed Scheme within Development Parcels C, E and F. Vegetation would be cleared to accommodate construction areas/laydowns as well as enabling room for the construction of new structures and associated infrastructure. The siting of the temporary footbridge from Development Parcels A to F across Development Parcel D would need to be carefully considered on site to minimise the loss to existing trees and hedgerows edging New Road. It is assumed that some tree planting and hedgerows along either side of New Road would be lost and the remainder (which forms a low level screen) would be retained. Vegetation lost during the siting of the temporary footbridge would be replaced. It is expected that there would be a 15 m offset from the internal edge of the woodland to the south of Development Parcel A.
- 10.5.29. Measures have been taken in the form of offsets to retain broadleaved woodland/tree belts within Development Parcel B whilst works take place during Stage 1 and 2. The woodland /tree belts serve an important screening function in localised views and connect with surrounding vegetation, reinforcing the green infrastructure network and trees that would be protected during construction refer to Document 6.7 outline landscape and biodiversity strategy.
- 10.5.30. The Gas Pipeline (and associated Laydown Area) has been rerouted to avoid key areas of woodland. A small section of tree planting to the east of Main Road may be lost, however it is assumed that through on site micro siting the route could be adjusted slightly to avoid damage to trees and associated root protection areas or trenchless construction techniques used to avoid such vegetation. This includes trees between New Road and Wren Hall Lane and running along the southern edge of the Site Boundary east of the GRF refer to Document 6.7 outline landscape and biodiversity strategy for further details.

Vegetation - Hedgerows within the Power Station Site and hedgerow trees / farmland pattern associated with the Pipeline Area:

- 10.5.31. Sections of hedgerows/hedgerow trees (of varying condition and quality) with some that serve an important historic function in terms of screening would be affected as a consequence of Stage 1 within the Power Station Site and along the Pipeline Area. Loss of hedgerows would result from the creation of a new access point into the laydown / construction and compound (Development Parcel A and D), construction area (Development Parcel C and E) and access into the GRF / compressor building (Development Parcel I). It is expected that field boundaries within Development Parcel A would be retained during construction use with an offset of 5 m from the internal edge of the existing hedgerows.
- 10.5.32. In terms of the Gas Pipeline trenchless construction techniques would be used such as directional drilling to avoid impacting on existing hedgerows and hedgerow trees. Two specific locations (boundaries on either side of Wren Hall Lane and east of Main Road) have been identified where such techniques would be used alongside the micro siting of the Gas Pipeline with a view to reducing the working width of the area within the Pipeline Construction Area, needed for construction. Works associated with the AGIs would incur no vegetation loss apart from the permanent loss of arable land to accommodate the AGIs and vegetation



temporarily removed along the Gas Pipeline which would be reinstated within a maximum of 12 months.

Vegetation - Ornamental Planting:

10.5.33. To accommodate Unit X and associated structures, existing vegetation (a mix of broadleaved scattered trees and shrub planting) some of which is identified in Weddle's 1987 / 1990 Landscape Management Report, (Figure 5) would be lost; its function to reduce visual clutter and provide screening. It should be noted that sections of original planting based on the 1987 / 1990 report have already been lost to accommodate existing structures, primarily the contractor's compound.

Vegetation - Grassland and Arable Land:

10.5.34. Areas of grassland (semi improved, improved, marshy and amenity) and arable land would be lost either temporarily or permanently within the Proposed Scheme and along the Gas Pipeline as a consequence of Stage 1. Vegetation would be lost to accommodate construction areas/laydown as well as new structures and associated infrastructure.

Topography:

10.5.35. One disused sludge lagoon would be brought back into operation during the construction of Unit X and a flood attenuation channel would be constructed wrapping around the battery storage facility. The resultant changes to the topography are limited to the above features and therefore not considered significant in effect.

Waterbodies:

10.5.36. There are a number of small ditches within the Proposed Scheme and along the Gas Pipeline, which are either dry or full of standing water. Features within the Proposed Scheme would be lost and replaced with a flood attenuation channel. Trenchless construction techniques would be used to avoid ditches along the Gas Pipeline.

Local Landscape Character

10.5.37. It is considered that the sensitivity of local landscape character is medium and the magnitude of change prior to mitigation is medium. Therefore, there is likely to be a direct, temporary or permanent, short to long term effect on local landscape character of moderate adverse significance prior to the implementation of secondary mitigation measures. This is based on the designed nature and function of the landscape features described above and the extent of changes within a localised area. It should be noted that in this context, moderate is considered a significant effect. The residual effects assessed as a consequence of these proposals are considered in section 10.7.

Stage 2 – Operation of Unit X and Construction of Unit Y

10.5.38. This section considers the landscape effects of the existence of Unit X in operation and the construction of Unit Y.



10-56

- 10.5.39. The construction of Unit Y would result in further temporary and permanent loss of land within the Existing Drax Power Station Complex (Development Parcel C and F) and the continued temporary use of the Carbon capture readiness reserve space (Development Parcels A and B). Works would include additional temporary construction laydowns/areas, resulting in the loss of further woodland, scrub, hedgerows and grassland (amenity, semi improved and improved) as summarised in Table 10 13 below.
- 10.5.40. In term of timescales the construction of Unit Y is assumed to take place 12 months after the completion of Unit X. As a consequence of the phased nature of the work some construction areas/laydowns would be set aside for temporary use for up to six years or more.
- 10.5.41. It is assumed that other than the construction of Unit Y, and the installation of the associated 100MW battery storage within the battery storage building already constructed as part of Stage 1, all other works associated with the battery storage facility, Gas Pipeline, GRF / compressor building and AGIs have been completed.
- 10.5.42. The LVIA assumes that at this stage mitigation planting implemented during Stage 1 and over the three year construction period for Unit X (2019-2022) would have between one and three years of growth. Planting would not have matured and therefore immediate benefits would not be realised.

Landscape Character

- 10.5.43. The new permanent Unit X and associated stacks and temporary structures in the form of large cranes would "jar" with the Existing Drax Power Station Complex from certain elevations. The Existing Drax Power Station Complex is a dominant feature in the landscape with a strong, almost iconic "presence". Its large scale, mass and coherent, considered design has resulted in strong, symmetry primarily relating to the cooling towers, chimney, boiler house and turbine hall.
- 10.5.44. Unit X and its four associated stacks would protrude above the horizontal lines created by the tops of the cooling towers, forming a strong contrast to the existing mass due to their narrow width and form. The permanent structures would visually "clutter" the top of the towers resulting in a slightly discordant view from certain angles. Added to this would be the notable presence of a number of large temporary cranes associated within the construction of Unit Y, and at a lower elevation construction vehicles and plant on or in close proximity to the Power Station Site (and associated noise / disturbance / tranquillity levels).
- 10.5.45. It should be noted that subject to appropriate climatic conditions, plumes from the existing cooling towers would mask views of the tops of the stacks in certain directions.
- 10.5.46. The extent of land utilised outside the confines of the Existing Drax Power Station Complex (being the temporary construction Laydown Area on the Carbon capture readiness reserve space) would continue unchanged throughout Stages 1 and 2, which could be six years or more.



- 10.5.47. For the Landscape Character Types / Areas areas within which the Proposed Scheme sits or lies adjacent to, it is considered that there are likely to be localised1 significant effects during Stage 2. Such effects relate to changes in the perceptual and experiential qualities associated with the Existing Drax Power Station Complex.
- 10.5.48. Outside of a 3 km radius of the Site it is anticipated that whilst the presence of the Proposed Scheme would affect the aesthetic and perceptual qualities of the local landscape from certain locations, the effects would not be significant. The Proposed Scheme would be barely perceptible when viewed against the western elevation of the Existing Drax Power Station Complex, whereas views beyond 3 km across to the eastern elevation would be read in the context of other large scale industry and power generation which are a well-established landuse within the study area and the relative proximity of many LCTs and LCAs to the power station.
- 10.5.49. LCTs / LCAs which would experience a significant adverse effect include:
 - 23 Levels Farmland and 24 River Floodplain (North Yorkshire and York Landscape Characterisation).
 - LCT4 River Corridors and in particular 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor (East Riding of Yorkshire).
- 10.5.50. The sensitivity of LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire Corridor is medium, and the magnitude of change prior to mitigation, is also considered to be medium. Therefore, there is likely to be a direct, long-term effect on the above LCTs and LCAs (LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire Corridor) of moderate adverse significance prior to the implementation of secondary mitigation measures. It should be noted that in this context, moderate is considered a significant effect.
- 10.5.51. Other LCTs and LCAs not described above but within the 10 km study area are of medium to negligible sensitivity and would experience a small or negligible magnitude of change prior to mitigation resulting in a direct, permanent, long term effect of minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Local Landscape Designations

- 10.5.52. During this stage there would be effects upon the ILA associated with changes in landscape character's aesthetic and perceptual qualities. This would be through the presence of four stacks associated with Unit X and associated plumes as well as the presence of temporary structures including large cranes used for the construction of Unit Y and associated stacks. Construction activity (associated movement / noise/ disturbance/ tranquillity levels) would be perceptible.
- 10.5.53. Operational structures associated with the Proposed Scheme (Unit X and associated stacks and battery storage facility) would contrast with the overall mass and symmetry of the Existing Drax Power Station Complex and be noticeable above/through vegetation edging the

¹ In the context of this assessment localised refers to within 3 km of the site boundary



- northern boundary of the Power Station Site (some of which may be lost in the future to accommodate the CCS). Other new structures would be introduced including AGIs associated with the Gas Pipeline, the GRF and compressor building as well as their stacks and supporting infrastructure in terms access roads and car parking.
- 10.5.54. Mitigation vegetation would not have matured at this stage to produce an effective screen. Effects on low level views from the eastern banks of the River Ouse and the Lower Derwent ILA would only alter in the long term subject to the implementation of the CCS (at some future date) and the associated introduction of a new 20 m woodland buffer strip to the north of the existing PRoW.
- 10.5.55. The sensitivity of the Lower Derwent Corridor ILA is high and the magnitude of change prior to mitigation is considered to be medium. Therefore, there is likely to be a direct, permanent, long-term effect on the Lower Derwent ILA of moderate to major adverse significance prior to the implementation of secondary mitigation measures. It should be noted that effects would be concentrated within a 3 km area of the ILA and diminish with distance. The LVIA considers that there would be no significant effects on any other local landscape designation within the study area.

Local landscape character and features associated with the Power Station Site and Pipeline Area

10.5.56. During Stage 2 there would be further temporary and permanent loss of land within the Existing Drax Power Station Complex (Development Parcel C and F) and the continued temporary use of the Carbon capture readiness reserve space (Development Parcels A and B). This would result in the loss of landscape features not affected during Stage 0 and 1. Table 10 - 13 and 10 - 14 refer to the temporary and permanent loss of landscape features during Stage 2. It should be noted that the tables below include permanent landscape / habitat loss within Development Parcel F on the basis that Unit Y would be constructed. Such land was identified as temporary under Stage 1 and set aside as construction laydown for Unit X.

Table 10-13 - Stage 2 – Temporary Development Parcel Landscape / Habitat Losses from Construction of Unit Y

Landscape / Habitat Type	Predicted Extent of Landscape / Habitat Loss (ha)	Relevant Development Parcels
Broadleaved woodland - plantation	0.07	B, C
Broadleaved Parkland/scattered trees	0.2	B, C
Scrub - dense/continuous	0.1	B, C
Introduced shrub	0.12	С
Improved grassland	1.38	В
Amenity grassland	0.13	B, C
Marsh/marshy grassland	1.13	F



Landscape / Habitat Type	Predicted Extent of Landscape / Habitat Loss (ha)	Relevant Development Parcels
Poor semi-improved grassland	0.97	B, C
Hard standing	1.86	B, C, F
Bare ground	0.05	С
Intact hedge - species-poor	226.25 (linear m)	В
Fence	303.54 (linear m)	В

Table 10-14 - Stage 2 – Permanent Development Parcel Landscape / Habitat Losses from Construction of Unit Y

Landscape / Habitat Type	Predicted Extent of Landscape / Habitat Loss (ha)	Relevant Development Parcels
Broadleaved Parkland/scattered trees	0.16	F
Introduced shrub	0.13	F
Amenity grassland	0.45	F
Marsh/marshy grassland	0.12	F
Bare ground	0.23	F
Hard standing	3.06	F

10.5.57. By the end of Stage 2 construction it is assumed that planting within construction Laydown Areas and parking areas would be reinstated refer to the outline landscape and biodiversity strategy and accompanying landscape and biodiversity mitigation plans (Document Ref. 6.7) which will be secured by a requirement in Schedule 2 to the draft DCO (Document Ref. 3.1).

Vegetation –Broadleaved woodland / trees belts and scrub within the Power Station Site:

10.5.58. Broadleaved woodland / tree belts and areas of scrub running along the eastern edge of the old wood store and to the south of the mains handling entrance would be lost as a consequence of the need to accommodate construction areas/laydowns within Development Parcels B and C.

Vegetation - Ornamental Planting:

10.5.59. To accommodate Unit Y and associated structures, existing ornamental vegetation (a mix of broadleaved scattered trees and shrub planting) would be temporarily and permanently lost; its function to reduce visual clutter and provide screening.

Hedgerows / Hedgerow Trees Associated with the Power Station Site:



10.5.60. A species poor hedgerow to the north of the materials handling entranceway into the Existing Drax Power Station Complex and running to the north of the northern cooling towers (Development Parcels B and C) would be lost as a consequence.

Grassland:

- 10.5.61. Areas of semi improved, improved, amenity and marshy grassland would be lost temporarily and permanently within Development Parcels B, C, E and F to accommodate construction areas/laydown and relocation of the sludge lagoons to accommodate Unit Y.
- 10.5.62. Reinstatement works associated with the Pipeline Area would be complete and arable land reinstated during this stage, resulting in no significant effects.

Topography:

- 10.5.63. One disused sludge lagoon would be infilled to accommodate Unit Y and the sludge lagoons relocated within Development Parcel E. The resultant changes to the topography are limited to the above features and therefore not considered significant in effect.
- 10.5.64. The sensitivity of topography is considered to be low, and the magnitude of change prior to mitigation, is considered to be medium. Therefore, there is likely to be a direct, long-term effect on topography of minor adverse significance prior to the implementation of mitigation measures.

Local landscape character

10.5.65. The sensitivity of local landscape character is considered to be medium, and the magnitude of change prior to mitigation, is considered to be medium. Therefore, there is likely to be a direct, long-term effect on local landscape character of moderate adverse significance prior to the implementation of secondary mitigation measures. This is based on the designed nature and function of the landscape features described above and the extent of changes within a localised area. It should be noted that in this context, moderate is considered a significant effect. The residual effects assessed as a consequence of these proposals are considered in section xxx.

Stage 3 – Operation of Units X and Y

- 10.5.66. The operation of Unit X and Unit Y would not result in any further permanent land take. Land set aside for CCS in the future would be covered under a separate planning application. Temporary construction laydowns / areas within Development Parcels A, B, and C (including the Carbon capture readiness reserve space) would be reinstated or used for enhancement mitigation, discussed further in the outline landscape and biodiversity strategy and associated landscape and biodiversity mitigation plans. In term of timescales both Units would be in operation by 2027.
- 10.5.67. The LVIA assumes that at this stage mitigation planting implemented as part of Stage 1 and over the three year construction period for Unit X (2019 2022) would have between six to eight years of growth. It is assumed that remaining mitigation planting forming part of Development Parcels A, B and C would be implemented as part of Stage 2 and over the three year construction period for Unit Y (2024-2027) resulting in 0 to 3 years of growth where feasible.



10.5.68. Arable land associated within the Pipeline Area would have been reinstated in Stage 1 and there would be negligible effects. Remaining planting would not have matured and therefore benefits would not be realised to produce a beneficial characteristic.

Landscape Character

- 10.5.69. For character areas within which the Proposed Scheme sits or lies adjacent to, it is considered that there are likely to be localised significant effects during Stage 3. Such effects relate to changes in the perceptual and experiential qualities associated with the Existing Drax Power Station Complex. As outlined above the Proposed Scheme would "jar" within the Existing Drax Power Station Complex from certain elevations and conflict with its simple symmetry.
- 10.5.70. The Proposed Scheme, and in particular the presence of eight stacks would protrude above the horizontal lines created by the tops of the cooling towers, forming a strong contrast to the existing mass due to their narrow width and form, and visually "clutter" the top of the towers resulting in a slightly discordant view from certain angles. However subject to appropriate climatic conditions, plumes from the existing cooling towers would mask views of the tops of the stacks in certain directions.
- 10.5.71. Outside of a 3 km radius of the Site it is anticipated that whilst the presence of the Proposed Scheme would affect the aesthetic and perceptual qualities of the local landscape from certain locations, the effects would not be significant. The Proposed Scheme would be barely perceptible when viewed against the western elevation of the Existing Drax Power Station Complex, whereas views beyond 3 km across to the eastern elevation would be read in the context of other large scale industry and power generation which are a well-established landuse within the study area and the relative proximity of many LCTs and LCAs to the power station.
- 10.5.72. LCTs / LCAs which would experience a significant adverse effect include:
 - 23 Levels Farmland and 24 River Floodplain (North Yorkshire and York Landscape Characterisation).
 - LCT4 River Corridors and in particularly 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor (East Riding of Yorkshire).
- 10.5.73. The sensitivity of LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire Corridor is medium, and the magnitude of change prior to mitigation, is also considered to be medium. Therefore, there is likely to be a direct, permanent, long-term effect on the above LCTs and LCAs (LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire Corridor) of moderate adverse significance prior to the implementation of secondary mitigation measures. It should be noted that in this context, moderate is considered a significant effect.
- 10.5.74. Other LCTs and LCAs not detailed above but which lie within the 10 km study area are of medium to negligible sensitivity and would experience a small to negligible magnitude of change prior to mitigation resulting in a direct, permanent, long term effect of minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.



Local Landscape Designations

- 10.5.75. On operation year 1 there would be an erosion to the landscape character of the Lower Derwent ILA and particular experiential and perceptual qualities as outlined above under Stage 2.
- 10.5.76. Structures associated with the Proposed Scheme (Unit X and Y and associated stacks and battery storage facility) would contrast with the overall mass and symmetry of the Existing Drax Power Station Complex and be notable above vegetation edging the northern boundary of the Power Station Site (some of which may be lost in the future to accommodate the CCS). Other new structures introduced during Stage 1 including AGI associated with the Gas Pipeline may still noticeable.
- 10.5.77. Mitigation vegetation associated with Stage 1 would not have matured to produce an effective screen. Effects on low level views from the eastern banks of the River Ouse and the Lower Derwent ILA would only alter in the long term subject to the implementation of the CCS (at some future date) and the associated introduction of a new 20 m woodland buffer strip to the north of the existing PRoW.
- 10.5.78. The sensitivity of the Lower Derwent Corridor ILA is high and the magnitude of change prior to mitigation is also considered to be medium. Therefore, there is likely to be a direct, permanent, long-term effect on the Lower Derwent ILA of moderate to major adverse significance prior to the implementation of mitigation measures. It should be noted that effects would be concentrated within a 3 km area of the ILA and diminish with distance. The LVIA considers that there would be no significant effects on any other local landscape designation within the study area.

Local Landscape Character and Landscape Features Associated with the Power Station Site and Pipeline Area

- 10.5.79. Following completion of Unit Y as part of Stage 2, planting within construction laydown areas and parking areas on the Carbon capture readiness reserve space would have been reinstated / enhanced in accordance with the outline landscape and biodiversity strategy and landscape and associated mitigation plans. Mitigation planting in the form of new trees / broadleaved / coppice / car woodland, scrub, hedgerows / hedgerow trees, scrubland mosaic and grassland (amenity, improved, semi improved and marshy grassland) would tie the development into its surroundings and partially screen the Proposed Scheme within local low level views.
- 10.5.80. Since replacement /enhancement planting takes time to mature, immediate benefits would not be realised by the time both Units come into operation and therefore there would be little or no reduction in effect of the Proposed Scheme as a consequence of the proposed planting. At 15 years after the start of Stage 3 (operation of Units X and Y) the mitigation planting would have an effect and this considered in further detail within the residual effects.
- 10.5.81. The sensitivity of local landscape is considered to be medium, and the magnitude of change prior to mitigation / planting becoming established, is considered to be of medium. Therefore, there is likely to be a direct, permanent, short to long-term effect on local landscape character



of moderate adverse significance prior to the maturity of mitigation measures. It should be noted that in this context, moderate is considered a significant effect.

Decommissioning

10.5.82. Effects associated with decommissioning would be largely temporary and similar to those described for construction and reinstatement. It is assumed that the demolition of structures would take place 25 years post opening of the Proposed Scheme by which time planting would have matured, and that the extent of construction laydown areas to dismantle structures and accommodate demolition equipment would be compatible with those described for the construction of Units X and Y.

Landscape Character

- 10.5.83. Adverse effects are likely to arise on landscape character during decommissioning and these would be similar to those described for construction and reinstatement.
- 10.5.84. The sensitivity of LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor is medium, and the magnitude of change following decommissioning is also considered to be medium. Therefore, there is likely to be a direct, temporary, short term effect on the above LCTs and LCAs (LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire Corridor) of moderate adverse significance prior to the implementation of mitigation measures. It should be noted that in this context, moderate is considered a significant effect.
- 10.5.85. Other LCTs and LCAs within the 10 km study area are of medium to negligible sensitivity and would experience a small or negligible magnitude of change prior to mitigation resulting in a direct, temporary, short term effect of minor adverse to negligible adverse significance prior to the implementation of mitigation measures.

Landscape Designations

- 10.5.86. Adverse effects are likely to arise on the Lower Derwent ILA during decommissioning and these would be similar to those described for construction and reinstatement.
- 10.5.87. The sensitivity of the Lower Derwent Corridor ILA is high and the magnitude of change following decommissioning is considered to be medium. Therefore, there is likely to be a direct, temporary, short term effect on the Lower Derwent ILA of moderate to major adverse significance.

Local Landscape Character

- 10.5.88. It is possible that the decommissioning works could require the temporary clearance of some "recently" planted and existing vegetation within the Site. At this point in time it is unclear exactly which areas could be affected and hence which areas of planting.
- 10.5.89. The sensitivity of local landscape character is considered to be medium, and the magnitude of change prior to mitigation, is considered to be medium. Therefore, there is likely to be a direct, temporary and permanent, short to long term effect on landscape of moderate adverse significance prior to the implementation of mitigation measures. This is based on the designed nature and function of the landscape features described above and new planting



and the extent of changes within a localised area. It should be noted that in this context, moderate is considered a significant effect.

Assessment of Likely Visual Impacts and Effects

- 10.5.90. Effects on visual receptors associated with the Power Station Site and Gas Pipeline / AGI are summarised below. Refer to Appendix 10.2 which provides a summary of the sensitivity of each visual receptor and Appendix 10.3 in terms of the LVIA methodology.
- 10.5.91. Representative viewpoints were taken to support the findings of the assessment refer to Figure 10.10 Viewpoint Location Plan and Figures 10.11.1 to 10.11.21. Figures followed by the suffix:
 - a) Illustrate the autumn view;
 - b) Winter views where agreed with the LPAs and on the request of PINs;
 - c) The existing view which is field verified; and
 - d) The field verified photomontages.

Stage 0 - Reconfiguration Works

- 10.5.92. Site Reconfiguration Works would entail the demolition, removal and relocation of existing facilities. The highest structure forming part of the Site Reconfiguration Works would be the contractor's store/workshop, at 11 m in height (17 m AOD). All other structures such as the cooling water spray screen would be 10 m high (16 m AOD) or lower.
- 10.5.93. Works would be localised; concentrated to two specific areas of the Existing Drax Power Station Complex, namely Development Parcels F and H. It is assumed for Stage 0 that there would be no vegetation loss associated with Development Parcel F.
- 10.5.94. It is considered that the impact of such works would only generate effects on immediate visual receptors, namely immediate residents, workers, recreational users and users of main and local roads. Effects are seen against a backdrop of an active operational site where the movement of vehicles and variations in air flows associated with the plumes from the cooling towers and main chimney are noticeable.

Residents

- 10.5.95. The number of residents who would experience a view of the Site Reconfiguration Works is limited to a localised area within 1 km to the southeast, east and north east of the Existing Drax Power Station Complex. Views would be experienced from a number of properties off the A645, New Road, Main Road, Carr Lane, Wren Hall Lane and Pear Tree Avenue. Such views would range from full, partial to oblique with some views filtered/obscured by built form and intervening vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). Visual receptors are likely to experience either a view across to Development Parcel F or H. Refer to:
 - Figure 10.11.3a, b, c and d within 1 km of the Existing Drax Power Station Complex.
- 10.5.96. Local residents within 1 km of the Existing Drax Power Station Complex: The sensitivity of residential receptors is considered to be high. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by residents in the areas described above who have



- a direct and unfiltered view is medium. Therefore, there is likely to be a direct, temporary effect on immediate residential receptors of moderate major adverse significance prior to the implementation of mitigation measures.
- 10.5.97. A proportion of residential receptors has partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect of minor - moderate to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.

Workers within and in the immediate vicinity of Existing Drax Power Station Complex

- 10.5.98. Workers in the immediate vicinity of Development Parcel F and H include workers at the Existing Drax Power Station Complex, English Village Salads Limited, Drax Golf Couse and local farmers. Whilst workers at the Existing Drax Power Station Complex would appreciate a variety of views ranging from full, partial to filtered depending on their relative proximity to the works, views from the remaining locations would be largely screened by existing blocks of woodland, a variation in level (the elevated position of the A645 relative to the surrounding topography) and built form in the foreground. Refer to:
 - Figure 10.11.21b within 1 km of the Existing Drax Power Station Complex.
- 10.5.99. Workers at the power station: The sensitivity of power station workers is considered to be low. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by power station workers who have a direct and unfiltered view is medium. Therefore, there is likely to be a direct, temporary effect on power station workers of minor adverse significance prior to the implementation of mitigation measures.
- 10.5.100. Workers within 1 km of the Existing Drax Power Station Complex: The sensitivity of workers outside of the Existing Drax Power Station Complex is low. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by workers within 1 km of the Existing Drax Power Station Complex who have a direct and unfiltered view is small to negligible. Therefore, there is likely to be a direct, temporary effect on workers of negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Recreational Users

- 10.5.101. Local recreational users within 1 km of the Existing Drax Power Station Complex using the PRoW network and Drax Golf Course to the south east, east and north east of the Existing Drax Power Station Complex would experience sequential views of the Site Reconfiguration Works. Such views would range from full, partial to oblique with some views filtered / obscured by intervening built form and vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). Visual receptors are likely to experience either a view across to Development Parcel F or H. Refer to:
 - Figure 10.11.3a, b c and d and Figure 10.11.21b within 1 km of the Existing Drax Power Station Complex.



- 10.5.102. Local recreational users within 1 km of the Existing Drax Power Station Complex: The sensitivity of local users of the PRoW network ((i.e. PRoW 35.47/1/2) is considered to be medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by recreational users within 1 km of the Existing Drax Power Station Complex who have a direct and unfiltered view is small. Therefore, there is likely to be a direct, temporary effect on immediate recreational users of minor to moderate adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.
- 10.5.103. A proportion of recreational users ((i.e. users of PRoW 35.17/6/1 Drax Golf Course) have partial screening by other development, vegetation, a variation in level (i.e. the elevated position of the A645 relative to the surrounding topography) or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect of minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Users of Local and Main Roads

- 10.5.104. Local road users within 1 km of the Existing Drax Power Station Complex and using the A645, New Road, Main Road, Carr Lane, Wren Hall Lane and Pear Tree Avenue to the south east, east and north east of the Existing Drax Power Station Complex would experience glimpsed, sequential views of the Site Reconfiguration Works. Such views would range from full, partial to oblique with some views filtered / obscured by the built form and intervening vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). Visual receptors are likely to experience either a view across to Development Parcel F or H. Refer to:
 - Figure 10.11.3a, b c and d within 1 km of the Existing Drax Power Station Complex.
- 10.5.105. Local road users within 1 km of the Existing Drax Power Station Complex: The sensitivity of local road users is medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by local road users in the areas described above and who have a direct and unfiltered view would be small. Therefore, there is likely to be a direct, temporary effect on local road users within 1 km of minor adverse significance prior to the implementation of secondary mitigation measures. Effects would be localised within sequential views.
- 10.5.106. A proportion of local road users have partial screening by other development or vegetation or the road is orientated away from the Existing Drax Power Station Complex. For these, the magnitude of change would be negligible resulting in a direct, temporary effect negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.107. Remaining users of main roads within 1 km of the Existing Drax Power Station Complex: Main road users within the vicinity of the site (i.e. the A645) would experience a range of views based on the relative orientation of the road and direction of travel and intervening vegetation / built form. The sensitivity of receptors is low, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect on the above receptors ranging from negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.



Education / Places of Worship

- 10.5.108. Due to the position of the Site Reconfiguration Works there would be negligible adverse effects on users of educational facilities and places of worship to the south east, east and north east of the Existing Drax Power Station Complex.
- 10.5.109. The sensitivity of users within 1 km of the Existing Drax Power Station Complex is considered to be medium, and the magnitude of change prior to mitigation is negligible. Therefore, there is likely to be a direct, temporary effect on users of negligible adverse significance prior to the implementation of secondary mitigation measures.

Stage 1 – Construction of Unit X

- 10.5.110. Activities which would be noticeable in views associated with both the Power Station Site and Pipeline Area include the removal of vegetation to accommodate new structures and construction laydown areas, the infill and relocation of one sludge lagoon within Development Parcel F, erection of a temporary bridge across New Road for construction staff and works associated with the laying of the Gas Pipeline and construction of the AGIs including the presence of temporary 2.2 site hoardings.
- 10.5.111. This stage would include the construction of the battery storage facility, GRF / compressor building with associated stacks and erection of Unit X and associated stacks. Most construction activity would only be visible at a low level with the exception of temporary cranes associated with erection of Unit X's stacks.
- 10.5.112. Views of such activities would be from the south east, east and north east. Views of construction activities from the south west, west and north west of the study area would be largely screened by the western elevation of the Existing Drax Power Station Complex with only the top of temporary cranes notable.
- 10.5.113. Significant views would be concentrated within a 3 km radius of the Site. Given the extent of the Site, users would experience either views of the Power Station Site or the Gas Pipeline and AGIs within a 1 km radius of the Site Boundary (subject to the orientation and proximity of the property). Within a 3 km radius receptors would experience views of both the Power Station Site and Gas Pipeline/ AGI. The effects on visual receptors within a 1 km radius, 3 km and 10 km study area are summarised below.

Residents

- 10.5.114. Whilst views of construction activities associated with Unit X and in the Pipeline Area would be notable throughout the 10 km study area, significant effects would be experienced by residents from a number of locations including off the A645, New Road, Main Road, Carr Lane, Wren Hall Lane, Pear Tree Avenue, Rusholme Lane, Brier Lane and Newland Road, from the edges of Drax, Long Drax, Barmby on the Marsh, Asselby, Lower Airmyn, Airmyn and Newlands as well as isolated properties and farmsteads within the 3 km radius of the Site. Refer to:
 - Figure 10.11.3a, b c and d and Figure 10.11.9a and b within 1 km of the Site.
 - Figure 10.11.4a and b, Figure 10.11.5a and b, Figure 10.11.8a and Figure 10.11.10a and b within 3k m of the Site.



- Figure 10.11.12a, Figure 10.11.13a, b, c and d, Figure 10.11.15a, b, c and d and Figure 10.11.18a within 10 km of the Site.
- 10.5.115. Such views would range from full, partial to oblique with some views filtered/obscured by the built form and intervening vegetation (largely introduced as mitigation planting associated with the original Weddle's plan).
- 10.5.116. Residents within 1 km of the Site considering both the Power Station Site and Pipeline Area: The sensitivity of residential receptors is considered to be high. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by residents in the areas described above who have a direct and unfiltered view would be medium. Therefore, there is likely to be a direct, temporary effect on immediate residential receptors of moderate major adverse significance prior to the implementation of mitigation measures. This includes residents of properties directly affected by construction works associated with the GRF and construction in the Pipeline Area including the AGIs
- 10.5.117. A proportion of residential receptors has partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect of minor moderate to negligible adverse significance prior to the implementation of mitigation measures. Such effects are not considered significant.
- 10.5.118. Residents between 1 & 3 km of the Site considering both the Power Station Site and Pipeline Area: The sensitivity of residents between 1 & 3 km who would experience a view is high, the magnitude of change would vary from medium to negligible depending on the screening of other development, vegetation or relative orientation to the Site. Therefore, there is likely to be a direct, temporary, short term effect on residential receptors between 1 & 3 km of negligible adverse, minor moderate adverse to moderate to major adverse significance prior to the implementation of secondary mitigation measure. Significant effects would be experienced by residents on the edge of Barmby on the Marsh (and some scattered individual properties) with a clear view of the Proposed Scheme, who would experience a moderate to major adverse effect.
- 10.5.119. **Residents beyond 3 km of the Site and within the 10 km study area:** Views experienced by residents beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors is high, the magnitude of change small to negligible resulting in a direct, temporary, short term effect on the above receptors of negligible adverse to minor to moderate adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.

Workers

10.5.120. Views of construction activities would be experienced by workers in the immediate vicinity of the Site including workers at the Existing Drax Power Station Complex, English Village Salads Limited, Drax Golf Couse and local farmers. Whilst workers at the Existing Drax Power Station Complex would appreciate a variety of views ranging from full, partial to filtered depending on their relative proximity to the works, views from the remaining locations would be largely screened by existing blocks of woodland, a variation in level (the elevated position of the A645 relative to the surrounding topography) and built form in the foreground. Refer to:



- Figure 10.11.21b within 1 km of the Site.
- 10.5.121. Workers at the Drax Power Station and within 3 km of the Site: The sensitivity of power station workers and workers within 3 km of the Site is considered to be low. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by workers and who have a direct and unfiltered view is medium. Therefore, there is likely to be a direct, temporary effect on workers of minor adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.122. A proportion of workers at the Existing Drax Power Station Complex and workers within 3 km of the Site have partial screening by other buildings or vegetation or are orientated from the works. For these, the magnitude of change within 3 km of the Site is considered to be small to negligible resulting in a direct, temporary effect of negligible minor adverse and negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.123. Workers beyond 3 km of the Site and within the 10 km study area: The sensitivity of workers throughout the 10 km study area is considered to be low, and the magnitude of change prior to mitigation experienced by workers beyond 3 km is small to negligible. Therefore, there is likely to be a direct, temporary, short term effect on workers of negligible adverse to negligible minor adverse significance prior to the implementation of secondary mitigation measures.

Recreational Users

- 10.5.124. Recreational users to the south east, east and north east of the Existing Drax Power Station Complex using the Trans Pennine Trail (TPT) and National Cycle Network Route 65 (NCN) to the north of the River Ouse, the PRoW network, recreational facilities and sports grounds and country parks would experience views of construction activities associated with the Proposed Scheme including the associated works with the Pipeline Area Works would include the presence of temporary site hoardings and the temporarily diversion of some PRoW whilst the Gas Pipeline is being constructed or, worst case, temporarily closed for a short period and then reinstated.
- 10.5.125. Such views would be sequential and range from full, partial to oblique with some views filtered/obscured by intervening built form and vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). The magnitude of change would vary based on proximity and orientation to the Proposed Scheme. Refer to:
 - Figure 10.11.3a, b c and d, Figure 10.11.9a and b and Figure 10.11.21b within 1 km of the Site.
 - Figure 10.11.4a and b, Figure 10.11.6a, Figure 10.11.8a, Figure 10.11.10a and b and. Figure 10.11.17a and b within the 3 km of the Site.
 - Figures 10.11.1a, Figure 10.11.2a and b, 10.11.11a, Figure 10.11.12a, Figure 10.11.13a, b, c and d, Figure 10.11.14a and b, Figure 10.11.15a, b, c and d and Figure 10.11.18a within 10 km of the Site.
 - Figure 10.11.19a and Figure 10.11.20a beyond the 10 km study area.
- 10.5.126. Local recreational users within 1 km of the Site: The sensitivity of recreational users on the TPT and NCN to the north of the River Ouse is considered to be high. Based on worst case view, the change arising from Stage 1 would be of medium magnitude. This would give rise to



- a direct, temporary, short term moderate major adverse effect on recreational users of the TPT and NCN prior to the implementation of secondary mitigation measures.
- 10.5.127. The sensitivity of other recreational users utilising the PRoW network, recreational facilities and sports grounds is medium. Based on a worst case view, the magnitude of change prior to mitigation experienced by such users within 1 km of the Site who have a direct and unfiltered view is medium. Therefore, there is likely to be a direct, temporary effect on recreational users of moderate adverse significance prior to the implementation of secondary mitigation measures. This is considered a significant effect.
- 10.5.128. A proportion of other recreational receptors within 1 km have partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect of minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.
- 10.5.129. Recreational users between 1 & 3 km of the Site: The sensitivity of recreational users on the TPT and NCN to the north of the River Ouse is considered to be high. Based on worst case views, the change arising from Stage 1 would be of medium magnitude. This would give rise to a direct, temporary moderate major adverse significant effect on recreational users of the TPT and NCN prior to the implementation of secondary mitigation measures.
- 10.5.130. The sensitivity of other recreational users between 1 & 3 km utilising the PRoW network, recreational facilities and sports grounds is medium. Based on a worst case view, the magnitude of change prior to mitigation experienced by such users between 1 & 3 km of the Site who have a direct and unfiltered view is medium. Therefore, there is likely to be a direct, temporary, short term effect on recreational users of moderate adverse significance prior to the implementation of mitigation measures and is considered a significant effect. As above remaining recreational users would experience a range of effects from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.131. Recreational users beyond 3 km of the Site and within the 10 km study area: Views experienced by recreational users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would range from high to medium, and the magnitude of change would vary from small to negligible resulting in a direct, temporary, short term effect on the above receptors ranging from minor moderate adverse to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered to be significant.

Users of Transport Routes:

- 10.5.132. Transport users to the south east, east and north east of the Site would have views of construction activities. Such views would be experienced from the local road network, the rail network, waterways, motorways and A roads within the 10 km study area. As discussed previously, views to the west, south west and north west would be largely obscured by the Existing Drax Power Station Complex. Refer to:
 - Figure 10.11.3a, b c and d within 1 km of the Site.



10-71

- Figure 10.11.5a, Figure 10.11.10a and b and Figure 10.11.16a and b within the 3 kmof the Site
- Figures 10.11.7a, Figure 10.11.12a, Figure 10.11.13a, b, c and d, Figure 10.11.18a within 10 km of the Site.
- 10.5.133. Users of the local road network within 1 km of the Site: The sensitivity of local road users is considered to be medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by local road users within 1 km of the Proposed Scheme who have a direct and unfiltered view would be medium. Therefore, there is likely to be a direct, temporary, short term effect on users of moderate adverse significance prior to the implementation of secondary mitigation measures. Such effects are considered to be significant.
- 10.5.134. A proportion of local road users have partial screening by other development or vegetation or the road is orientated away from the Site. For these, the magnitude of change would be small to negligible resulting in a direct, temporary effect of minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.135. *Users of main road network within 1 km of the Site:* Users of main roads (i.e. the A645 and A1041) within 1 km of the Site would experience a range of views based on the relative orientation of the road, direction of travel, intervening vegetation and built form. The sensitivity of receptors is low, the magnitude of change would vary from small to negligible resulting in a direct, temporary, short term effect on the above receptors ranging from negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.136. Users of the local road network between 1 & 3 km of the Site: Based on worst case views which are direct and unfiltered, the sensitivity of transport users between 1 & 3 km of the Site is considered to be medium, and the magnitude of change prior to mitigation is medium. Therefore, there is likely to be a direct, temporary, short term effect on transport users of moderate adverse prior to the implementation of secondary mitigation measures. Such effects are considered to be significant.
- 10.5.137. Users of main road network between 1 & 3 km of the Site: Users of main roads (i.e. the A645 and A1041) within 1 & 3 km of the Site would experience a range of views based on the relative orientation of the road, direction of travel, intervening vegetation and built form. The sensitivity of receptors is low, the magnitude of change would vary from small to negligible resulting in a direct, temporary, short term effect on the above receptors ranging from negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.138. Users of the transport network beyond 3 km of the Site and within the 10 km study area: Views experienced by users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would be low, and the magnitude of change prior to mitigation would vary from small to negligible. Therefore, there is likely to be a direct, temporary, short term effect on transport users of negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.



Education / Places of Worship

- 10.5.139. Users of educational facilities and places of worship to the south east, east and north east of the Existing Drax Power Station Complex would experience views of construction activities associated with the Proposed Scheme including within the Pipeline Area.
- 10.5.140. Such views would range from full, partial to oblique with some views filtered / obscured by intervening built form and vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). The magnitude of change would vary based on proximity and orientation to the Proposed Scheme. Refer to:
 - Figure 10.11.9a and b within 1 km of the Site.
 - Figure 10.11.10a and b within the 3 km study area.
 - Figure 10.11.19a beyond the 10km study area.
- 10.5.141. Users within 1 km of the Site: The sensitivity of users of educational facilities (Read School) is medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by users described above who have a direct and unfiltered view would be medium. Therefore, there is likely to be a direct, temporary, short term effect on users of moderate adverse significance prior to the implementation of secondary mitigation measures. Such effects are considered significant.
- 10.5.142. Remaining users (i.e. Drax Church) have partial screening by other developments or vegetation or are orientated away from the Site. For these, the magnitude of change is negligible resulting in a direct, temporary, short term effect on the above receptors of negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.143. Users between 1 & 3 km of the Site: The sensitivity of users is medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by users between 1 & 3 km who have a direct and unfiltered view, is medium. Therefore, there is likely to be a direct, temporary, short term effect on users of moderate adverse significance prior to the implementation of mitigation measures. Such effects are considered significant. As above remaining users would experience a range of effects from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.144. *Users beyond 3 km of the Site and within the 10 km study area:* Views experienced by users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would be medium, and the magnitude of change would vary from small to negligible resulting in a direct, short term, temporary effect on the above receptors ranging from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Stage 2 – Operation of Unit X and Construction of Unit Y

10.5.145. The new permanent (Unit X) and temporary (construction of Unit Y) structures would "jar" with the Existing Drax Power Station Complex from certain elevations. The Existing Drax Power Station Complex has a strong, symmetrical almost iconic "presence". Unit X, and in particular the presence of its four associated stacks, would protrude above the horizontal lines created by the tops of the cooling towers, forming a strong contrast to the existing mass due to their narrow width and form. The permanent structures would visually "clutter" the top of the towers



- resulting in a slightly discordant view from certain angles. Added to this would be the notable presence of a number of large temporary cranes associated within the construction of Unit Y, and at a lower elevation, the movement of construction vehicles and plant on or in close proximity to the Site would be noticeable.
- 10.5.146. The extent of land used outside the confines of the Existing Drax Power Station Complex would continue to include the use of the Carbon capture readiness reserve space for construction laydown, however all work associated with the Gas Pipeline, AGI and GRF / compressor building would be complete (other than works of reinstatement), as would the battery storage facility building within the Power Station Site. The AGI, and more specifically the electrical kiosk and pipework associated with the PTF-L and MOC would be up to 5 m (10 m AOD) and noticeable, adding additional structures to a flat, open landscape. Given their height, the nature of effects would be localised.
- 10.5.147. It is considered that there would be significant visual effects on receptors during Stage 2. Key views of Unit X and construction of Unit Y activities would be from the south east, east and north east, with localised significant views within 3 km of the Site.
- 10.5.148. Outside of a 3 km radius of the Site it is anticipated that the presence of the Proposed Scheme would result in varying effects on visual receptors subject to the relative orientation to the Existing Drax Power Station Complex. The Proposed Scheme would be barely perceptible when viewed against the western elevation of the Existing Drax Power Station Complex, whereas views beyond 3 km across to the eastern elevation would be noticeable though read in the context of other large scale industry and power generation developments, varied in their height and mass.
- 10.5.149. It should be noted that subject to appropriate climatic conditions, plumes from the existing cooling towers would mask views of the tops of the new stacks and cranes in certain directions.
- 10.5.150. In term of timescales the construction of Unit Y is assumed to take place 12 months after the completion of Unit X. As a consequence some construction areas/laydowns (within the Power Station Site and on the Carbon capture readiness reserve space) would be set aside for temporary use for up to six years or more.
- 10.5.151. The LVIA assumes that at this stage mitigation planting, implemented as part of Stage 1 and over the three year construction period for Unit X (2019 2022), would have between one and three years of growth. Planting would not have matured and therefore visual benefits would not be realised.

Residents

- 10.5.152. Whilst views of Unit X and construction activities associated with Unit Y would be notable throughout the 10 km study area, significant effects would be experienced by residents from a number of locations including off the A645, New Road, Main Road, Carr Lane, Wren Hall Lane, Pear Tree Avenue, Rusholme Lane, Brier Lane and Newland Road, from the edges of Drax, Long Drax, Barmby on the Marsh, Asselby, Lower Airmyn, Airmyn and Newlands as well as isolated properties and farmsteads within the 3 km radius of the Site. Refer to:
 - Figure 10.11.3a, b c and d and Figure 10.11.9a and b within the 1 km of the Site.



- Figure 10.11.4a and b, Figure 10.11.5a and b, Figure 10.11.8a and Figure 10.11.10a and b within 3 km of the Site study area.
- Figure 10.11.12a, Figure 10.11.13a, b, c and d, Figure 10.11.15a, b, c and d and Figure 10.11.18a within the 10 km of the Site.
- 10.5.153. Such views would range from full, partial to oblique with some views filtered/obscured by the built form and intervening vegetation (largely introduced as mitigation planting associated with the original Weddle's plan).
- 10.5.154. **Residents within 1 km of the Power Station Site and AGIs:** The sensitivity of residential receptors is considered to be high. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by residents in the areas described above who have a direct and unfiltered view would be large or medium. Therefore, there is likely to be a direct, permanent, long term effect on immediate residential receptors of major adverse or moderate major adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.155. Remaining residential receptors within a 1 km radius have partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, long term effect on the above receptors of minor moderate adverse to negligible adverse significance to prior to the implementation of secondary mitigation measures. Such effects are not considered significant.
- 10.5.156. Residents between 1 & 3 km of the Site and who would experience a view of both the Power Station Siteand AGIs: The sensitivity of residential residents is considered to be high. Taking a worst case scenario, the magnitude of change prior to mitigation would vary from medium to negligible resulting in a direct, long term effect on the above receptors ranging from negligible adverse, minor moderate adverse to moderate major adverse significance prior to the implementation of secondary mitigation measure. Significant views would be experienced by residents on the edge of Barmby on the Marsh (and some scattered individual properties) with a clear view of the Proposed Scheme, who would experience a moderate to major adverse significant effect.
- 10.5.157. **Residents beyond 3 km of the Site and within the 10km study area:** Views experienced by residents beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors is high, the magnitude of change would vary from small to negligible resulting in a direct, long term effect on the above receptors ranging from minor moderate adverse to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.

Workers

- 10.5.158. Views of Unit X and construction activities associated with Unit Y would be experienced by workers in the immediate vicinity of the Site including workers at the Existing Drax Power Station Complex Drax Golf Couse, the substation (off the A645) and local farmers. Workers would appreciate a variety of views ranging from full, partial to filtered depending on their relative proximity to the works, intervening vegetation / built form and subtle changes in elevation. Refer to:
 - Figure 10.11.21b within 1 km of the Site.



- 10.5.159. Workers at the Existing Drax Power Station Complex and within 1 km of the Site: The sensitivity of workers at the Drax Power Station and within 1 km of the Site is low. The magnitude of change based on worst case direct and unfiltered views prior to mitigation would be large to medium. Therefore, there is likely to be a direct, long term effect on workers of minor moderate adverse to minor adverse significance prior to the implementation of secondary mitigation measures. These effects are not considered to be significant.
- 10.5.160. Workers between 1 & 3 km of the Site: The sensitivity of workers between 1 & 3 km of the Site is low. The magnitude of change based on worst case direct and unfiltered views prior to mitigation would be medium. Therefore, there is likely to be a direct, long term effect on workers of minor adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.161. Workers beyond 3 km of the Site and within the 10 km study area: The sensitivity of workers beyond 3 km is considered to be low, and the magnitude of change prior to mitigation would be small to negligible subject to the relative position of their area of work, intervening vegetation and built form. Therefore, there is likely to be a direct, long term effect on workers outside the Existing Drax Power Station Complex of negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Recreational Users

- 10.5.162. Recreational users to the south east, east and north east of the Existing Drax Power Station Complex using the Trans Pennine Trail (TPT) and National Cycle Network Route 65 (NCN) to the north of the River Ouse, the PRoW network, recreational facilities and sports grounds and country parks would experience views of construction activities associated with Unit Y and the operation of Unit X, AGIs and GRF.
- 10.5.163. Such views would be sequential and range from full, partial to oblique with some views filtered through intervening built form and vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). The magnitude of change would vary based on proximity and orientation to the Proposed Scheme. Refer to:
 - Figure 10.11.3a, b c and d, Figure 10.11.9a and b within 1 km of the Site.
 - Figure 10.11.4a and b, Figure 10.11.6a and Figure 10.11.8a within 3 km of the Site.
 - Figures 10.11.11a, Figure 10.11.12a, Figure 10.11.14a and b within 10 km of theSite.
 - Figure 10.11.19a and Figure 10.11.20a beyond the 10 km study area.
- 10.5.164. Local recreational users within 1 km of the Site: The sensitivity of recreational users using the TPT and NCN to the north of the River Ouse is high. Based on a worst case direct and unfiltered view the change arising from Stage 2 would be of medium magnitude. This would give rise to a direct, long term moderate major adverse significant effect on recreational users of the TPT and NCN prior to the implementation of secondary mitigation measures.
- 10.5.165. Local recreational users within 1 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of other recreational users utilising the PRoW network, recreational facilities and sports grounds is medium. Based on a worst case direct and unfiltered view experienced by users within 1 km of the Site, the magnitude of change prior to mitigation would be large to medium. Therefore, there is likely to be a direct, long term effect



- on immediate residential receptors of moderate major and moderate adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.166. A proportion of other recreational receptors within 1 km have partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, long term effect of minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.
- 10.5.167. Recreational users between 1 & 3 km of the Site: The sensitivity of recreational users on the TPT and NCN to the north of the River Ouse is considered to be high. Based on worst case views, the change arising from Stage 2 would be of medium magnitude. This would give rise to a direct, long term moderate major adverse significant effect on recreational users of the TPT and NCN prior to the implementation of secondary mitigation measures
- 10.5.168. Local recreational users between 1 & 3 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of other recreational users utilising the PRoW network, recreational facilities and sports grounds and who would experience a direct view is considered to be medium. Based on a worst case view, the magnitude of change prior to mitigation experienced by such users between 1 & 3 km of the Site who have a direct and unfiltered view is medium. Therefore, there is likely to be a direct, long term effect on recreational users of moderate adverse significance prior to the implementation of mitigation measures and this is considered a significant effect. As above, remaining recreational users would experience a range of effects from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.169. Recreational users beyond 3 km of the Site and within the 10 km study area: Views experienced by recreational users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would range from high to medium, and the magnitude of change would vary from small to negligible resulting in a direct, long term effect on the above receptors ranging from minor moderate adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Users of Transport Routes:

- 10.5.170. Transport users to the south east, east and north east of the Site would have views of Stage 2. Such views would be experienced from local road network, the rail network, waterways, motorways and A roads within the 10 km study area. As discussed previously views to the west, south west and north west would be largely obscured by the Existing Drax Power Station Complex.
- 10.5.171. Views would be sequential and range from full, partial to oblique with some views filtered/obscured by intervening built form and vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). The magnitude of change would vary based on proximity and orientation to the Proposed Scheme. Refer to:
 - Figure 10.11.3a, b c and d within 1 km of the Site.
 - Figure 10.11.5a, Figure 10.11.10a and b and Figure 10.11.16a and b within 3 km of the Site.



- Figures 10.11.7a, Figure 10.11.12a, Figure 10.11.13a, b, c and d, Figure 10.11.18a within 10 km of the Site.
- 10.5.172. Users of the local road network within 1 km of the Site: The sensitivity of local road users is considered to be medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by local road users within 1 km of the Proposed Scheme who have a direct and unfiltered view would be large to medium. Therefore, there is likely to be a direct, long term effect on users of moderate major to moderate adverse significance prior to the implementation of secondary mitigation measures. It should be noted that such views are localised and in close proximity of the Proposed Scheme (i.e. New Road) and effects would diminish with distance.
- 10.5.173. A proportion of local road users have partial screening by other development or vegetation or the road is orientated away from the Site. For these, the magnitude of change would be small to negligible resulting in a direct, long term effect of minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.174. *Users of main road network within 1 km of the Site:* Users of main roads (i.e. the A645 and A1041) within 1 km of the Site would experience a range of views based on the relative orientation of the road, direction of travel, intervening vegetation and built form. The sensitivity of receptors is low, the magnitude of change would vary from medium to negligible resulting in a direct, long term effect on the above receptors ranging from minor adverse, negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.175. Users of the local and main road network between 1 & 3 km of the Site: Based on worst case views which are direct and unfiltered, the sensitivity of transport users using local roads between 1 & 3 km of the Site is considered to be medium, and the magnitude of change prior to mitigation is considered to be medium. Therefore, there is likely to be a direct, long term effect on transport users of moderate adverse significance prior to the implementation of secondary mitigation measures. This is considered a significant effect.
- 10.5.176. Remaining effects on users of the main road network where the sensitivity of receptors is low and the magnitude of change varies from medium to negligible resulting in a direct, long term effect on the above receptors ranging from minor adverse, negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.177. Users of the transport network beyond 3 km of the Site and within the 10 km study area: Views experienced by users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would be medium to low, and the magnitude of change prior to mitigation, would be small to negligible. Therefore, there is likely to be a direct, temporary effect on transport users of minor adverse, negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.



10-78

Education / Places of Worship

- 10.5.178. Users of educational facilities and places of worship to the south east, east and north east of the Existing Drax Power Station Complex would experience views of Unit X and the construction of Unit Y.
- 10.5.179. Such views would range from full, partial to oblique with some views filtered / obscured by intervening built form and vegetation (largely introduced as mitigation planting associated with the original Weddle's plan). The magnitude of change would vary based on proximity and orientation to the Proposed Scheme. Refer to:
 - Figure 10.11.9a and b within 1 km of the Site.
 - Figure 10.11.10a and b within 3 km of the Site.
 - Figure 10.11.19a beyond the 10 km of the Site.
- 10.5.180. *Users within 1 km of the Site:* The sensitivity of users of educational facilities (Read School) is medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by users described above who have a direct and unfiltered view would be medium. Therefore, there is likely to be a direct, long term effect on users of moderate adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.181. Remaining users (i.e. Drax Church) have partial screening by other developments or vegetation or are orientated away from the Site. For these, the magnitude of change is negligible resulting in a direct, long term effect on the above receptors of negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.182. Users between 1 & 3 km of the Site: The sensitivity of users is medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by users between 1 & 3 km who have a direct and unfiltered view, is medium. Based on worst case views, the sensitivity of users who would experience a direct view is considered to be medium, and the magnitude of change prior to mitigation, is considered to be medium. Therefore, there is likely to be a direct, long term effect on users of moderate adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.183. As above remaining users would experience a range of effects from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.184. *Users beyond 3 km of the Site and within the 10 km study area:* Views experienced by users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would be medium, and the magnitude of change would vary from small to negligible resulting in a direct, temporary effect on the above receptors ranging from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Stage 3 – Operation of Units X and Y

10.5.185. The main visual effects arising from the Power Station Site would be in relation to the gas turbines and HRSGs, the associated stacks (up to 120 m high (126 m AOD)) and battery storage facility, as well as the GRF / Compressor Building and associated stacks adjacent to the Power Station Site. Although the Existing Drax Power Station Complex is well screened by extensive blocks of woodland at a low elevation (particularly to the west, and northwest -



- Barlow Mound), the stacks associated with Units X and Y would be visible from locations throughout the 10 km study area.
- 10.5.186. Due to the relative position of the Proposed Scheme to the Existing Drax Power Station Complex, significant visual effects experienced by receptors are localised and within a 3 km radius of the Site; to the northeast, east and southeast. From such locations the stacks associated with Units X and Y would be a prominent feature within the view, grouped to the front of the chimney, turbine house and in between the cooling towers.
- 10.5.187. Outside of a 3 km radius of the Site it is anticipated that the presence of the Proposed Scheme would result in varying effects on visual receptors subject to the relative orientation to the Existing Drax Power Station. The Proposed Scheme would be barely perceptible when viewed against the western elevation of the Existing Power Station Complex, whereas views beyond 3 km of the eastern elevation would remain noticeable. The Proposed Scheme however would be "read" in the context of other large scale industry and power generation developments including Eggborough Power Station and several wind farms located to the south west and south east respectively which are varied in their height, mass and scale
- 10.5.188. The proposed stacks would contrast with the overall scale and mass of the Existing Drax Power Station Complex; slender narrow, vertical in form compared to the larger more coherent and considered structures associated with the cooling towers and turbine hall. The structures would interrupt the strong horizontal lines of the tops of the cooling towers at a higher elevation, though subject to appropriate climate conditions, plumes from the existing cooling towers may mask the tops of the stacks from view. In addition the siting of a GRF and as compressor building (up to 10 m in height, 16 m AOD) would also be notable in some localised views, though this, like the AGIs, would not be permanently manned and therefore not be lit full time.
- 10.5.189. The operation of Unit X and Unit Y would not result in any further permanent need for land beyond the Power Station Site. Land set aside for CCS in the future would be safeguarded by a requirement to the draft DCO (Document Ref. 3.1) but any actual further development on the Carbon capture readiness reserve space would be covered under a separate planning application. In term of timescales both Units would be in operation by 2027.
- 10.5.190. The LVIA assumes that at this stage mitigation planting, implemented as part of Stage 1 and over the three year construction period for Unit X (2019 2022), would be between six to eight years of growth. It is assumed that remaining mitigation planting would have been implemented as part of Stage 2 and over the three year construction period for Unit Y (2024-2027) resulting in 0 to three years of growth where feasible by the start of Stage 3. Planting would be in accordance with the outline landscape and biodiversity strategy, to be secured by a requirement in Schedule 2 of the draft DCO (Document Ref. 3.1. w
- 10.5.191. Whilst arable land associated within the Gas Pipeline would be reinstated generating negligible visual effects, structures associated with the AGIs would still be discernible. Remaining tree planting would not have matured and therefore visual benefits would not yet be realised at the start of Stage 3.
- 10.5.192. In summary whilst the effects associated with this Stage are similar to Stage 2 key differences relate:



- The operation of both Units X and Y and up to 8 associated stacks.
- A reduction in the extent of land being used beyond the Power Station Site through reinstatement of construction laydown areas (in particular on the Carbon capture readiness reserve space).
- The progressive maturing of vegetation as part of Stage 1 and Stage 2 construction phases, though the visual benefits of hedgerow, shrub, scrub and tree planting have yet to be realised.
- 10.5.193. It is considered that these differences would not give rise to any changes in effect between Stages 2 and 3.

Residents

- 10.5.194. Views of Units X and Y, associated structures and the AGIs would be experienced by local residents as well as receptors throughout the 10 km study area. The nature of effects summarised below would remain the same as Stage 2.
- 10.5.195. Residents within 1 km of theSite: The sensitivity of residential receptors is considered to be high. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by residents in the areas described above who have a direct and unfiltered view would be large or medium. Therefore, there is likely to be a direct, permanent, long term effect on immediate residential receptors of major adverse or moderate major adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.196. Remaining residential receptors within a 1 km radius have partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, long term effect on the above receptors of minor moderate adverse to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.
- 10.5.197. Residents between 1 & 3 km of the Site and who would experience a view of both the Power Station Site and Pipeline Area: The sensitivity of residents is considered to be high. Taking a worst case scenario, the magnitude of change prior to mitigation would vary from medium to negligible resulting in a direct, long term effect on the above receptors ranging from negligible adverse, minor moderate adverse to moderate major adverse prior to the implementation of mitigation measure. Significant views would be experienced by residents on the edge of Barmby on the Marsh (and some scattered individual properties) with a clear view of the Proposed Scheme, who would experience a moderate to major adverse effect.
- 10.5.198. **Residents beyond 3 km of the Site and within the 10km study area:** Views experienced by residents beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors is high, the magnitude of change would vary from small to negligible resulting in a direct, long term effect on the above receptors ranging from minor moderate adverse to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.

Workers

10.5.199. Views of Units X and Y, associated structures and the AGI would be experienced by workers in the immediate vicinity of the Site including workers at the Existing Drax Power Station



10-81

- Complex, Drax Golf Couse and local farmers as well as receptors throughout the wider 10 km study area. The nature of effects summarised below would remain the same as Stage 2.
- 10.5.200. Workers at the Drax Power Station and within 1 km of the Site: The sensitivity of workers at the Existing Drax Power Station Complex and within 1 km of the Site is low. The magnitude of change based on worst case direct and unfiltered views prior to mitigation would be large to medium. Therefore, there is likely to be a direct, long term effect on workers of minor moderate adverse to minor adverse significance prior to the implementation of secondary mitigation measures. These effects are not considered to be significant.
- 10.5.201. Workers between 1 & 3 km of the Site: The sensitivity of workers between 1 & 3 km of the Site is low. The magnitude of change based on worst case direct and unfiltered views prior to mitigation would be medium. Therefore, there is likely to be a direct, long term effect on workers of minor adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.202. Workers beyond 3 km of the Site and within the 10 km study area: The sensitivity of workers beyond 3 km is considered to be low, and the magnitude of change prior to mitigation would be small to negligible subject to the relative position of their area of work, intervening vegetation and built form. Therefore, there is likely to be a direct, long term effect on workers outside the existing Drax Power Station of negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Recreational Users

- 10.5.203. Recreational users to the south east, east and north east of the Existing Drax Power Station using the Trans Pennine Trail (TPT) and National Cycle Network Route 65 (NCN) to the north of the River Ouse, the PRoW network, recreational facilities and sports grounds and country parks would experience views of both Unit X and Y, associated structures and the AGI. Effects would be also felt by receptors throughout the wider 10 km study area. The nature of effects summarised below would remain the same as Stage 2.
- 10.5.204. **Local recreational users within 1 km of the Site:** The sensitivity of recreational users using the TPT and NCN to the north of the River Ouse is high. Based on a worst case direct and unfiltered view the change arising from Stage 3 would be of medium magnitude. This would give rise to a direct, long term moderate major adverse significant effect on recreational users of the TPT and NCN prior to the implementation of secondary mitigation measures.
- 10.5.205. Local recreational users within 1 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of other recreational users utilising the PRoW network, recreational facilities and sports grounds is medium. Based on a worst case direct and unfiltered view experienced by users within 1 km of the Site, the magnitude of change prior to mitigation would be large to medium. Therefore, there is likely to be a direct, long term effect on immediate residential receptors of moderate major and moderate adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.206. A proportion of other recreational receptors within 1 km have partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, long term effect of minor



- adverse to negligible adverse significance prior to the implementation of secondary mitigation measures. Such effects are not considered significant.
- 10.5.207. Recreational users between 1 & 3 km of the Site: The sensitivity of recreational users on the TPT and NCN to the north of the River Ouse is considered to be high. Based on worst case views, the change arising from Stage 3 would be of medium magnitude. This would give rise to a direct, long term moderate major adverse significant effect on recreational users of the TPT and NCN prior to the implementation of secondary mitigation measures.
- 10.5.208. Local recreational users between 1 & 3 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of other recreational users utilising the PRoW network, recreational facilities and sports grounds and who would experience a direct view is considered to be medium. Based on a worst case view, the magnitude of change prior to mitigation experienced by such users between 1 & 3 km of the Site who have a direct and unfiltered view is medium. Therefore, there is likely to be a direct, long term effect on recreational users of moderate adverse prior to the implementation of mitigation measure and this is considered a significant effect. As above remaining recreational users would experience a range of effects from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.209. Recreational users beyond 3 km of the Site and within the 10 km study area: Views experienced by recreational users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would range from high to medium, and the magnitude of change would vary from small to negligible resulting in a direct, long term effect on the above receptors ranging from minor moderate adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Users of Transport Routes

- 10.5.210. Transport users to the south east, east and north east of the Site would have views of both Unit X and Y, associated structures and the AGI. Effects would be also felt by receptors throughout the wider 10 km study area. The nature of effects summarised below would remain the same as Stage 2.
- 10.5.211. *Users of the local road network within 1 km of the Site:* The sensitivity of local road users where there are direct, unfiltered views across to the Site and low levels of traffic on local roads is medium. Taking the worst case scenario, the magnitude of change prior to mitigation is considered to be large to medium. Therefore, there is likely to be a direct, long term effect on users of moderate major to moderate adverse significance prior to the implementation of secondary mitigation measures. It should be noted that such views are localised and in close proximity of the Proposed Scheme (i.e. New Road) and effects would diminish with distance.
- 10.5.212. Users of main road network within 1 km of the Site: The sensitivity of main roads users (i.e. the A645 and A1041) is low. Taking a worst case scenario, the magnitude of change experienced by such road users prior to mitigation would be medium to negligible based on the relative orientation of the road, direction of travel, intervening vegetation and built form. Therefore, there is likely to be a direct, long term effect on the above receptors ranging from minor adverse, negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.



- 10.5.213. *Users of the local road network between 1 & 3 km of the Site:* The sensitivity of transport users using local roads between 1 & 3 km of the Site is medium. Taking a worst case scenario, the magnitude of change experienced by road users prior to mitigation is medium depending on the orientation of the road, direction of travel, intervening vegetation and built form. Therefore, there is likely to be a direct, long term effect on transport users of moderate adverse significance prior to the implementation of secondary mitigation measures. This is considered a significant effect.
- 10.5.214. Remaining effects on users of the main road network where the sensitivity of receptors is low and the magnitude of change varies from medium to negligible resulting in a direct, long term effect on the above receptors ranging from minor adverse, negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.215. Users of the transport network beyond 3 km of the Site and within the 10 km study area: The sensitivity of transport users beyond 3 km of the Site is medium to low, and the magnitude of change prior to mitigation, would be small to negligible based on the relative orientation of the road, direction of travel, intervening vegetation and built form. Therefore, there is likely to be a direct, temporary effect on transport users of minor adverse, negligible minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Education / Places of Worship

- 10.5.216. Users of educational facilities and places of worship to the south east, east and north east of the Existing Drax Power Station Complex would experience views of Unit X and Y. Effects would be also felt by receptors throughout the wider 10 km study area. The nature of effects summarised below would remain the same as Stage 2.
- 10.5.217. **Users within 1 km of the Site:** The sensitivity of users of educational facilities (Read School) is medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by users described above who have a direct and unfiltered view would be medium. Therefore, there is likely to be a direct, long term effect on users of moderate adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.218. Remaining users (i.e. Drax Church) have partial screening by other developments or vegetation or are orientated away from the Site. For these, the magnitude of change is negligible resulting in a direct, long term effect on the above receptors of negligible adverse significance prior to the implementation of secondary mitigation measures.
- 10.5.219. **Users between 1 & 3 km of the Site:** The sensitivity of users is medium. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by users between 1 & 3 km who have a direct and unfiltered view, is medium. Therefore, there is likely to be a direct, long term effect on recreational users of moderate adverse significance prior to the implementation of secondary mitigation measures which is considered a significant effect.
- 10.5.220. As above, remaining users would experience a range of effects from minor adverse to negligible adverse prior to the implementation of secondary mitigation measures.
- 10.5.221. *Users beyond 3 km of the Site and within the 10 km study area:* Views experienced by users beyond 3 km would vary depending on their relative position, intervening vegetation and



built form. The sensitivity of receptors would be medium, and the magnitude of change would vary from small to negligible resulting in a direct, temporary effect on the above receptors ranging from minor adverse to negligible adverse significance prior to the implementation of secondary mitigation measures.

Decommissioning

- 10.5.222. Effects associated with decommissioning would be temporary and largely similar to activities described under Stage 1. It is assumed that the demolition of structures would take place 25 years post completion of the Proposed Scheme (Stage 3) by which time planting would have matured. The extent of construction laydown areas to dismantle structures and accommodate demolition equipment would be comparable with the extent of land required for the construction laydown areas associated with the construction of the AGI and Power Station Site during Stages 1 and 2.
- 10.5.223. Key views would be associated with the dismantling of Units X and Y's stacks, related structures and infrastructure, and at a lower elevation and within more immediate local views, construction laydown areas. As described above views would range from full, partial to oblique with some views filtered/obscured by the built form and intervening vegetation (introduced as mitigation planting based on the original Weddle's plan and as part of the Proposed Scheme). It should be noted that whilst mitigation planting would be effective in screening some local, lower elevational views, views of taller structures would still be noticeable.
- 10.5.224. It is assumed that the Gas Pipeline would remain in situ and only structures associated with the AGI under Drax Limited's ownership (that is, not the MOC controlled by National Grid) would be removed; a temporary passing place would not be required. It is also assumed that if a requirement to provide the CCS plant has not arisen the Carbon capture readiness space (Development Parcel A and B) could be utilised for a construction laydown area for the purpose of decommissioning. If that space is not available (because of use for CCS), alternative land for construction laydown would be utilised, most likely within the Existing Drax Power Station Complex.
- 10.5.225. In summary whilst the effects associated with this Stage are similar to Stage 1, key differences relate to:
 - The dismantling of both Units X and Y, associated stacks, structures and infrastructure. Any part of the electrical connection owned by National Grid would remain.
 - A temporary construction laydown with a similar footprint to Stage 2 would be required on the assumption that there would be no further land take and this would include Development Parcel A.
 - Vegetation as part of Stage 1 and Stage 2 construction phases would have matured providing visual benefits.
- 10.5.226. It is considered that these differences would not give rise to any changes in effect between Stage 1 and decommissioning.

Residents

10.5.227. Residents within 1 km of the Site: The sensitivity of residential receptors is considered to be high. Taking a worst case scenario, the magnitude of change prior to mitigation experienced by residents within 1 km of the Site who have a direct and unfiltered view is medium. Therefore,



- there is likely to be a direct, temporary effect on immediate residential receptors of moderate major adverse significance. This includes residents of properties directly affected by the AGIs.
- 10.5.228. A proportion of residential receptors have partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect of minor moderate to negligible adverse significance. Such effects are not considered significant.
- 10.5.229. Residents between 1 & 3 km of the Power Station Site and AGI: The sensitivity of residents between 1 & 3 km who would experience a view is high, the magnitude of change would vary from medium to negligible depending on the screening of other development, vegetation or relative orientation to the Site. Therefore, there is a direct, temporary effect on the above receptors ranging from negligible adverse, minor moderate adverse, to moderate major adverse significance. Significant views would be experienced by residents on the edge of Barmby on the Marsh (and some scattered individual properties) with a clear view of the Proposed Scheme, who would experience a moderate to major adverse effect.
- 10.5.230. Residents beyond 3 km of the Site and within the 10 km study area: Views experienced by residents beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors is high, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect on the above receptors ranging from negligible adverse to minor -moderate adverse significance. Such effects are not considered significant.

Workers

- 10.5.231. Workers at the Drax Power Station and within 3 km of the Site: Based on worst case direct and unfiltered views appreciated by workers at the Existing Drax Power Station Complex and within 3 km of the Site, the sensitivity of power station workers and workers within 3 km of the Site is low, and the magnitude of change prior to mitigation is considered to be medium. Therefore, there is likely to be a direct, temporary effect on workers of minor adverse significance.
- 10.5.232. Workers beyond 3 km of the Site and within the 10 km study area: The sensitivity of workers throughout the 10 km study area is considered to be low, and the magnitude of change prior to mitigation, is considered to be small to negligible subject to the relative position of their area of work, intervening vegetation and built form. Therefore, there is likely to be a direct, temporary effect on workers of negligible adverse to negligible minor adverse significance.

Recreational Users

- 10.5.233. Local recreational users within 1 km of the Site: The sensitivity of recreational users using the TPT and NCN to the north of the River Ouse is considered to be high. Based on worst case view, the change arising from decommissioning would be of medium magnitude. This would give rise to a direct, temporary, short term moderate major adverse significant effect on recreational users of the TPT and NCN.
- 10.5.234. The sensitivity of other recreational users utilising the PRoW network, recreational facilities and sports grounds is medium. Based on a worst case view, the magnitude of change prior to mitigation experienced by such users within 1 km of the Site who have a direct and unfiltered



- view is medium. Therefore, there is likely to be a direct, temporary effect on recreational users of moderate adverse significance. This is considered a significant effect.
- 10.5.235. A proportion of other recreational receptors within 1 km have partial screening by other development or vegetation or are oriented away from the site. For these, the magnitude of change would vary from small to negligible resulting in a direct, temporary effect of minor adverse to negligible adverse significance. Such effects are not considered significant.
- 10.5.236. Recreational users between 1 & 3 km of the Site: The sensitivity of recreational users on the TPT and NCN to the north of the River Ouse is considered to be high. Based on worst case views, the change arising from decommissioning would be of medium magnitude. This would give rise to a direct, temporary moderate - major adverse significant effect on recreational users of the TPT and NCN.
- 10.5.237. The sensitivity of other recreational users between 1 & 3 km utilising the PRoW network, recreational facilities and sports grounds is medium. Based on a worst case view, the magnitude of change prior to mitigation experienced by such users between 1 & 3 km of the Site who have a direct and unfiltered view is medium. Therefore, there is likely to be a direct, temporary, short term effect on recreational users of moderate adverse significance which is considered a significant effect. As above remaining recreational users would experience a range of effects from minor adverse to negligible adverse significance prior to the implementation of mitigation measures.
- 10.5.238. Recreational users beyond 3 km of the Site and within the 10 km study area: Views experienced by recreational users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would range from high to medium, and the magnitude of change would vary from small to negligible resulting in a direct, temporary effect on the above receptors ranging from minor moderate adverse to negligible adverse significance. Such effects are not considered significant.

Users of Transport Routes:

- 10.5.239. Users of the local road network within 1 km of the Site: The sensitivity of local road users where there are direct, unfiltered views across to the Site and low levels of traffic on local roads is medium. Taking a worst case scenario, the magnitude of change experienced by local road users prior to mitigation is medium. Therefore, there is likely to be a direct, temporary effect on users of moderate adverse significances. This is considered a significant effect.
- 10.5.240. Users of main road network within 1 km of the Site: The sensitivity of main roads users (i.e. the A645 and A1041) is low. Taking the worst case scenario, the magnitude of change experienced by main road users prior to mitigation would be small to negligible depending on the relative orientation of the road, direction of travel, intervening vegetation and built form. Therefore, there is likely to be a direct, temporary effect on the above receptors ranging from negligible minor adverse to negligible adverse significances.
- 10.5.241. **Users of the transport network between 1 & 3 km of the Site:** The sensitivity of transport users between 1 & 3 km of the Site is considered to be medium. Taking a worst case scenario, the magnitude of change experienced by road users prior to mitigation is medium depending on the orientation of the road, direction of travel, intervening vegetation and built form.



Therefore, there is likely to be a direct, temporary effect on transport users of moderate adverse significance. This is considered a significant effect.

10.5.242. *Users of the transport network beyond 3 km of the Site and within the 10 km study area:* The sensitivity of transport users beyond 3 km is considered to be low, and the magnitude of change prior to mitigation, is considered to be small to negligible based on the relative orientation of the road, direction of travel, intervening vegetation and built form. Therefore, there is likely to be a direct, temporary effect on transport users of negligible - minor adverse to negligible adverse significance.

Education / Places of Worship

- 10.5.243. *Users within 1 km of the Site:* The sensitivity of users of educational facilities (Read School) is considered to be medium. Taking a worst case scenario, the magnitude of change experienced by users who have a direct and unfiltered view prior to mitigation is medium. Therefore, there is likely to be a direct, temporary effect on users of moderate adverse significance. This is considered a significant effect.
- 10.5.244. Remaining users (i.e. Drax Church) would experience limited views based on the relative position of the church and intervening vegetation / built form. The sensitivity of such receptors is medium, the magnitude of change is negligible resulting in a direct, temporary effect on the above receptors of negligible adverse significance.
- 10.5.245. *Users between 1 & 3 km of the Site:* The sensitivity of users is considered to be medium. Taking a worst case scenario, the magnitude of change experienced by users who have a direct and unfiltered view who would experience a direct and unfiltered view prior to mitigation is medium. Therefore, there is likely to be a direct, temporary effect on users of moderate adverse significance. This is considered a significant effect.
- 10.5.246. As above remaining users would experience a range of effects from minor adverse to negligible adverse significance.
- 10.5.247. Users beyond 3 km of the Site and within the 10 km study area: Views experienced by users beyond 3 km would vary depending on their relative position, intervening vegetation and built form. The sensitivity of receptors would be medium, and the magnitude of change would vary from small to negligible resulting in a direct, temporary effect on the above receptors ranging from minor adverse to negligible adverse significance.

10.6 Mitigation and Enhancement Measures

- 10.6.1. This section sets out the preliminary avoidance, mitigation and compensation measures likely to be required to address remaining significant effects on landscape and visual receptors as assessed above. These include:
 - Lighting Strategy;
 - Compensation areas:
 - Reinstatement of land and vegetation associated with the Gas Pipeline;
 - Indicative palette of planting drawn from existing species notable on site;
 - Impact avoidance techniques; and



- The preparation of a long term maintenance and management plan.
- 10.6.2. The Proposed Scheme would result in the temporary and permanent loss of some landscape features referred to in section 10.6. This includes the loss of ornamental trees, shrub and hedgerow planting, woodlands, tree belts, field hedgerows, scrub, grassland (semi improved, improved, marshy and amenity) as well as arable land and associated habitats.
- 10.6.3. To compensate for the loss of such features and respond to a need to reduce the localised visual effects, enhance local landscape character, improve connectivity and reinforce some of Weddle's aspirations (such as reducing visual clutter) the following mitigation measures, techniques and plans are proposed.

Lighting Strategy

- 10.6.4. Permanent lighting would be required on the Power Station Site (including road and area lighting), the AGIs and GRF/compressor station. New lighting would seek to minimise any off site effects and use specifically designed lighting equipment that reduces the upward spread of light and minimises glare. It is assumed proposed lighting would comply with existing standards applied to the Existing Drax Power Station Complex.
- 10.6.5. Mitigation measures would consider specific working hours, controlled lighting associated with the AGIs and the GRF / Compressor Station and measures designed to reduce unnecessary light spill outside the Site Boundary and avoiding unnecessary sky glow.
- 10.6.6. Requirements are included in Schedule 2 of the draft DCO (Document Ref. 3.1) requiring submission and approval of lighting strategies both in relation to temporary lighting during construction and permanent lighting once the Proposed Scheme is operational.

Compensation Areas: Mitigation for Landscape and associated Habitat Loss

- 10.6.7. Parcels of land on and/or off the Power Station Site within the confines of the Site Boundary, plus areas of land outside the Site Boundary but under Drax ownership have been identified to compensate and offset landscape / habitats lost as a result of construction, site clearance and/or the construction and retention of permanent infrastructure. The extent of proposed mitigation measures are the same for just one unit scenario; Unit X (Stage 1) as for two Units X and Y (Stage 2).
- 10.6.8. Such parcels, referred to as "Compensation Areas" and discussed in further detail below, include appropriate enhancement and landscape measures in the form of new trees / coppice woodland, scrub, hedgerows, scrubland mosaic and grassland. Use of the Compensation Areas in relation to habitat loss and protected species affected by the Proposed Scheme is discussed in Chapter 9 (Biodiversity).
- 10.6.9. Opportunities for further on and off site planting are limited due to land constraints. Drax does not have the extent of land holding that was available in the 1960's when the original power station was constructed (and the Weddle strategy was prepared) and is constrained by the Order limits and third party ownership. During the 1960's government had greater powers to access and acquire land than it has today. The extent of land acquisition for landscape mitigation has been minimised to reduce the impact on current landholders' agricultural interests. To determine the extent of landscape/habitat required for compensation areas and enhancement measures, the DEFRA metric calculates areas of net-loss arising from the



- Proposed Scheme (Stages 0 to 3) which would subsequently provide the expected habitat areas needed for biodiversity net gain.
- 10.6.10. Compensation Areas proposed by Drax are detailed in the outline landscape and biodiversity strategy and associated landscape and biodiversity mitigation plans (Document Ref. 6.7) submitted with this DCO Application, and approval and implementation of which is secured by a requirement in Schedule 2 of the draft DCO (Document Ref. 3.1). It should be noted that since replacement planting takes time to mature, immediate benefits would not be realised and maturity is dependent on the size and species planted. Planting would take place during Stage 0, 1 and 2 as detailed in the outline landscape and biodiversity strategy. An indicative timescale associated with the maturity of plants is summarised below:
 - 1-3 years for grassland;
 - 3-5 years for hedgerows; and
 - 15 years onwards for trees.
- 10.6.11. Planting would accord with BSi standards and where new woodland planting is introduced this would accord with the UK Forest Standard.

Reinstatement of land and vegetation associated with the Gas Pipeline

- 10.6.12. Micro siting of the Gas Pipeline would be undertaken so that soil stripped and the trench dug along the route avoids significant trees and hedge lines wherever possible. A temporary haul road would be constructed along the route corridor in order to provide access for pipe laying. Temporary storage areas for soil and subsoil would run adjacent to the haul route and occasional traffic and storage of vehicles would be visible along the route. Overall it is assumed that a 30 m corridor may be required to accommodate the laying of the pipeline, haul route, temporary site hoardings and storage areas.
- 10.6.13. Due to constraints on planting over pipelines, the reinstatement of the land once the pipeline has been installed would be with existing type of turf, shallow rooting native shrubs and/or small trees. Where possible, reinstatement would involve the careful handling of soils and a return to the existing habitat type. Reinstated planting and new planting would take place on completion of the Gas Pipeline in Stage 1.

Proposed Planting Palette

10.6.14. The proposed planting palette would be drawn from the Extended Phase 1 Habitat Surveys, landscape field visits and Weddle's Landscape Management Report 1987 / Revised July 1990. Further details are provided in the outline landscape and biodiversity strategy and associated landscape and biodiversity mitigation plans (Document Ref. 6.7).

Impact avoidance techniques

10.6.15. Impact avoidance techniques would be implemented, as relevant and appropriate, prior to and during the construction phase of each Work Order and associated development parcel. Further details are provided in the outline landscape and biodiversity strategy and its implementation would therefore be secured by a requirement to the draft DCO (Document Ref. 3.1). Techniques would include:



- Clerk of work and toolbox talks would be advised by the ecologist and landscape architect based on relevant and appropriate environmental commitments, the findings of the pre-construction surveys and work number programmes surveys.
- The impact of the development on existing trees would be reviewed by an arboriculturalist to determine the condition and quality of trees and the extent root protection areas. Current best practice should be followed including:
 - British Standard (BS) 5837:2012 Trees in relation to design, demolition and construction Recommendations (Ref. 10.16); and
 - National Joint Utilities (NJUG) Guidelines for the Planning, installation and Maintenance of Utility Apparatus in Proximity of Trees (Ref. 10.23).
 - Energy Network Association Technical Specification 43-8, Issue 4 2015 (Ref 10.24)
 - Working areas would be offset from existing and retained landscape features and associated habitat.
- Proposed planting would adhere to easements associated with the Gas Pipeline and overhead cables.
- Trenchless construction techniques would be used to avoid the removal of existing trees and hedgerows along the Gas Pipeline where possible.
- The spread of invasive non native species would be controlled by a method statement which would be produced in receipt of the specific Site construction works.
- 10.6.16. Planting constraints such as underground or overhead services and infrastructure has been taken into consideration.

Management and Maintenance Plan

10.6.17. All new landscape/habitat creation would be subject to a long term (25 year) management and maintenance plan to ensure the full and successful establishment of the planting. The management and maintenance plan would form part of the landscape and biodiversity strategy to be approved and implemented pursuant to a requirement in Schedule 2 of the draft DCO (Document Ref. 3.1). The plan would prescribe the maintenance regimes for all different landscape / habitats considering the aims, objectives and functions of each area of planting / habitat.

10.7 Residual Effects

Assessment of Likely Residual Landscape Effects

10.7.1. This section summarises the residual landscape effects.

Stage 0 - Site Reconfiguration Works

Local Landscape Character

10.7.2. Development Parcel H would result in the loss of landscape features outlined in Section 10.5 above. Such features include the loss of amenity grassland, hedgerows and broadleaved parkland / scattered trees. Whilst mitigation measures would be undertaken as part of Stage 0 and would include additional broadleaved parkland / scattered trees, the LVIA considers that such benefits would not have been realised during this Stage and therefore there would be no change in effect. On this basis the sensitivity of local landscape character is medium, and the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term, residual effect on local landscape character of moderate



adverse following the implementation of mitigation measures and as planting matures. Such measures would be implemented through the DCO application.

Stage 1 – Construction of Unit X

Local Landscape Character

- 10.7.3. Mitigation measures would be undertaken as part of this stage, however, the LVIA considers that benefits would not have been realised and therefore there would be no change in effect. On this basis local landscape character is medium, and the magnitude of change, following mitigation and until planting is established is medium. Therefore, there is likely to be a direct, permanent, medium to long term residual effect on local landscape character of moderate adverse significance following the implementation of mitigation measures and until vegetation matures. This effect is considered significant.
- 10.7.4. It should be noted that it is assumed that temporary arable land and grassland along the Gas Pipeline would be reinstated post construction of the Gas Pipeline within Stage 1.

Stage 2 – Operation of Unit X and Construction of Unit Y

Landscape Character

- 10.7.5. LCTs / LCAs which would experience a significant adverse residual effect include:
 - 23 Levels Farmland and 24 River Floodplain (North Yorkshire and York Landscape Characterisation).
 - LCT4 River Corridors and in particularly 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor (East Riding of Yorkshire).
- 10.7.6. Mitigation measures would be undertaken as part of this stage, however, the LVIA considers that benefits would not have been realised and therefore there would be no change in effect. The sensitivity of LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor is medium, and the magnitude of change following mitigation, is medium. Therefore, there is likely to be a direct, long term, permanent residual effect on the above LCTs and LCAs of moderate adverse significance following the implementation of mitigation measures. This effect is considered significant.

Landscape Designations

10.7.7. Mitigation measures would be undertaken as part of this stage, however, the LVIA considers that benefits would not have been realised and therefore there would be no change in effect. The sensitivity of the Lower Derwent ILA is high, and the magnitude of change following to mitigation, is medium. Therefore, there is likely to be a direct, long term, permanent effect on the ILA of moderate to major adverse significance following the implementation of mitigation measures. It should be noted that the LVIA considers that the effects would be localised and diminish with distance.

Local Landscape Character

10.7.8. Mitigation measures implemented up to and including this stage would have achieved between three to five years of growth subject to the stage at which they were planted. The



- LVIA considers that the benefits from mitigation planting associated with Stage 2 would not have been realised and therefore there would be no change in effect.
- 10.7.9. The sensitivity of local landscape character is medium, and the magnitude of change, following mitigation and until planting is established is medium. Therefore, there is likely to be a direct, permanent, medium to long term residual effect on local landscape character of moderate adverse significance following the implementation of mitigation measures and until vegetation matures.

Stage 3 – Operation of Units X and Y

10.7.10. It is considered that mitigation measures would only be effective 15 years after the completion of planting during Stage 2 (that is, 15 years from the start of Stage 3). At the end of Stage 2 it is assumed there would be 0 years of planting growth, whilst there would be approximately three to five years of planting growth associated with mitigation measures implemented during Stage 2 and on completion of Unit X. On this basis the residual effects have been assessed based on planting established on completion of year 0 (of Stage 3, being operation of Units X and Y) and 15 years after the start of Stage 3 for landscape character, landscape designations and local landscape character.

Landscape Character

- 10.7.11. LCTs / LCAs which would experience a significant adverse residual effect include:
 - 23 Levels Farmland and 24 River Floodplain (North Yorkshire and York Landscape Characterisation).
 - LCT4 River Corridors and in particular 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor (East Riding of Yorkshire).
- 10.7.12. A year 0 the sensitivity of LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor is medium, and the magnitude of change following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term, residual effect on the above LCTs and LCAs of moderate adverse significance following the implementation of mitigation measures.
- 10.7.13. Based on 15 years of growth the magnitude of change would be remain as medium and there would be no change in the effects described above following the establishment of planting. Mitigation measures are concentrated within the immediate vicinity of the Existing Power Station Complex. Planting would not screen the presence of the proposed stacks and therefore reduce the impact of changes to experiential and perpetual qualities of the Existing Drax Power Station Complex.

Landscape Designations

10.7.14. At year 0 the sensitivity of the Lower Derwent ILA is high, and the magnitude of change following the mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term effect on the ILA of moderate to major adverse significance following the implementation of mitigation measures. It should be noted that the LVIA considers that the effects would be localised and diminish with distance.



10.7.15. Based on 15 years of growth the magnitude of change would be remain as medium and there would be no change in the effects described above following the establishment of planting. Mitigation measures are concentrated within the immediate vicinity of the Existing Power Station Complex. Planting would not screen the presence of the proposed stacks and therefore reduce the impact of changes to experiential and perpetual qualities of the Existing Drax Power Station Complex.

Local Landscape Character

- 10.7.16. At year 0 the sensitivity of local landscape character is medium, and the magnitude of change, following mitigation and until planting is established is medium. Therefore, there is likely to be a direct, permanent, medium to long term residual effect on local landscape character of moderate adverse significance following the implementation of mitigation measures and until vegetation matures.
- 10.7.17. Based on 15 years of growth the sensitivity of local landscape character is medium, and the magnitude of change, following mitigation and after planting has matured is small. Therefore, there is likely to be a direct, permanent, medium to long term residual effect on local landscape character of minor beneficial significance following the implementation of mitigation measures and establishment of vegetation.

Decommissioning

Landscape Character

- 10.7.18. LCTs / LCAs which would experience a significant adverse residual effect include:
 - 23 Levels Farmland and 24 River Floodplain (North Yorkshire and York Landscape Characterisation).
 - LCT4 River Corridors and in particularly 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor (East Riding of Yorkshire).
- 10.7.19. The sensitivity of LCT 23 Levels Farmland, LCT 24 River Floodplain, LCT4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor is medium, and the magnitude of change following mitigation, is also considered to be medium. Therefore, there is likely to be a direct, temporary, short term, residual effect on the above LCTs and LCAs of moderate adverse significance. Mitigation measures implemented through Stage 0 to 2 with a minimum of 25 years of growth and potentially lost through decommissioning work would not generate a change in effect since proposed mitigation measures are concentrated within the immediate vicinity of the Existing Drax Power Station Complex.

Landscape Designations

10.7.20. The sensitivity of the Lower Derwent ILA is high, and the magnitude of change following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term effect on the ILA of moderate to major adverse significance h Mitigation measures implemented through Stage 0 to 2 with a minimum of 25 years of growth and potentially lost through decommissioning work would not generate a change in effect since proposed mitigation measures are concentrated within the immediate vicinity of the Existing Drax Power Station



Complex. It should be noted that the LVIA considers that the effects would be localised and diminish with distance.

Local Landscape Character

10.7.21. The sensitivity of local landscape character is considered to be medium and the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short to long term residual effect on local landscape character of moderate adverse significance. This is considered a significant effect. It is assumed that whilst some mitigation planting would be lost as a consequence of decommissioning, some planting including around the front of development Parcel H and AGIs would be retained and therefore there would be a slight change in effect from moderate – major to moderate adverse.

Assessment of Likely Residual Visual Effects Stage 0 – Site Reconfiguration Works

10.7.22. Residents within 1 km of the Site: The sensitivity of local residents within a 1 km radius of the Site is high, and the magnitude of change following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term effect on immediate residential receptors of moderate - major adverse significance following the implementation of mitigation measures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.

Stage 1 – Construction of Unit X

- 10.7.23. Residents within 1 km of the Site considering both the Power Station Site and the Pipeline Area: The sensitivity of local residents within a 1 km radius of the Site is high, and taking a worst case scenario the magnitude of change following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term effect on residential receptors within 1 km of moderate major adverse significance following the implementation of mitigation measures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.
- 10.7.24. Residents between 1 & 3 km of the Site considering both the Power Station Site and the Pipeline Area: The sensitivity of residential receptors between 1-3 km is high, and taking a worst case scenario the magnitude of change, following mitigation, is medium to negligible. Therefore, there is likely to be a direct, temporary, short term residual effect on residents between 1-3 km of moderate major adverse, minor moderate adverse to negligible adverse significance following the implementation of mitigation measures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.
- 10.7.25. Local recreational users within 1 km and between 1 & 3 km using the TPT/ NCN: The sensitivity of recreational receptors on the TPT / NCN within 1 km and between 1 & 3 km is high. Based on worst case views, the magnitude of change arising from Stage 1 and following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect users of moderate to major adverse significance following the implementation of mitigation measures. The LVIA considers that benefits associated with such mitigation measure would not have been realised and therefore there would be no change in effect.



- 10.7.26. Local recreational users within 1 km and between 1 & 3 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of recreational receptors within 1 km and between 1 & 3 km is medium. Based on a worst case view, the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect on users of moderate adverse significance following the implementation of mitigation measures. The LVIA considers that benefits associated with such mitigation measure would not have been realised and therefore there would be no change in effect.
- 10.7.27. Users of the local road network within 1 km and between 1 & 3 km: The sensitivity of local road users within 1 km and between 1 & 3 km is medium. Based on worst case views, the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect on users of moderate adverse significance following the implementation of mitigation measures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.
- 10.7.28. Users of educational facilities / places of worship within 1 km and between 1-& 3 km of the Site: The sensitivity of users of educational facilities / places of worship within 1 km and between 1 & 3 km is medium. Based on a worst case view, the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect on users of moderate adverse significance following the implementation of mitigation measures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.

Stage 2 - Operation of Unit X and Construction of Unit Y

- 10.7.29. Residents within 1 km of the Site considering both the Power Station Site and the Pipeline Area: The sensitivity of local residents within a 1 km radius of the Site is high. Taking a worst case scenario the magnitude of change following mitigation, is large or medium. Therefore, there is likely to be a direct, permanent, long term effect on immediate residential receptors of major adverse / moderate major adverse significance following the implementation of mitigation measures and before planting matures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.
- 10.7.30. Residents between 1 & 3 km of the Site considering both the Power Station Site and the Pipeline Area: The sensitivity of residential receptors between 1 & 3 km is high. Taking a worst case scenario, the magnitude of change, following mitigation, is medium to negligible. Therefore, there is likely to be a direct, permanent, long term residual effect on residents between 1 & 3 km of moderate -major adverse to negligible adverse significance following the implementation of mitigation measures and before planting matures. The LVIA considers that benefits associated with such mitigation measured would not have been realised and therefore there would be no change in effect.
- 10.7.31. Local recreational users within 1 km and between 1 & 3 km using the TPT/NCN: The sensitivity of recreational receptors on the TPT and NCN within 1 km and between 1 & 3 km is high. Based on the worst case view, the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term residual effect users of moderate major adverse significance following the implementation of mitigation measures



- and before planting matures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.
- 10.7.32. Local recreational users within 1 km and between 1 & 3 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of recreational receptors within 1 km (including users immediately adjacent to construction laydown areas) and between 1 & 3 km is large to medium. Based on the worst case view, the magnitude of change, following mitigation, is large to medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of major adverse to major -moderate adverse significance following the implementation of mitigation measures and before planting matures. Mitigation measures would be undertaken as part of this stage, however, the LVIA considers that benefits would not have been realised and therefore there would be no change in effect.
- 10.7.33. Users of the local road network within 1 km: The sensitivity of local road users within 1 km is medium. Based on worst case views, the magnitude of change, following mitigation, is large to medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate major and moderate adverse significance following the implementation of mitigation measures and before planting matures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.
- 10.7.34. Users of the local road network between 1 & 3 km: The sensitivity of local road users between 1 & 3 km is medium. Based on worst case views the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate adverse significance following the implementation of mitigation measures and before planting matures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.
- 10.7.35. Users of educational facilities / places of worship within 1 km of the Site and who would experience a direct view: The sensitivity of users of educational facilities / places of worship within 1 km is medium. Taking the worst case scenario, magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate adverse significance following the implementation of mitigation measures and before planting matures. The LVIA considers that benefits associated with such mitigation measures would not have been realised and therefore there would be no change in effect.

Stage 3 – Operation of Units X and Y

10.7.36. As discussed above it is considered that mitigation measures would only be effective 15 years after the completion of the planting in Stage 2. On completion of Stage 2 (the start of Stage 3) there would be 0 years of planting growth, whilst there would be approximately three to five years of planting growth associated with mitigation measures implemented during Stage 1 and on completion of Unit X. This section is therefore reviewed based on planting established on completion of year 0 (at the start of Stage 3) and 15 years later (after the completion of Stage 2 / start of Stage 3).



10-97

Residents within 1 km of the Site considering both the Power Station Site and the Pipeline Area:

- 10.7.37. At year 0 the sensitivity of local residents within a 1 km radius of the Site is high. Taking a worst case scenario, the magnitude of change following mitigation is large to medium. Therefore, there is likely to be a direct, permanent, long term effect on immediate residential receptors of major and moderate major adverse significance following the implementation of mitigation measures and as planting matures.
- 10.7.38. Based on 15 years of growth and taking a worst case scenario the magnitude of change following mitigation would vary from large to small. Therefore, there is likely to be a direct, permanent, long term effect on immediate residential receptors of major adverse, moderate major adverse to minor moderate adverse significance following the establishment of planting. Effects range from significant (moderate major and moderate adverse) to not significant (minor moderate adverse). The change in effects would be subject to the presence and proximity of mitigation planting which would provide partial screening for some visual receptors of the Proposed Scheme.

Residents between 1 & 3 km of the Site considering both the Power Station Site and Pipeline Area:

- 10.7.39. At year 0 the sensitivity of residential receptors between 1 & 3 km is high. Taking a worst case scenario the magnitude of change, following mitigation, is medium to negligible. Therefore, there is likely to be a direct, permanent, long term residual effect on residents between 1 & 3 km of moderate major adverse, minor moderate adverse, minor adverse to negligible adverse significance following the implementation of mitigation measures and as planting matures. Minor -moderate adverse effects are not significant.
- 10.7.40. Based on 15 years of growth the magnitude of change would remain as medium to negligible and there would be no change in the effects described above following the establishment of planting. Mitigation measures in the form of planting would not screen views across to the Proposed Power Station.
- 10.7.41. Local recreational users within 1 km and between 1 & 3 km using the TPT/ NCN: The sensitivity of recreational receptors on the TCT / NCN within 1 km and between 1 & 3 km is high. Based on a worst case scenario, the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate major adverse significance following the implementation of mitigation measures and as planting matures.
- 10.7.42. Based on 15 years of growth the magnitude of change would be remain as medium and there would be no change in the effects described above following the establishment of planting. Mitigation measures in the form of planting would not screen views across to the Proposed Power Station.
- 10.7.43. Local recreational users within 1 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of recreational receptors within 1 km (including users immediately adjacent to construction laydown areas) is medium. Based on a worst case scenario, the magnitude of change, following mitigation, is large to medium.



- Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate major and moderate adverse significance following the implementation of mitigation measures and as planting matures. Effects are considered significant.
- 10.7.44. Based on 15 years of growth and taking a worst case scenario the magnitude of change for recreational users within 1 km following mitigation would vary from large to small. Therefore, there is likely to be a direct, permanent, long term effect on recreational receptors within 1 km of the Site of moderate major, moderate adverse to minor adverse significance following the establishment of planting. Effects range from significant (moderate major and moderate adverse) to not significant (minor adverse). The change in effects would be subject to the presence and proximity of mitigation planting to the visual receptor.
- 10.7.45. Local recreational users between 1 & 3 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of recreational receptors between 1- 3 km is medium. Based on a worst case scenario, the magnitude of change, following mitigation, is large to medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate major and moderate adverse significance following the implementation of mitigation measures and as planting matures. Effects are considered significant.
- 10.7.46. Based on 15 years of growth and taking a worst case scenario the magnitude of change for recreational users between 1 & 3 km following mitigation would vary from medium to small. Therefore, there is likely to be a direct, permanent, long term effect on recreational receptors between 1 & 3 km of the Site of moderate adverse to minor adverse significance following the establishment of planting. Effects range from significant (moderate adverse) to not significant (minor adverse). The change in effects would be subject to the presence and proximity of mitigation planting to the visual receptor.
- 10.7.47. Users of the local road network within 1 km: The sensitivity of local road users within 1 km is medium. Based on a worst case scenario the magnitude of change, following mitigation, is large to medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate major adverse and moderate adverse significance following the implementation of mitigation measures and as planting matures.
- 10.7.48. Based on 15 years of growth and taking a worst case scenario the magnitude of change for local road users within 1 km of the Site would vary from large to small. Therefore, there is likely to be a direct, permanent, long term effect on local road users within 1 km of the Site of moderate major, moderate to minor adverse significance following the establishment of planting. Effects range from significant (moderate major, moderate adverse) to not significant (minor adverse). The change in effects would be subject to the presence and proximity of mitigation planting to the visual receptor.
- 10.7.49. Users of the local road network between 1 & 3 km: The sensitivity of local road users between 1 & 3 km is medium. Based on a worst case scenario the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate adverse significance following the implementation of mitigation measures and as planting matures.
- 10.7.50. Based on 15 years of growth and taking a worst case scenario the magnitude of change for local road users between 1 & 3 km of the Site would vary from medium to small. Therefore,



there is likely to be a direct, permanent, long term effect on local road users between 1 & 3 km of the Site of moderate to minor adverse significance following the establishment of planting. Effects range from significant (moderate adverse) to not significant (minor adverse). The change in effects would be subject to the presence and proximity of mitigation planting to the visual receptor.

- 10.7.51. Users of educational facilities / places of worship within 1 km of the Site and who would experience a direct view: The sensitivity of users of educational facilities / places of worship within 1 km is medium. Based on worst case views the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, permanent, long term residual effect on users of moderate adverse significance following the implementation of mitigation measures.
- 10.7.52. Based on 15 years of growth the magnitude of change would be remain as medium and there would be no change in the effects described above following the establishment of planting as mitigation measures in the form of planting would not screen views across to the Proposed Power Station.

Decommissioning

- 10.7.53. Residents within 1 km of the Site considering the Power Station Site and the AGIs: The sensitivity of local residents within a 1 km radius of the Site is high. Taking a worst case scenario the magnitude of change following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term effect on immediate residential receptors of moderate major adverse significance. It is assumed that mitigation measures implemented through Stage 0 to 2 with a minimum of 25 years of growth would be lost through decommissioning work.
- 10.7.54. Residents between 1 & 3 km of the Site considering both the Power Station Site and the AGIs: The sensitivity of residential receptors between 1 & 3 km is high. Taking a worst case scenario the magnitude of change, following mitigation, is medium to negligible. Therefore, there is likely to be a direct, temporary, short term residual effect residents between 1 & 3 km of moderate major adverse to negligible adverse significance. It is assumed that mitigation measures implemented through Stage 0 to 2 with a minimum of 25 years of growth would be lost through decommissioning work.
- 10.7.55. Local recreational users within 1 km and between 1 & 3 km using the TPT/NCN: The sensitivity of recreational receptors within 1 km and between 1 & 3 km is high, and the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect users of moderate major adverse significance. It is assumed that mitigation measures implemented through Stage 0 to 2 with a minimum of 25 years of growth would be lost through decommissioning work.
- 10.7.56. Local recreational users within 1 km and between 1 & 3 km using the local PRoW network, recreational facilities and sports grounds: The sensitivity of recreational receptors within 1 km and between 1 & 3 km is medium, and the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect on users of moderate adverse significance. It is assumed that mitigation measures implemented



- through Stage 0 to 2 with a minimum of 25 years of growth would be lost through decommissioning work.
- 10.7.57. Users of the local road network within 1 km and between 1 & 3 km: The sensitivity of local road users within 1 km and between 1 & 3 km is medium, and the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect on users of moderate adverse significance. It is assumed that mitigation measures implemented through Stage 0 to 2 with a minimum of 25 years of growth would be lost through decommissioning work.
- 10.7.58. Users of educational facilities / places of worship within 1 km and between 1 & 3 km of the Site: The sensitivity of users of educational facilities / places of worship within 1 km and between 1 & 3 km is medium. Based on a worst case scenario the magnitude of change, following mitigation, is medium. Therefore, there is likely to be a direct, temporary, short term residual effect on users of moderate adverse significance. It is assumed that mitigation measures implemented through Stage 0 to 2 with a minimum of 25 years of growth would be lost through decommissioning work.

10.8 Limitations and Assumptions

- 10.8.1. The assessment made the following assumptions:
 - The assessment of the views was taken from publically accessible locations and professional judgement. A residential amenity survey was not undertaken.
 - The visual envelope for the Proposed Scheme was prepared on the basis of desk based review and production of ZTVs (using LiDAR and base earth data) followed by survey work and the application of professional judgement. Where gaps in data existed these were verified in the field. This related to the lack of LiDAR data to the north of the Site and a distortion in LiDAR data resulting from the plumes associated within the existing cooling towers.
 - The LVIA includes a comprehensive visual assessment describing and assessing the
 effects from all the potentially affected visual receptors (settlements, groups of receptors
 and individual isolated receptors) within the study area. This is illustrated through
 photographs from a series of agreed representative viewpoints to give a clear picture of
 the anticipated effects, with visualisations / photomontages from selected key
 viewpoints.

10.9 Summary

10.9.1. The LVIA recognises the considerable effort which went into the design, aesthetics and mitigation of the original 1960's proposals for the Drax Power Station; the setting and treatment of the buildings and structures was considered of utmost importance. Consideration was given to the need to reduce visual coalescence, visual clutter and achieve a simple design and symmetry. Building materials and colours were carefully considered to be reflective and as light as possible to equate to the sky and reduce their visual impact. Substantial off site mitigation in the form of planting was introduced at a scale reflective of the size of the original power station creating the illusion of extensive woodland when viewed across the flat landscape and connecting minor elements in the landscape. Planting sought to reduce the number of completely open views from main roads and villages



- 10.9.2. Environmental and technological constraints have informed the siting of the Proposed Scheme, its extent and height. Alternative solutions such as combining stacks and rechannelling emissions through the existing chimney were considered in order to mitigate landscape and visual impacts but such options were not feasible. Inherent design measures have however considered the colour and lighting of the Proposed Scheme and the retention of existing vegetation (which serves an important screening function) where feasible.
- 10.9.3. Whilst it is acknowledged that as a consequence of environmental and engineering constraints, the Proposed Scheme would jar from certain elevations and conflict with the symmetry of the original Weddle's design resulting in visual coalescence, visual clutter and discordant views, it should be noted that since Weddle's original design other developments on the Existing Drax Power Station Complex have added to the visual clutter and widened the development footprint. Such developments include the biomass co-firing facilities, the biomass storage domes as well as the more recent Lytag plant to the north west of the Existing Drax Power Station Complex.

Landscape Character

- 10.9.4. The assessment has determined that there would be significant adverse effects of the Proposed Scheme on landscape character including LCT Levels Farmland, LCT 24 River Floodplains, LCT 4 River Corridors and in particularly LCA 4A Derwent Valley, 4B River Ouse Corridor and 4D River Aire corridor. Equally there would be significant adverse effects on the Lower Derwent ILA, though given the linear nature of the local designation effects would be localised and diminished with distance.
- 10.9.5. Significant adverse effects are associated with aesthetic and perceptual qualities of the new units, stacks and associated structures against the Existing Drax Power Station Complex which is a dominant feature in the landscape with a strong, almost iconic "presence". The stacks associated with Unit X and Y would protrude above the horizontal lines created by the tops of the cooling towers, forming a strong contrast to the existing mass due to their narrow width and form, visually "cluttering" the top of the towers, resulting in a slightly discordant view from certain angles and visual coalescence. The scale of the development would increase in terms of overall footprint and impact on local landscape features on and off site. Subject to appropriate climatic conditions, plumes from the existing cooling towers would mask views of the tops of the stacks in certain directions.
- 10.9.6. The Proposed Scheme would be barely perceptible when viewed against the western elevation of the Existing Drax Power Station Complex, whereas views beyond 3 km across to the eastern elevation would be read in context of other large scale industry and power generation which are a well-established land-use within the study area.
- 10.9.7. In terms of local landscape features significant adverse effects would be notable during Stages 0 to 2, however effects would diminish (to varying degrees) once planting has matured 15 years post Stage 3. Effects would vary depending on the timescale by which vegetation reaches maturity.
- 10.9.8. Compensation Areas have been identified to mitigate/offset against the loss of local landscape features on and off the Power Station Site, respond to specific localised visual effects, enhance landscape character, improve connectivity and reinforce some of Weddle's



aspirations. Drax does not however have the extent of land holdings that was available in the 1960's and is constrained by the Site Boundary, and on this basis the majority of the new Compensation Areas are concentrated to the north and north west of the Proposed Scheme.

Visual amenity

- 10.9.9. There would inevitably be significant adverse effects on visual amenity as a consequence of the Proposed Scheme. NPS EN-2 paragraph 2.6.5 states that "it is not possible to eliminate the visual impacts associated with a fossil generating station. Mitigation is therefore to reduce the visual intrusion of the buildings in the landscape and minimise impacts on visual amenity as far as reasonably practicable". A best fit solution should be designed to reduce the visual impacts giving consideration to the design and size, external finish and colour as far as compliance with engineering and environmental requirements permit (NPS EN-2 paragraph 2.6.6).
- 10.9.10. As it is not possible to eliminate the visual impact of the Proposed Scheme, mitigation, where feasible through the proposed Compensation Areas detailed above has focused on reducing visual intrusion at a local level and minimising the impact on visual amenity for immediate visual receptors. Proposals include screening the impact of the Proposed Scheme on views from receptors close to Wren Hall Lane as well as screening adjacent to the AGIs and along part of Rusholme Lane.
- 10.9.11. Significant adverse effects would therefore remain on visual receptors within 3 km of the Proposed Scheme particularly associated with local residents, users of the Trans Pennine Trail and National Cycle Network both of whom have a high sensitivity to change, and local road users within 1 km of the Site where the magnitude of change at specific stages of the Proposed Scheme is large. Significant effects relate to receptors who would have a direct view of the Proposed Scheme. Effects on other visual receptors would be less based on proximity, orientation, intervening vegetation and built form.
- 10.9.12. This assessment has been completed assuming the delivery of embedded mitigation measures as part of the Proposed Scheme. It should be noted that the detailed design, external appearance and landscaping of the Proposed Scheme have yet to be finalised and requirements to the draft DCO (Document Ref. 3.1) provide for the approval of the detail of the appearance of the Proposed Scheme and the approval and implementation of the Outline Landscape and Biodiversity Strategy prior to construction.



Table 10-15 - Summary of Landscape Effects Table for the Landscape and Visual Chapter

Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Stage 0 – Red	configuration Works			•
Local landscape character	Combination of local landscape features	Moderate / - /P / D /LT	Reinstatement of planting not proposed until end of Stage 0 informed by the outline landscape and biodiversity strategy and mitigation plans.	Moderate / - / P/ D / LT
Stage 1 – Cor	nstruction of Unit X			
Local landscape character	Combination of local landscape features	Moderate / - /P / D /LT	New planting where feasible informed by the outline landscape and biodiversity strategy and mitigation plans prior to reaching maturity.	Moderate / - / P / D / MT to LT
Stage 2 – Ope	eration of Unit X and Const	ruction of Unit Y		
Landscape Character	CT 23 Levels Farmland	Moderate / - /P / D /LT	None Proposed	Moderate / - / P / D /LT
Landscape Character	LCT 24 River Floodplain	Moderate / - /P / D /LT	None Proposed	Moderate / - / P / D /LT
Landscape Character	LCT4 River Corridors - LCA 4A Derwent Valley,	Moderate / - /P / D /LT	None Proposed	Moderate / - / P / D /LT
Landscape Character	LCT4 River Corridors 4B River Ouse Corridor	Moderate / - / P / D /LT	None Proposed	Moderate / - / P / D /LT



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Landscape Character	LCT4 River Corridors - 4D River Aire	Moderate / - / P / D /LT	None Proposed	Moderate / - / P / D /LT
Local Landscape Designation	Lower Derwent ILA	Moderate - major / - / P / D/ LT	None Proposed	Moderate - major / - / P / D / LT
Local landscape character	Combination of local landscape features	Moderate / - /P / D / LT	New planting where feasible informed by the outline landscape and biodiversity strategy and mitigation plans – mitigation works implemented during Stage 2	Moderate / - /P / D /MT to LT
Stage 3 – Ope	eration of Units X and Y	ı		1
Landscape Character	CT 23 Levels Farmland	Moderate / - /P / D /LT	None Proposed	Year 0 and Year 15: Moderate / - / P / D /LT
Landscape Character	LCT 24 River Floodplain	Moderate / - /P / D/ LT	None Proposed	Year 0 and Year 15: Moderate / - / P / D / LT
Landscape Character	LCT4 River Corridors - LCA 4A Derwent Valley,	Moderate / - / P / D/ LT	None Proposed	Year 0 and Year 15: Moderate / - / P / D / LT
Landscape Character	LCT4 River Corridors 4B River Ouse Corridor	Moderate / - / P / D / LT	None Proposed	Year 0 and Year 15: Moderate / - / P / D / LT
Landscape Character	LCT4 River Corridors - 4D River Aire	Moderate / - / P / D/ LT	None Proposed	Year 0 and Year 15:



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
				Moderate / - / P / D / LT
Local Landscape Designation	Lower Derwent ILA	Moderate - major / - / P / D / LT	None Proposed	Year 0 and Year 15: Moderate - major / - / P / D / LT
Local landscape character	New planting	Moderate / - / P / D / ST to LT	New planting where feasible informed by the outline landscape and biodiversity strategy and mitigation plans. Mitigation works implemented during Stage 1 and 2.	Year 0: Moderate / - / P/ D LT Year 15: Minor / + / P / D /MT to LT
Decommissio	ning	1		
Landscape Character	CT 23 Levels Farmland	Moderate / - / T/ D / ST	None Proposed	Moderate / - / T / D / ST
Landscape Character	LCT 24 River Floodplain	Moderate / - / T/ D/ ST	None Proposed	Moderate / - / T / D / ST
Landscape Character	LCT4 River Corridors - LCA 4A Derwent Valley,	Moderate / - / T/ D/ ST	None Proposed	Moderate / - / T / D / ST
Landscape Character	LCT4 River Corridors 4B River Ouse Corridor	Moderate / - / T/ D/ ST	None Proposed	Moderate / - / T / D / ST
Landscape Character	LCT4 River Corridors - 4D River Aire	Moderate / - / T/ D / ST	None Proposed	Moderate / - / T / D / ST



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Local Landscape Designation	Lower Derwent ILA	Moderate - major / - / T / D / ST	None Proposed	Moderate - major / - / T / D / ST
Local landscape character	New tree, shrub, scrub and grassland planting contributing to local landscape character potentially lost	Moderate - major / - /P / D / MT	None proposed – loss of existing and potentially future planting	Moderate /-/T/D/ST - LT

NB: Aspects of the proposed scheme considered as part of the pre-mitigation scenario are summarised above in Section 1.6, and within Chapter X: Summary of Environmental Statement.

Key to table: +/-= Positive or Negative P / T = Permanent or Temporary, D / I = Direct or Indirect, ST / MT / LT = Short Term, Medium Term or Long Term N/A = Not Applicable

Table 10-16 - Summary of Significant Visual Effects Table for the Landscape and Visual Chapter

Description of Effects		Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Stage 0 – Reconfi	guration Work	(S		
Residents	Within 1 km radius of the site	Moderate - major / - / T / D / ST	None proposed	Moderate - major / - / T / D / ST



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Stage 1 – Constr	uction of Unit X	(
Residents	Within 1 km radius of the site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major / - / T/ D / ST
Residents	Between 1 & 3 km of the Site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major - / T / D / ST
Recreational users (TPT and NCN)	Within 1 km radius of the site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major / - / T / D / ST
Recreational users (PRoW / other facilities)	Within 1 km radius of the site	Moderate / - / T/ D / ST	None proposed	Moderate / - / T/ D / ST
Recreational users (TPT and NCN)	Between 1 8 3 km radius of the site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major / - / T/ D / ST
Recreational users (PRoW / other facilities)	Between 1 8 3 km radius of the site	Moderate / - / T/ D / ST	None proposed	Moderate / - / T/ D / ST
Users of local road network	Within 1 km radius of the site	Moderate / - / T/ D / ST	None proposed	Moderate / - / T/ D / ST



Description of Effects		Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Users of local road network	Between 1 & 3 km radius of the site	Moderate / - / T/ D / ST	None proposed	Moderate / - / T/ D / ST
Users of education facilities/ places of worship	radius of the	Moderate / - / T/ D / ST	None proposed	Moderate / - / T/ D / ST
Stage 2 – Operation	on of Unit X ar	nd Construction of Un	it Y	
Residents		Major and Moderate - Major / - / P / D / LT	Proposed planting associated with Wren Hall Lane to mitigate effects on immediate local receptors and planting adjacent to AGIs – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans during Stage 1	Major and Moderate - Major /-/P/D/LT
Residents	Between 1 & 3 km of the Site		Planting adjacent to AGIs during Stage 1 – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans	Moderate - major / - / P / D / LT
Recreational users (TPT and NCN)	Within 1 km radius of the site		Planting adjacent to AGIs during Stage 1 – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans	Moderate - major / - / P / D / LT



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Recreational users (TPT and NCN)	Between 1 & 3 km radius of the site		Planting adjacent to AGIs during Stage 1 – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans	Moderate - major / - / P / D / LT
Recreational users of PRoW network and recreational facilities			Planting adjacent to AGIs during Stage 1 – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans	Moderate - major and moderate/ - / P / D / LT
Recreational users (PRoW / other facilities)	Between 1 8 3 km radius of the site	Moderate / - / P / D / LT	Reinstatement of Development Parcel A and proposed planting to screen GRF / compressor building off Wren Hall Lane / PRoW - planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans during Stage 1 and 2	Moderate / - / P / D / LT
Users of local road network		_	Proposed mitigation along Wren Hall Lane, near AGIs, east of GRF / compressor building and reinstatement of Development Parcel A to mitigate effects on immediate local receptors and planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans during Stage 1 and 2	Moderate - major and moderate / - / P / D / LT
Users of local road network	Between 1 8 3 km radius of the site	Moderate / - / P / D / LT	None proposed	Moderate / - / P / D / LT



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Users of education facilities/ places of worship	radius of the	Moderate / - / P / D / LT	None proposed	Moderate / - / P / D / LT
Stage 3 – Operation	on of Units X a	and Y		
Residents		Major and Moderate · Major / - / P / D / LT	Proposed mitigation along Wren Hall Lane and planting adjacent to AGIs and reinstatement of Development Area A – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans during Stage 1 and 2.	Year 0: Major and Moderate - Major / - / P / D / LT Year 15: Major, Moderate -major and Minor - moderate / - / P / D / LT
Residents		Moderate - major / - / P / D / LT	Planting adjacent to AGIs during Stage 1 – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans	Year 0: Moderate - major / - / P / D / LT Year 15: Moderate – major, / - / P / D / LT
Recreational users (TPT and NCN)	Within 1 km radius of the site		Planting adjacent to AGIs during Stage 1 – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans	Year 0: Moderate - major / - / P / D / LT Year 15: Moderate – major / - / P / D / LT
Recreational users (TPT and NCN)	Between 1 & 3 km radius of the site		Planting adjacent to AGIs during Stage 1 – planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans	Year 0: Moderate - major / - / P / D / LT Year 15: Moderate - major / - / P / D / LT



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Recreational users (PRoW / other facilities)		moderate / - / P / D / LT	Reinstatement of Development Parcel A and planting along Wren Hall Lane to screen GRF / compressor building - planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans during Stage 1 and 2	Year 0: Moderate- major and moderate / - / P / D / LT Year 15: Moderate- major, Moderate and Minor / - / P / D / LT
Recreational users (PRoW / other facilities)	Between 1 & 3 km radius of the site		None Proposed – planting associated with the AGIs would have matured	Year 0: Moderate - major / - / P / D / LT Year 15: Moderate and Minor / - / P / D / LT
Users of local road network		moderate / - / P / D / LT	Proposed off site mitigation along Wren Hall Lane, near AGIs, off Main Road and reinstatement of Development Parcel A to mitigate effects on immediate local receptors and planting yet to mature informed by the outline landscape and biodiversity strategy and mitigation plans during Stage 1 and 2	Year 0: Moderate - major and moderate / - / P / D / LT Year 15: Moderate - major, Moderate and Minor / - / P / D / LT
Users of local road network	Between 1 & 3 km radius of the site		None proposed	Year 0: Moderate / - / P / D / LT



Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
				Year 15: Moderate and Minor / - / P / D / LT
Users of education facilities/ places of worship	radius of the	Moderate / - / P / D / LT	None proposed	Year 0: Moderate / - / P / D / LT Year 15: Moderate / - / P / D / LT
Decommissioning	<u> </u>			
Residents	Within 1 km radius of the site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major / - / T/ D / ST
Residents	Between 1 & 3 km of the Site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major / - / T/ D / ST
Recreational users (TPT and NCN)	Within 1 km radius of the site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major / - / T/ D / ST
Recreational users (PRoW / other facilities)	Within 1 km radius of the site	Moderate / - / T/ D / ST	None proposed	Moderate / - / T/ D / ST
Recreational users (TPT and NCN)	Between 1 & 3 km radius of the site	Moderate - major / - / T/ D / ST	None proposed	Moderate - major / - / T/ D / ST

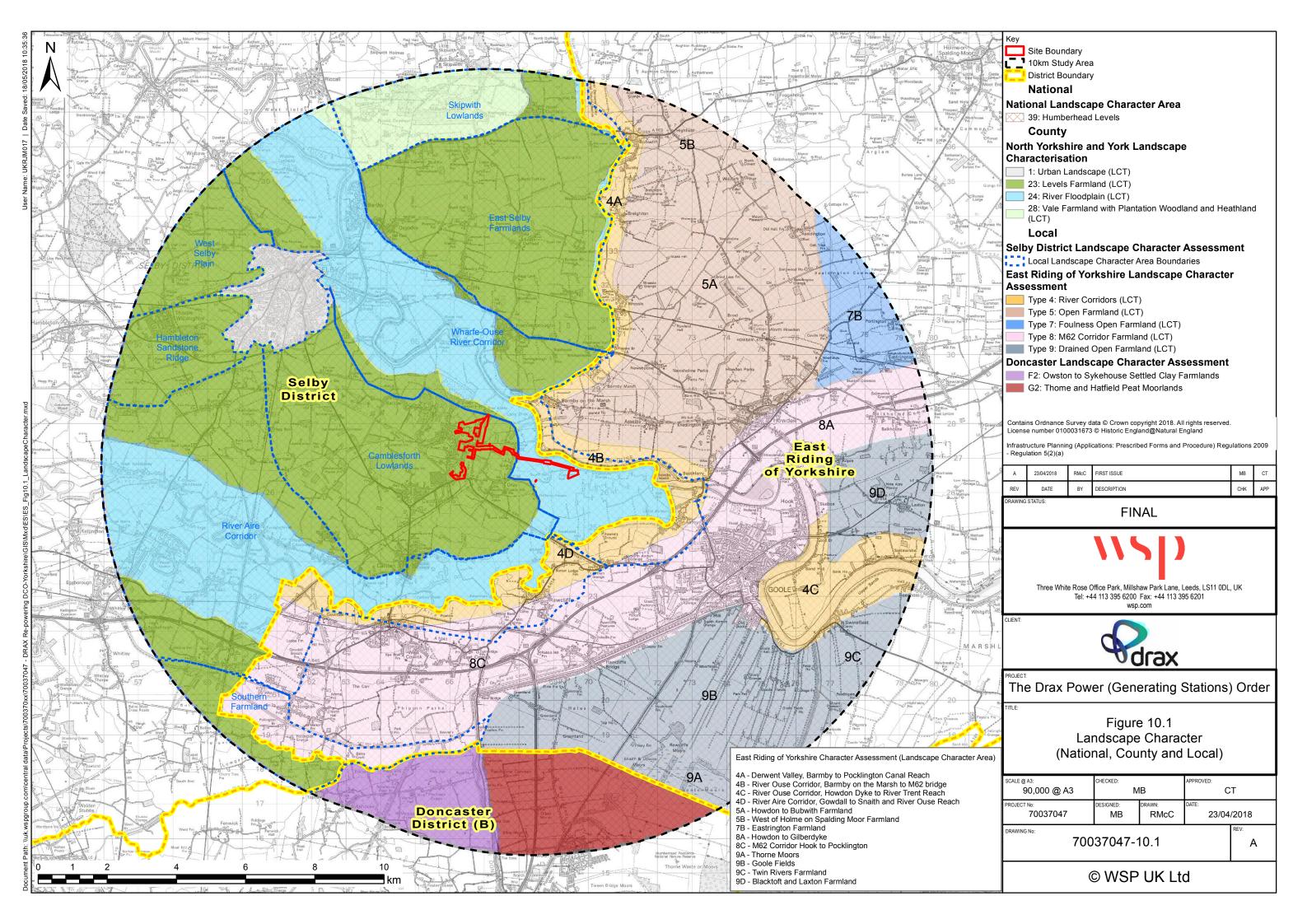


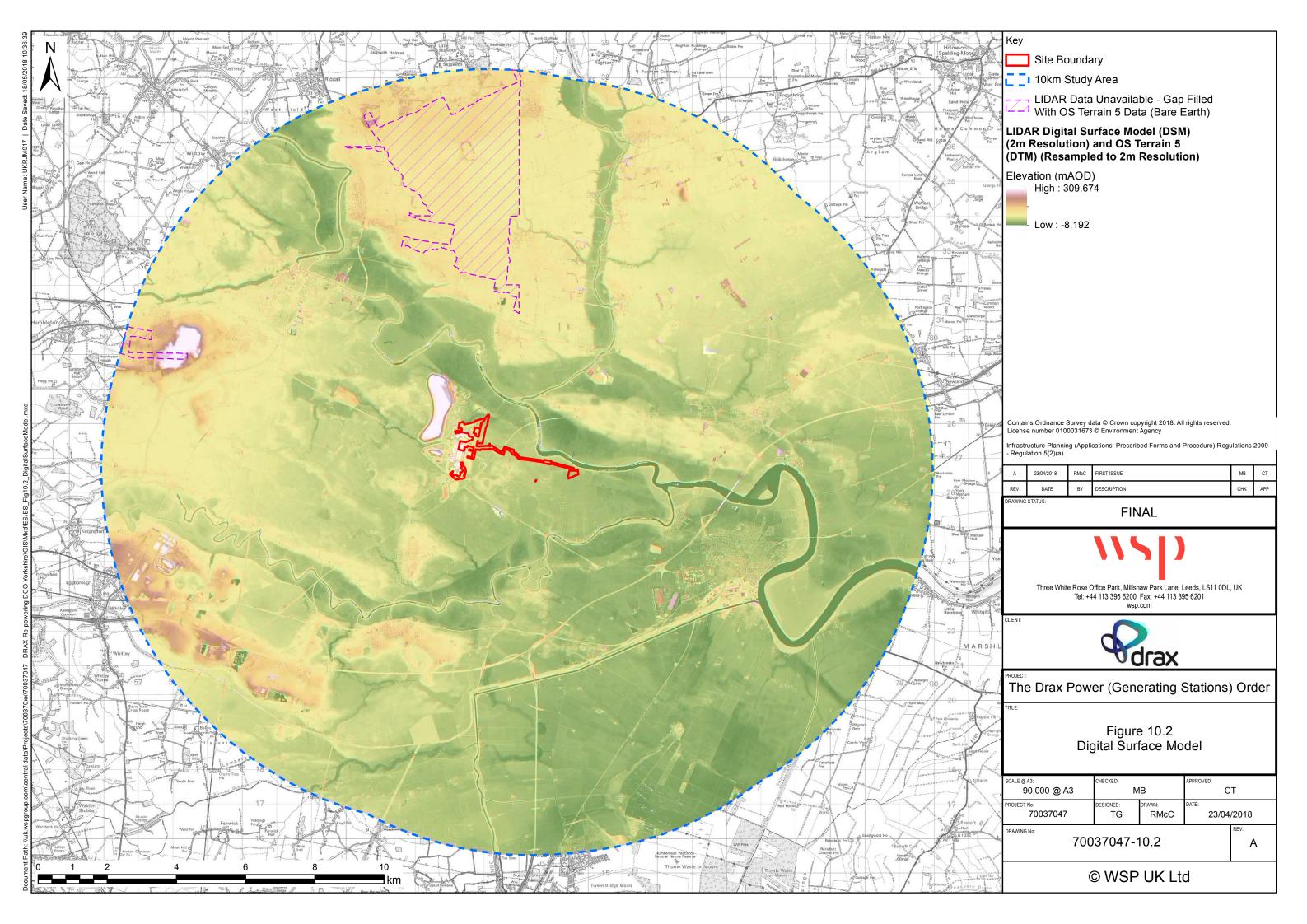
Description of Effects	Receptor	Significance and Nature of Effects Prior to Mitigation / Enhancement	Summary of Mitigation / Enhancement	Significance and Nature of Effects Following Mitigation / Enhancement (Residual)
Recreational users (PRoW / other facilities)	Between 1 & 3 km radius of the site		None proposed	Moderate / - / T/ D / ST
Users of local road network	Within 1 km radius of the site	Moderate / - / T/ D / ST	None proposed	Moderate / - / T/ D / ST
Users of local road network	Between 1 & 3 km radius of the site		None proposed	Moderate / - / T/ D / ST
Users of education facilities/ places of worship	radius of the		None proposed	Moderate / - / T/ D / ST

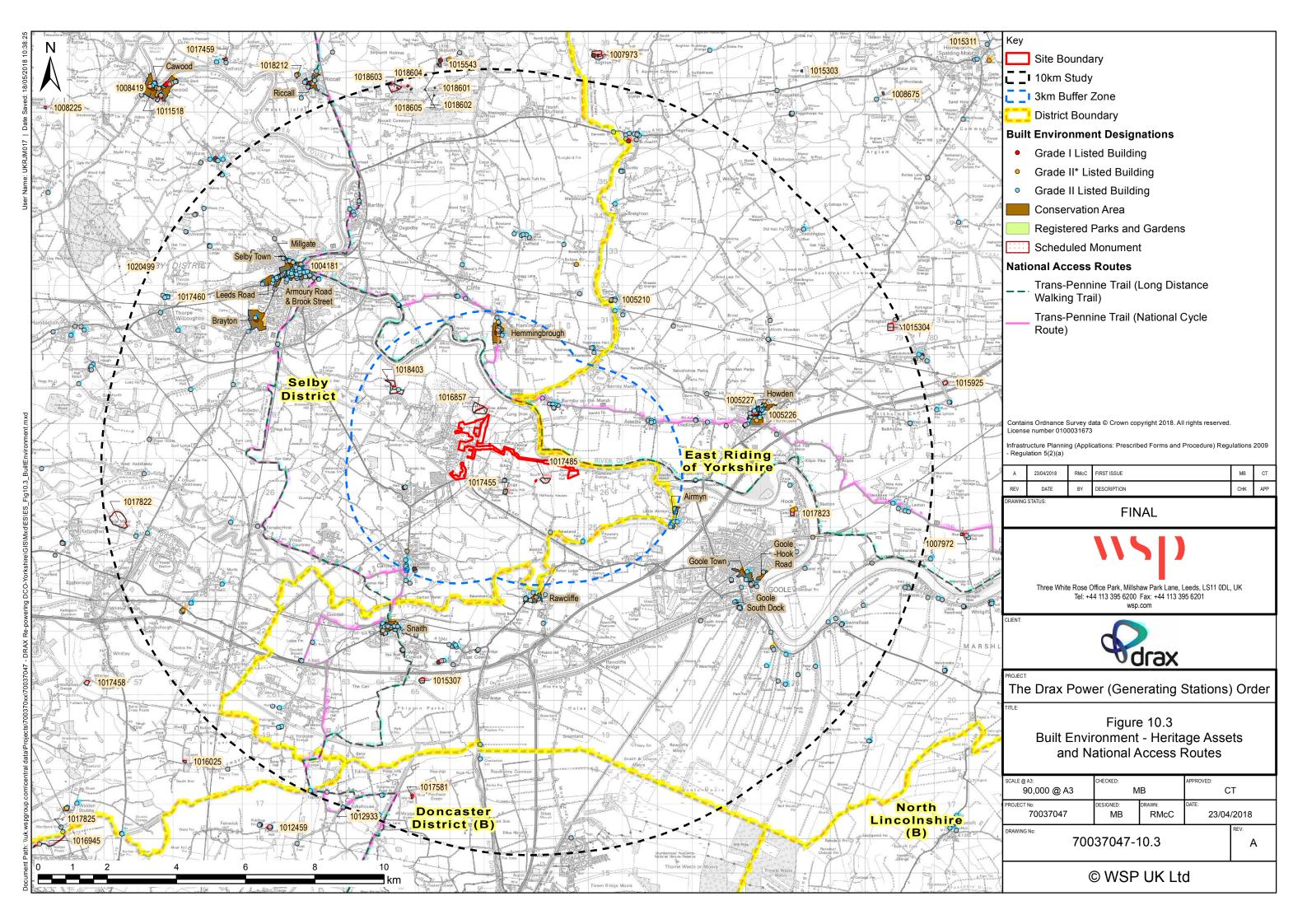
NB: Aspects of the proposed scheme considered as part of the pre-mitigation scenario are summarised above in Section 1.6, and within Chapter X: Summary of Environmental Statement.

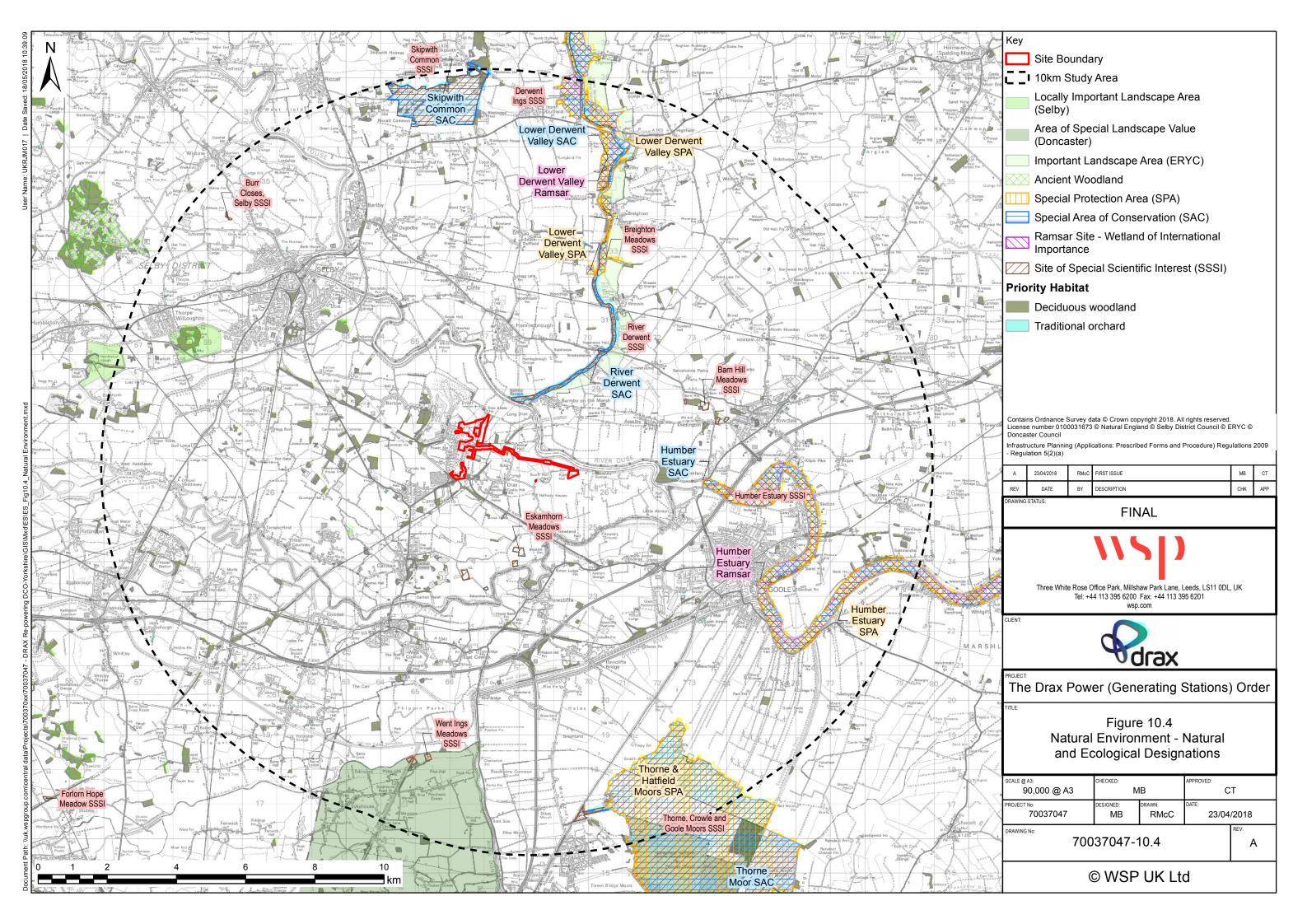
Key to table: +/-= Positive or Negative P / T = Permanent or Temporary, D / I = Direct or Indirect, ST / MT / LT = Short Term, Medium Term or Long Term N/A = Not Applicable

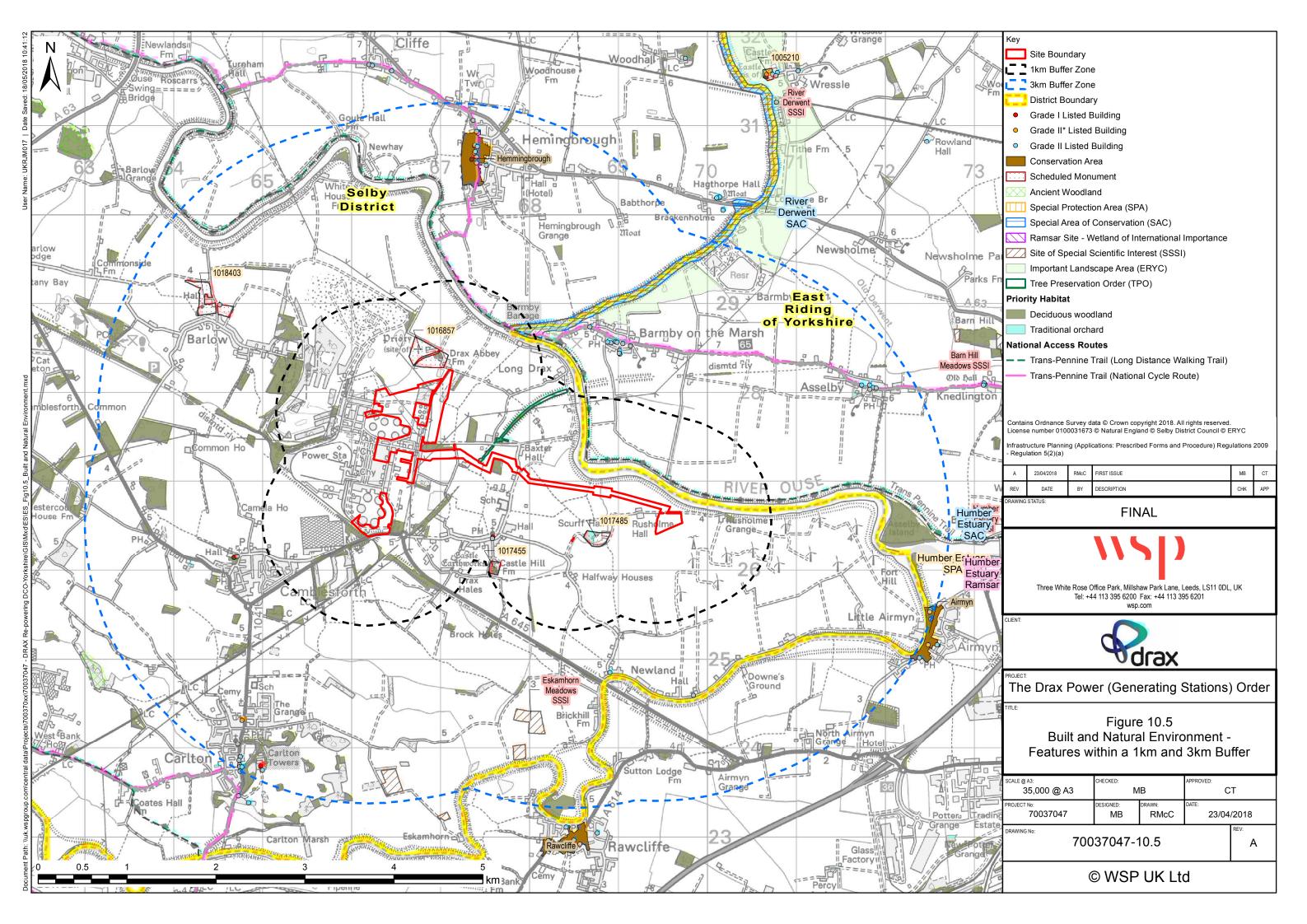


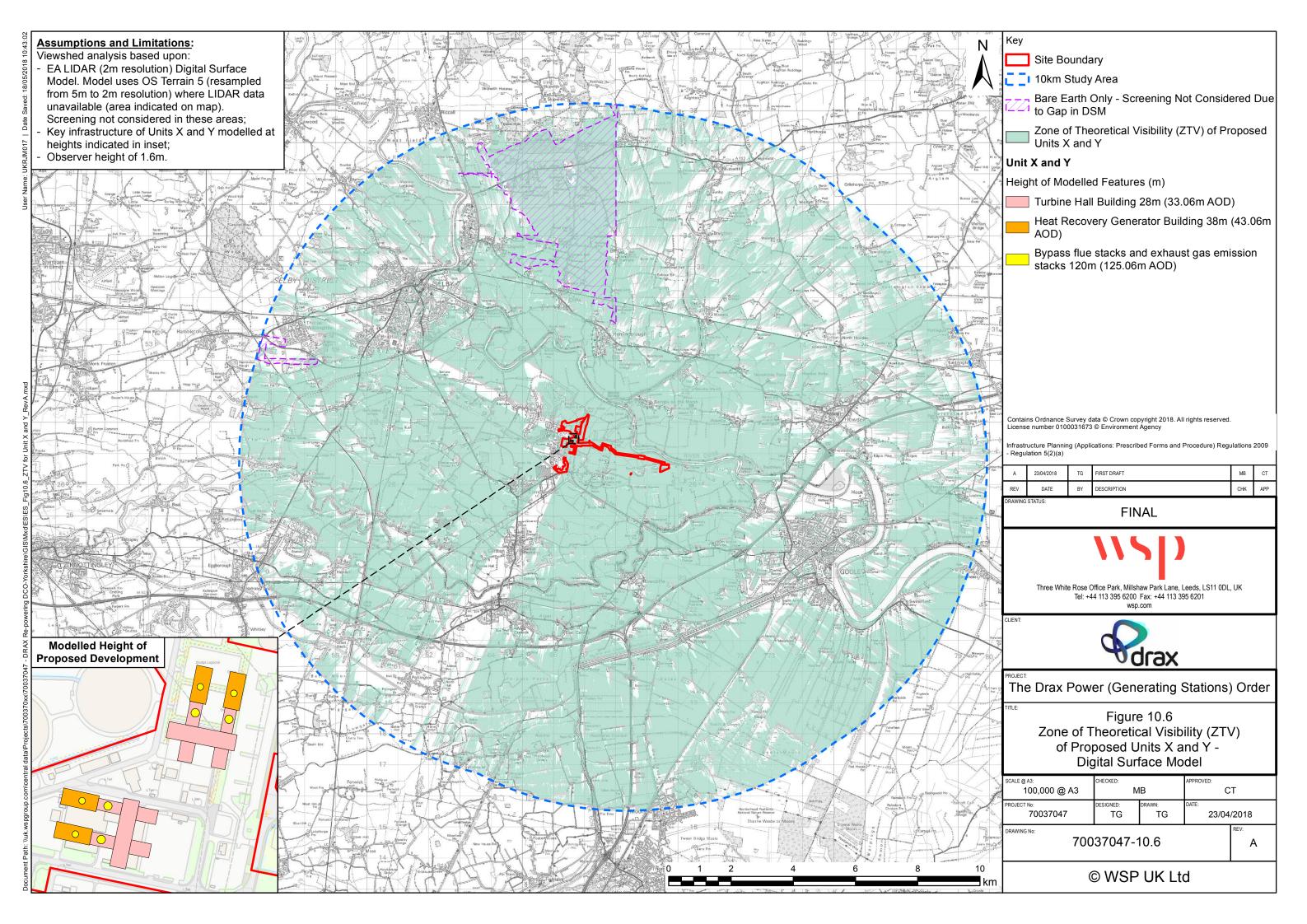


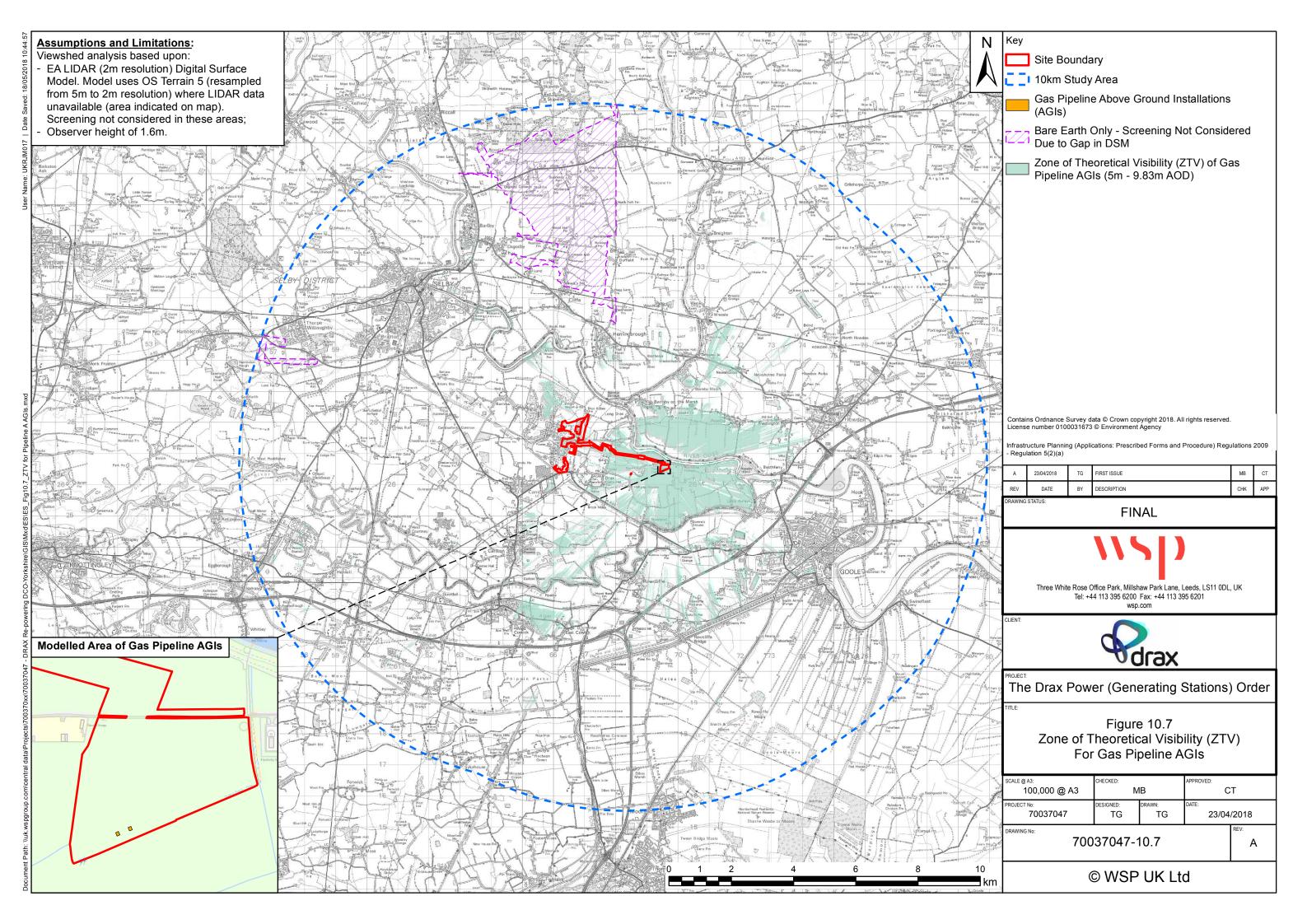


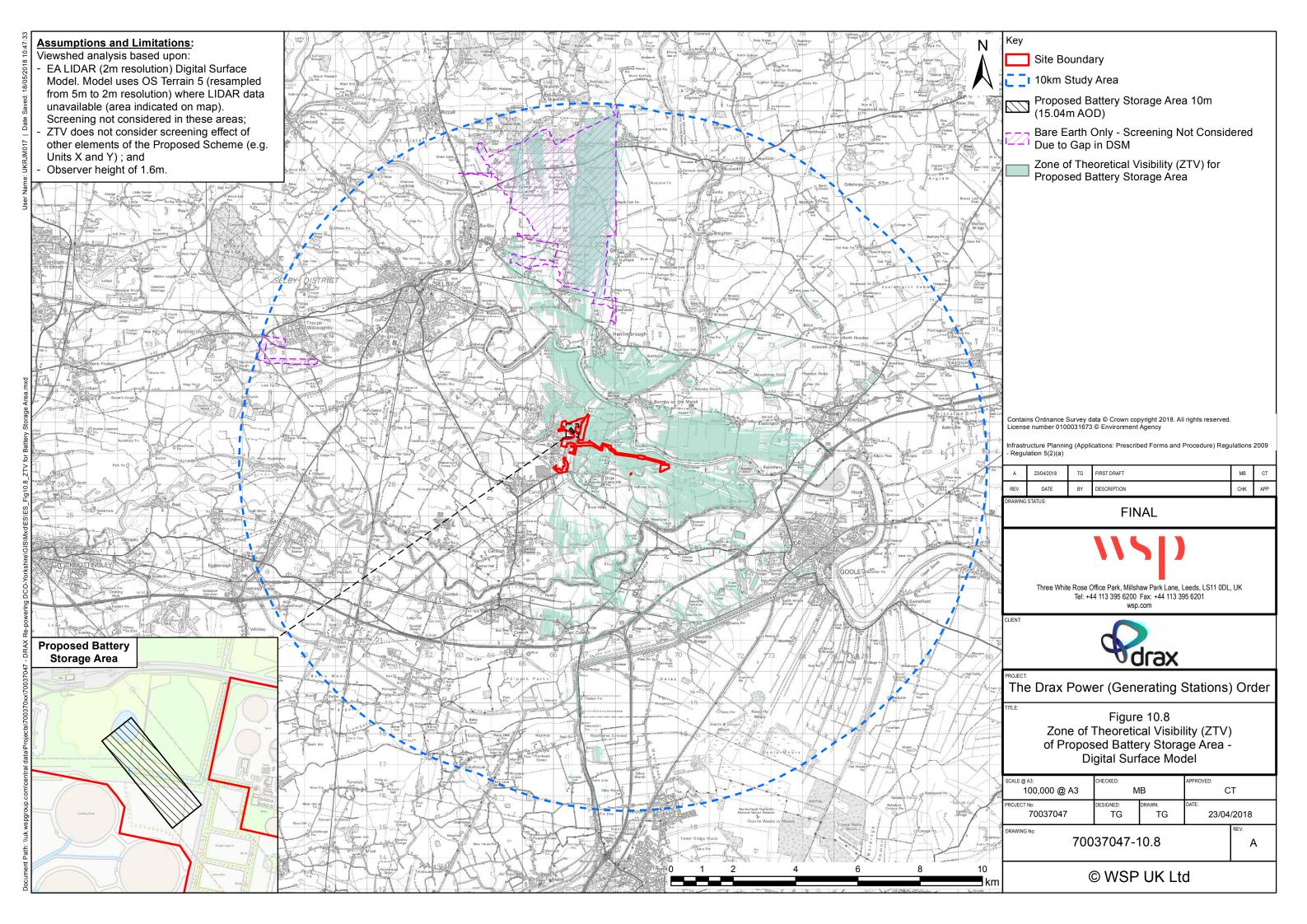


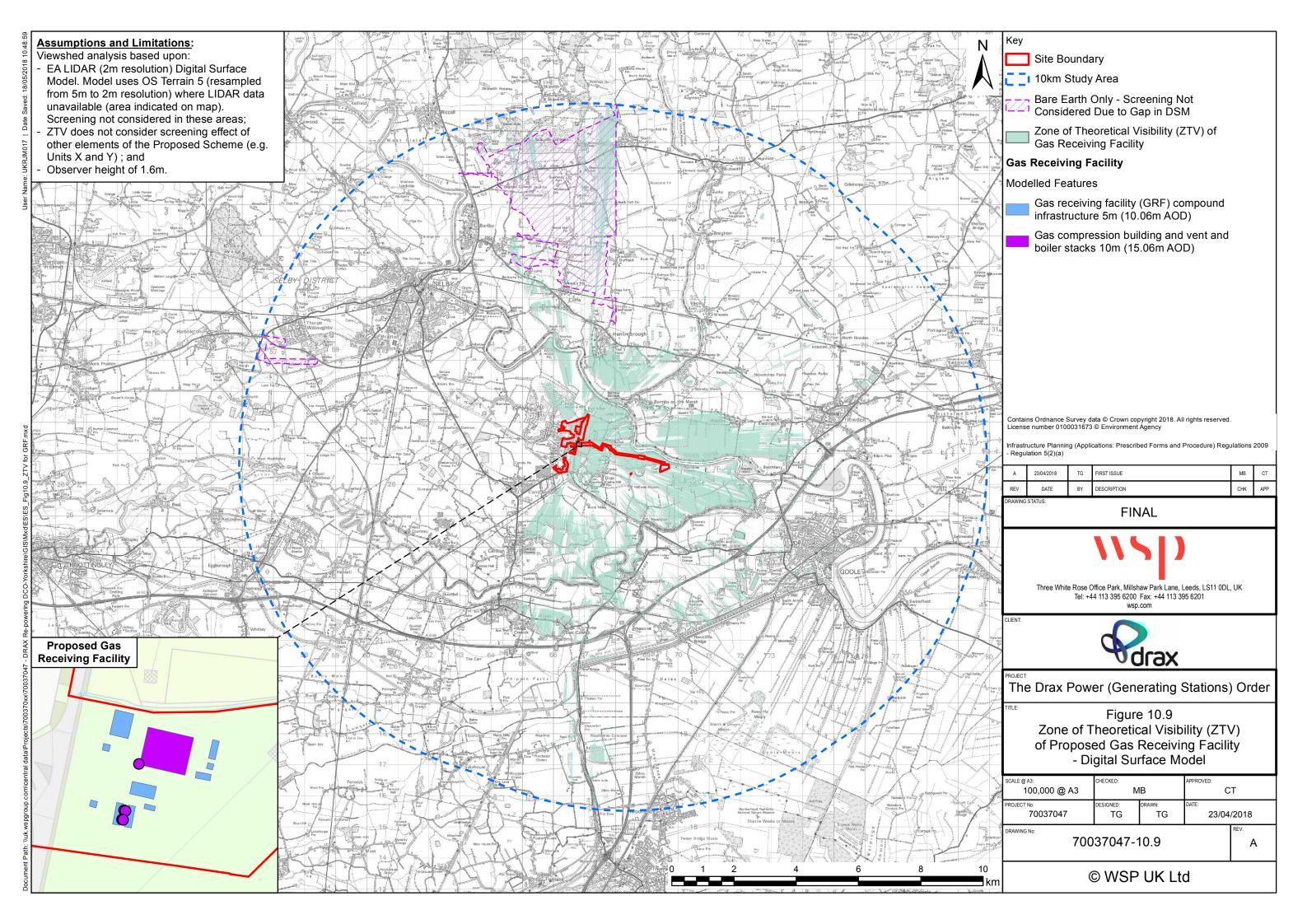


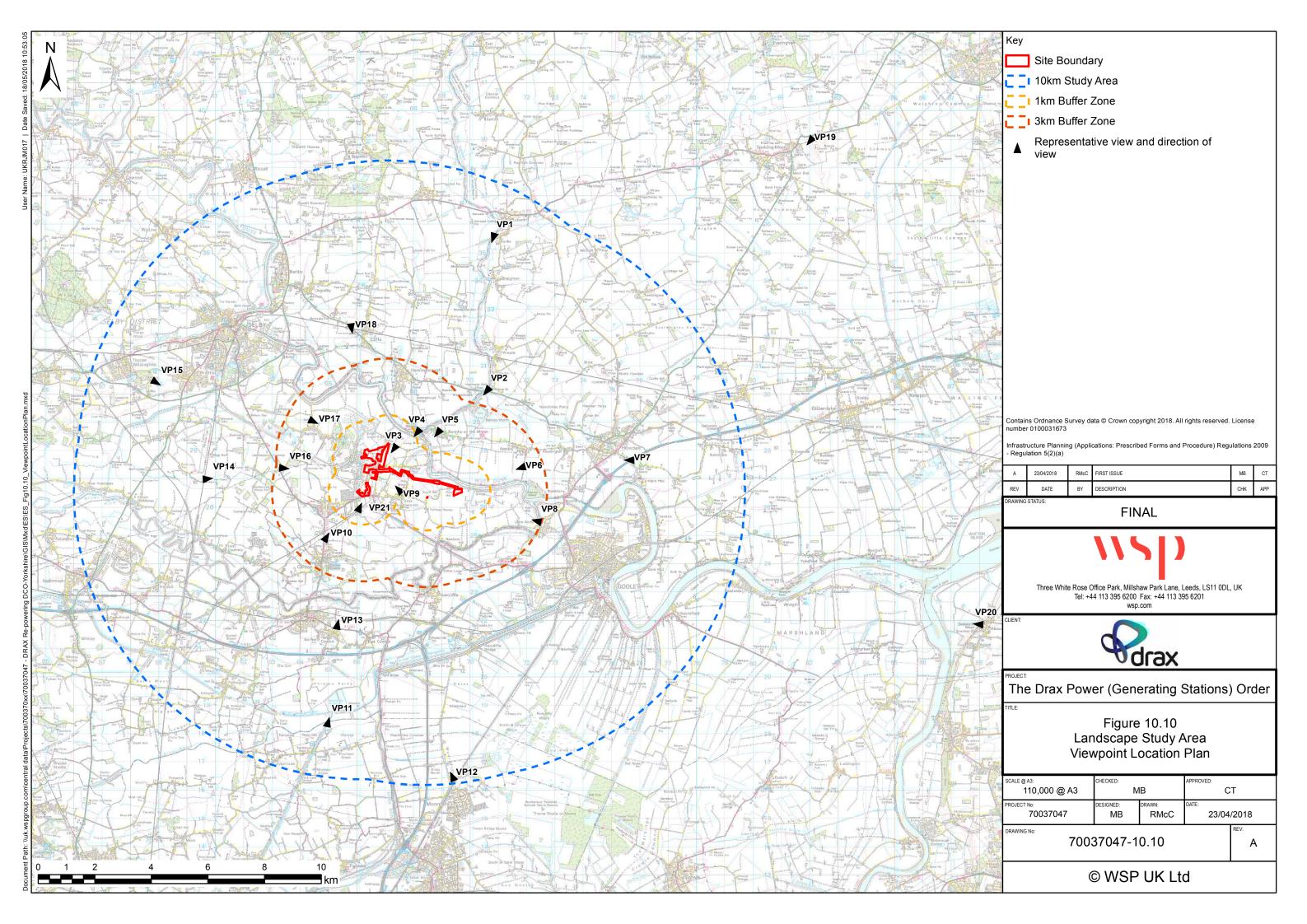


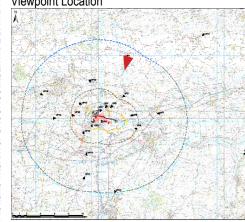














OS Reference: 470810 435471

Receptor Type: Users of PRoW (Howden 20)/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

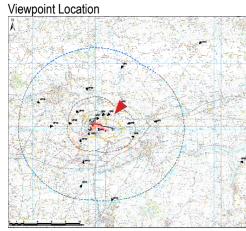
VIEW 1: VIEW FROM PRoW WEST OF GUNBY

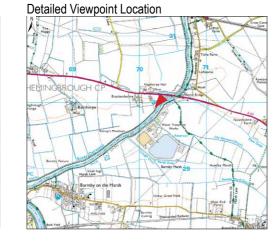
FIGURE 10.11.1a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 07:36

Approximate distance to site boundary: 4km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 470483 430081

Receptor Type: Users of PRoW/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

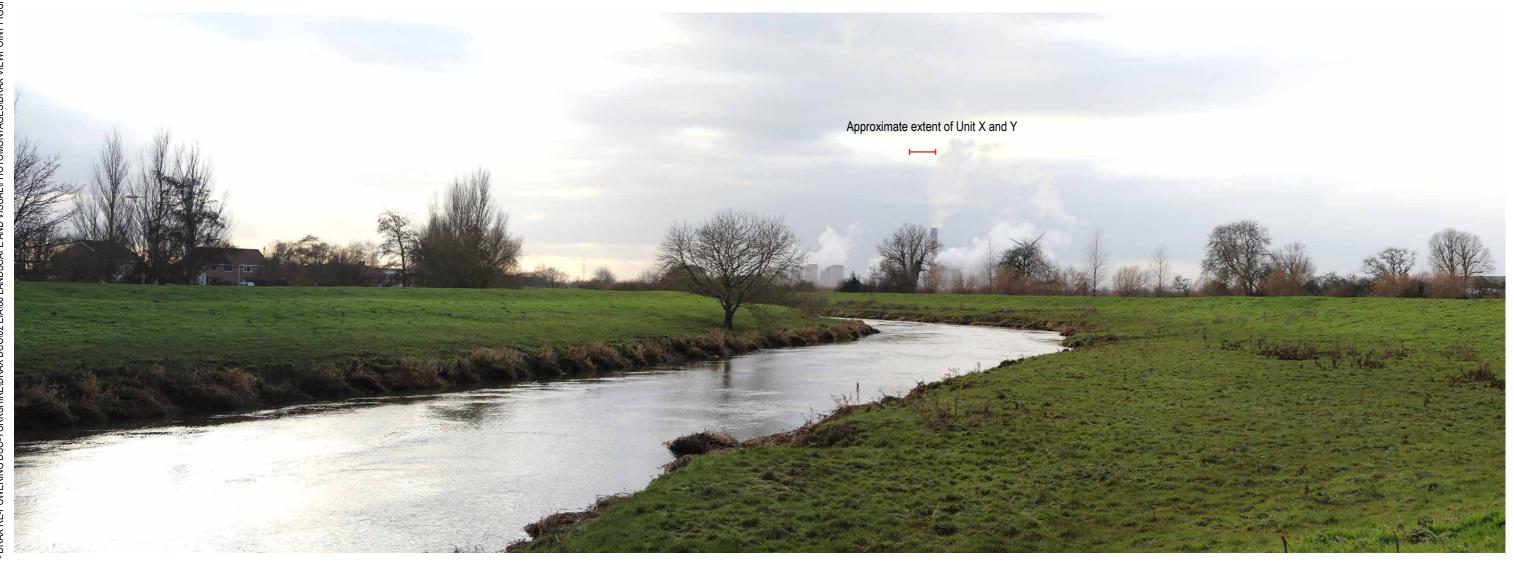
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

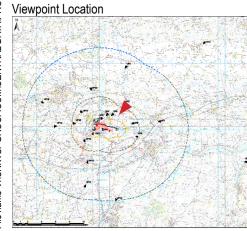
VIEW 2: VIEW FROM PRoW CLOSE TO LOFTSOME BRIDGE

FIGURE 10.11.2a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 14.12.2017 13:5

Approximate distance to site boundary: 4km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 470483 430081

Receptor Type: Users of PRoW/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

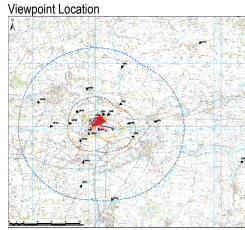
VIEW 2: VIEW FROM PRoW CLOSE TO LOFTSOME BRIDGE

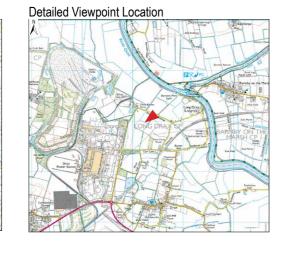
FIGURE 10.11.2b WINTER VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 11:20

Approximate distance to site boundary: 0.5km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 467436 428143

Receptor Type: Road users/ Users of PRoW/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

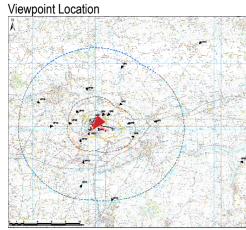
VIEW 3: VIEW FROM PEAR TREE AVENUE CLOSE TO PROW

FIGURE 10.11.3a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 13.12.2017 14:22

Approximate distance to site boundary: 0.5km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 467436 428143

Receptor Type: Road users/ Users of PRoW/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 3: VIEW FROM PEAR TREE AVENUE CLOSE TO PROW

FIGURE 10.11.3b WINTER VIEW (PHOTOSTITCHED)







 OS Grid Ref :
 467436, 428143

 Direction of view :
 South Westerly

 Ground elevation :
 3.12m AOD

 Time taken :
 14:18pm

 Date taken :
 13/12/2017

 Site distance :
 1050m

Camera: Nikon D3200 with a fixed 35mm lens
Sensor Size: Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

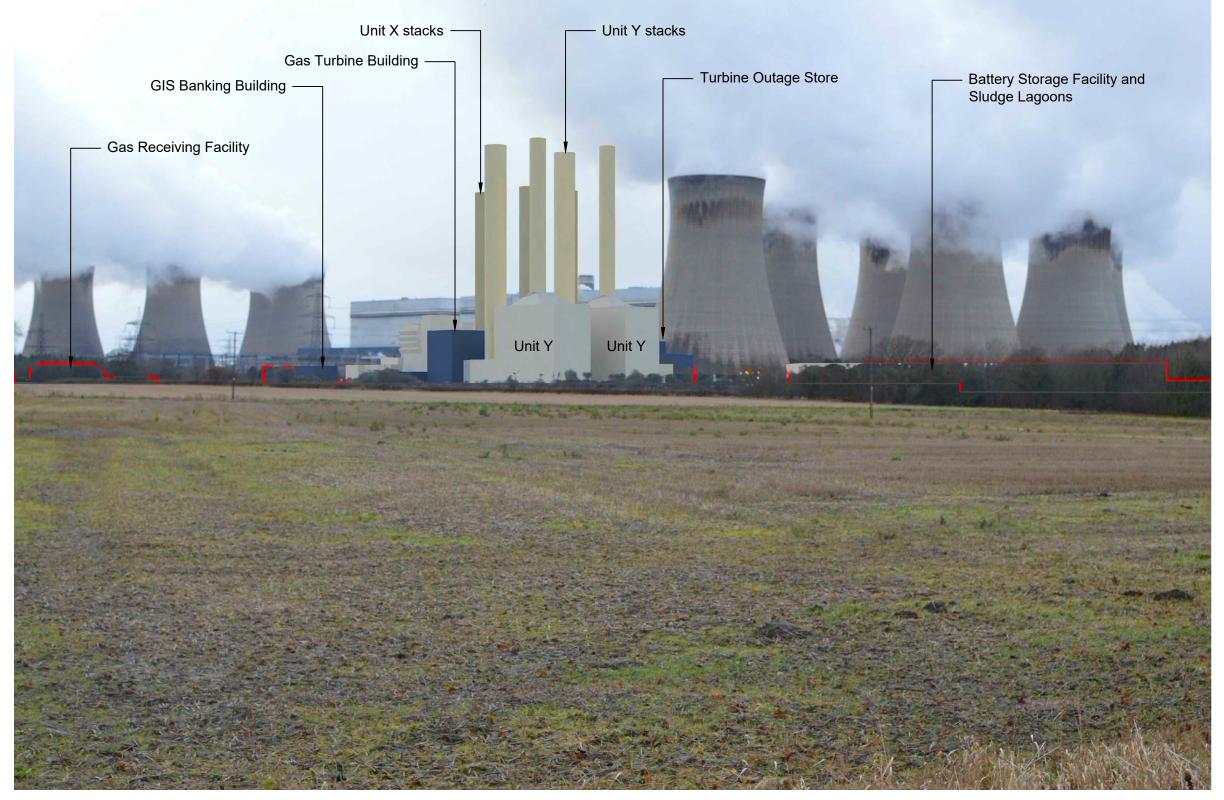
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 3: VIEW FROM PEAR TREE AVENUE CLOSE TO PRoW

FIGURE: 10.11.3c FIELD VERIFIED EXISTING VIEW







 OS Grid Ref :
 467436, 428143

 Direction of view :
 South Westerly

 Ground elevation :
 3.12m AOD

 Time taken :
 14:18pm

 Date taken :
 13/12/2017

 Site distance :
 1050m

Camera: Nikon D3200 with a fixed 35mm lens
Sensor Size: Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

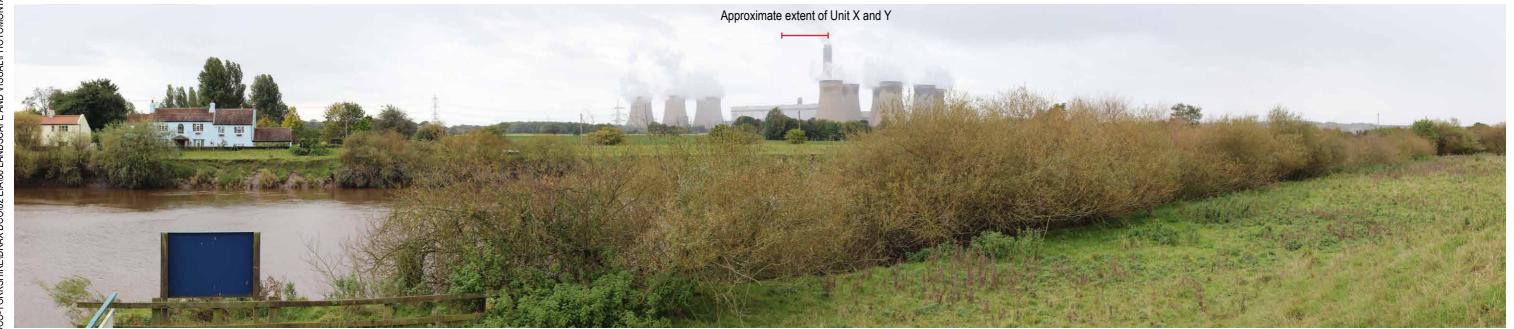
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

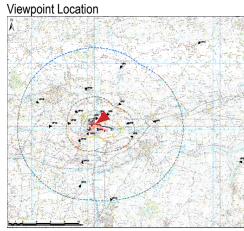
VIEW 3: VIEW FROM PEAR TREE AVENUE CLOSE TO PRoW

FIGURE: 10.11.3d FIELD VERIFIED PHOTOMONTAGE











Date and time: 04.10.2017 10:0

Approximate distance to site boundary: 2km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 468054 428620

Receptor Type: Users of PRoW (Trans Pennine Trail and Howden 20)/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

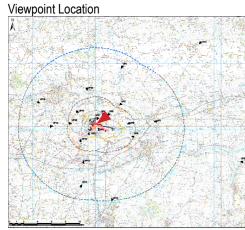
VIEW 4: VIEW FROM BARMBY BARRAGE CLOSE TO BARMBY ON THE MARSH

FIGURE 10.11.4a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 14.12.2017 14:43

Approximate distance to site boundary: 2km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 468054 428620

Receptor Type: Users of PRoW (Trans Pennine Trail and Howden 20)/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

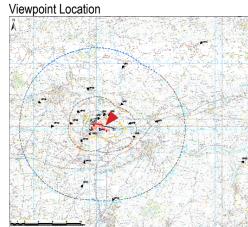
VIEW 4: VIEW FROM BARMBY BARRAGE CLOSE TO BARMBY ON THE MARSH

FIGURE 10.11.4b WINTER VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 10:0

Approximate distance to site boundary: 2km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 468648 428731

Receptor Type: Residents/ Road users

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

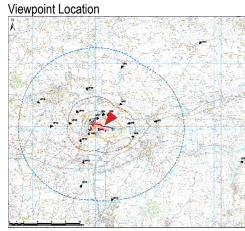
VIEW 5: VIEW FROM BARMBY ON THE MARSH

FIGURE 10.11.5a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 14.12.2017 14:34

Approximate distance to site boundary: 2km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 468648 428731

Receptor Type: Residents/ Road users

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 5: VIEW FROM BARMBY ON THE MARSH

FIGURE 10.11.5b WINTER VIEW (PHOTOSTITCHED)







OS Grid Ref : 468648, 428731 Direction of view South Westerly Ground elevation : 5.155m AOD Time taken : 14:29pm 14/12/2017 Date taken : Site distance :

Camera: Nikon D3200 with a fixed 35mm lens Digital SLR with 1.5 cropfactor Sensor Size :

35mm equivalent focal length: 52.5mm Horizontal field of view : 36.66 degrees Camera height :

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 5: VIEW FROM BARMBY ON THE MARSH

FIGURE: 10.11.5c FIELD VERIFIED EXISTING VIEW







 OS Grid Ref :
 468648, 428731

 Direction of view :
 South Westerly

 Ground elevation :
 5.155m AOD

 Time taken :
 14:29pm

 Date taken :
 14/12/2017

 Site distance :
 2375m

Camera: Nikon D3200 with a fixed 35mm lens
Sensor Size: Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

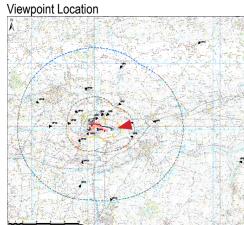
VIEW 5: VIEW FROM BARMBY ON THE MARSH

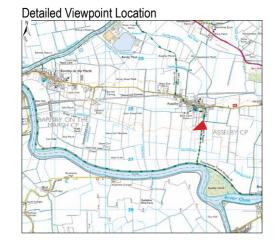
FIGURE: 10.11.5d FIELD VERIFIED PHOTOMONTAGE











Date and time: 04.10.2017 09:56

Approximate distance to site boundary: 2.5km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 471920 427637

Receptor Type: sers of PRoW (Trans Pennine Trail and Howden 20)/ Residents within Asselby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER) LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 6: VIEW FROM PRoW ALONG LANDING LANE

FIGURE 10.11.6a AUTUMN VIEW (PHOTOSTITCHED)







OS Grid Ref : 471920, 427637

Direction of view : Westerly

Ground elevation : 4.675m AOD

Time taken : 14:15pm

Date taken : 14/12/2017

Site distance : 5280m

Camera: Nikon D3200 with a fixed 35mm lens
Sensor Size: Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 6: VIEW FROM PROW ALONG LANDING LANE

FIGURE: 10.11.6c FIELD VERIFIED EXISTING VIEW







 OS Grid Ref :
 471920, 427637

 Direction of view :
 Westerly

 Ground elevation :
 4.675m AOD

 Time taken :
 14:15pm

 Date taken :
 14/12/2017

 Site distance :
 5280m

mera: Nikon D3200 with a fixed 35mm lens

Sensor Size : Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 6: VIEW FROM PROW ALONG LANDING LANE

FIGURE: 10.11.6d FIELD VERIFIED PHOTOMONTAGE

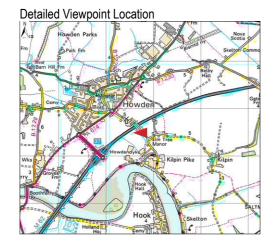






Viewpoint Location

A final control of the control



Date and time: 04.10.2017 08:

Approximate distance to site boundary: 7.5km

Approximate Elevation: 5m

Direction of View: West

OS Reference: 475854 427395

Receptor Type: Residents of properties nearby/ Road Users – local road and M62/ Users of PRoW/ Workers in warehouse nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

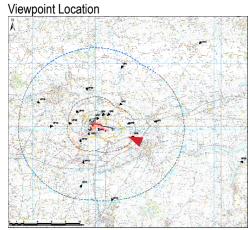
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

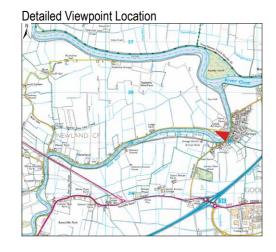
VIEW 7: VIEW FROM PUBLIC FOOTPATH ADJACENT TO HOWDEN DYKE ROAD, SOUTH EAST OF HOWDEN FIGURE 10.11.7a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 09:29

Approximate distance to site boundary: 2.5km

Approximate Elevation: 5m

Direction of View: West / North West

OS Reference: 472451 425162

Receptor Type: Residents/ Users of PRoW

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

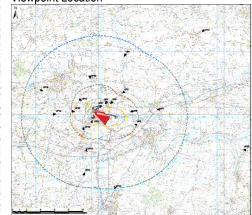
VIEW 8: VIEW FROM PRoW ON EMBANKMENT, WEST OF HILL STREET, AIRMYN

FIGURE 10.11.8a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 11

Approximate distance to site boundary: 0.5km

Approximate Elevation: 6m

Direction of View: West

OS Reference: 467483 426620

Receptor Type: Users of PRoW/ Residents/ School

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

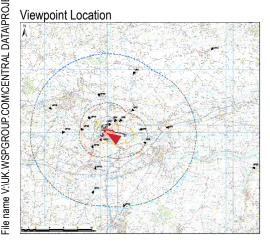
VIEW 9: VIEW FROM PROW CLOSE TO DRAX VILLAGE AND READ SCHOOL

FIGURE 10.11.9a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 14.12.2017 15:

Approximate distance to site boundary: 0.5km

Approximate Elevation: 6m

Direction of View: West

OS Reference: 467483 426620

Receptor Type: Users of PRoW/ Residents/ School

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

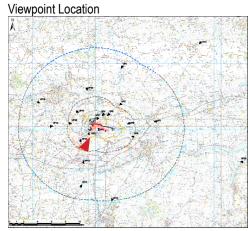
VIEW 9: VIEW FROM PRoW CLOSE TO DRAX VILLAGE AND READ SCHOOL

FIGURE 10.11.9b WINTER VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 10:51

Approximate distance to site boundary: 2.5km

Approximate Elevation: 5m

Direction of View: North East

OS Reference: 464851 424809

Receptor Type: Users of PRoW/ Residents/ Schools/ Road users

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

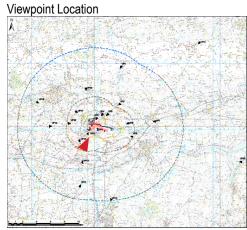
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

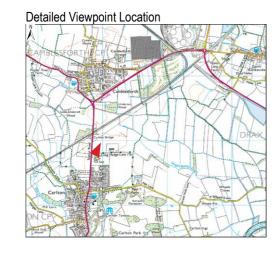
VIEW 10: VIEW FROM PROW ALONG LONG HEDGE LANE, NORTH OF CARLTON FIGURE 10.11.10a AUTUMN (PHOTOSTITCHED)











Date and time: 13.12.2017 12:55

Approximate distance to site boundary: 2.5km

Approximate Elevation: 5m

Direction of View: North East

OS Reference: 464851 424809

Receptor Type: Users of PRoW/ Residents/ Schools/ Road users

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

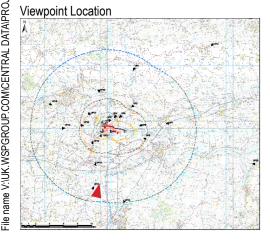
VIEW 10: VIEW FROM PROW ALONG LONG HEDGE LANE, NORTH OF CARLTON

FIGURE 10.11.10b WINTER VIEW (PHOTOSTITCHED)











Date and time: 03.10.2017 14:2

Approximate distance to site boundary: 8.5km

Approximate Elevation: 5m

Direction of View: North East

OS Reference: 464929 418312

Receptor Type: Users of PRoW/ Users of New Junction Canal/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

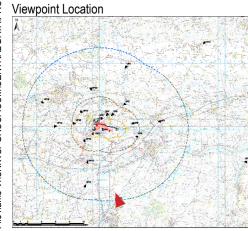
VIEW 11: VIEW FROM WENT END FOOTBRIDGE

FIGURE 10.11.11a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 03.10.2017 15:07

Approximate distance to site boundary: 10km

Approximate Elevation: 5m

Direction of View: North West

OS Reference: 469244 416447

Receptor Type: Residents/ Road users

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

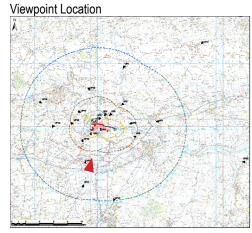
VIEW 12: VIEW FROM PUBLIC FOOTPATH ALONG MOOR ENDS ROAD

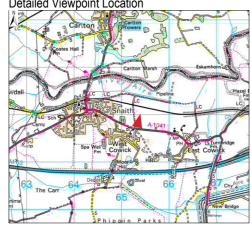
FIGURE 10.11.12a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 03.10.2017 13:36

Approximate distance to site boundary: 5km

Approximate Elevation: 5m

Direction of View: North East

OS Reference: 465286 421712

Receptor Type: Residents/ Users of PRoW/ Road users

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 13: VIEW FROM PRoW ALONG FISH BALK LANE

FIGURE 10.11.13a (AUTUMN VIEW (PHOTOSTITCHED)







Viewpoint 13

 OS Grid Ref :
 465286, 421712

 Direction of view :
 North Easterly

 Ground elevation :
 8.922m AOD

 Time taken :
 11:55am

 Date taken :
 13/12/2017

 Site distance :
 5935m

Camera: Nikon D3200 with a fixed 35mm lens
Sensor Size: Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 13: VIEW FROM PRow ALONG FISH BALK LANE

FIGURE: 10.11.13c FIELD VERIFIED EXISTING VIEW







Viewpoint 13

 OS Grid Ref :
 465286, 421712

 Direction of view :
 North Easterly

 Ground elevation :
 8.922m AOD

 Time taken :
 11:55am

 Date taken :
 13/12/2017

 Site distance :
 5935m

Camera: Nikon D3200 with a fixed 35mm lens
Sensor Size: Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 13: VIEW FROM PRoW ALONG FISH BALK LANE

FIGURE: 10.11.13d FIELD VERIFIED PHOTOMONTAGE







— Site boundary

Viewpoint Location



Date and time: 03.10.2017

Approximate distance to site boundary: 6km

Approximate Elevation: 5m

Direction of View: East

OS Reference: 460650 427124

Receptor Type: Users of PRoW (close to Trans Pennine Trail) Rail users/ Users of disused airfield/ Residents

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

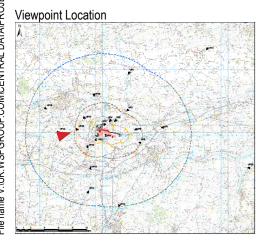
VIEW 14: VIEW FROM PRoW NEAR DISUSED BURN (SELBY)

FIGURE 10.11.14a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 14.12.2017 11:54

Approximate distance to site boundary: 6km

Approximate Elevation: 5m

Direction of View: East

OS Reference: 460650 427124

Receptor Type: Users of PRoW (close to Trans Pennine Trail) Rail users/ Users of disused airfield/ Residents

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

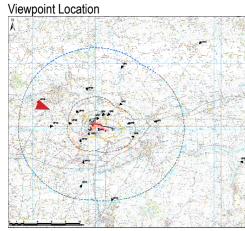
VIEW 14: VIEW FROM PROW NEAR DISUSED BURN (SELBY) AIRFIELD

FIGURE 10.11.14b WINTER VIEW (PHOTOSTITCHED)











Date and time: 03.10.2017 11:13

Approximate distance to site boundary: 7.5km

Approximate Elevation: 5m

Direction of View: South East

OS Reference: 458730 430260

Receptor Type: Users of Country Park and surrounding PRoW/ Road users/ Users of Selby Golf Course/ Residents

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 15: VIEW FROM BRAYTON BARFF COUNTRY PARK

FIGURE 10.11.15a AUTUMN VIEW (PHOTOSTITCHED)







Viewpoint 15

 OS Grid Ref :
 458801, 430586

 Direction of view :
 South Easterly

 Ground elevation :
 15.582m AOD

 Time taken :
 10:45am

 Date taken :
 14/12/2017

 Site distance :
 8475m

Camera: Nikon D3200 with a fixed 35mm lens
Sensor Size: Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 15: VIEW FROM BRAYTON BARFF COUNTRY PARK

FIGURE: 10.11.15c FIELD VERIFIED EXISTING VIEW







Viewpoint 15

 OS Grid Ref :
 458801, 430586

 Direction of view :
 South Easterly

 Ground elevation :
 15.582m AOD

 Time taken :
 10:45am

 Date taken :
 14/12/2017

 Site distance :
 8475m

Camera: Nikon D3200 with a fixed 35mm lens

Sensor Size : Digital SLR with1.5 cropfactor

35mm equivalent focal length: 52.5mm

Horizontal field of view: 36.66 degrees

Camera height: 1.6m

When printed at A3 and viewed at a comfortable arm's length (Approx 500mm), this printed image is representative of our detailed central vision.

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

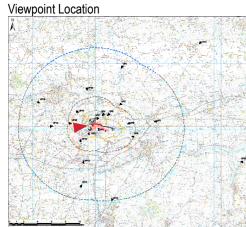
VIEW 15: VIEW FROM BRAYTON BARFF COUNTRY PARK

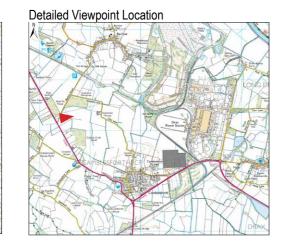
FIGURE: 10.11.15d FIELD VERIFIED PHOTOMONTAGE











Date and time: 04.10.2017 06:41

Approximate distance to site boundary: 3km

Approximate Elevation: 5m

Direction of View: East

OS Reference: 463366 427210

Receptor Type: Road users (A1041 and Barlow Road)/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

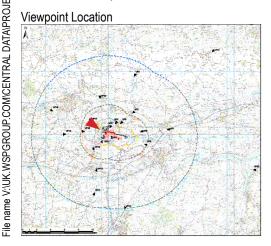
VIEW 16: VIEW FROM BARLOW ROAD CLOSE TO A1041

FIGURE 10.11.16a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 06:50

Approximate distance to site boundary: 2km

Approximate Elevation: 5m

Direction of View: South East

OS Reference: 465805 432321

Receptor Type: Road users/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

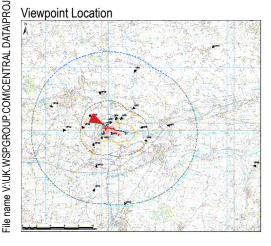
VIEW 17: VIEW FROM PERMISSIVE PATH CLOSE TO BROWN COW LANE

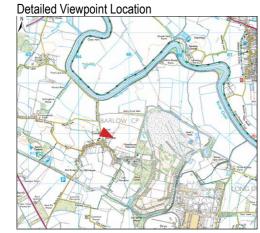
FIGURE 10.11.17a AUTUMN VIEW(PHOTOSTITCHED)











Date and time: 14.12.2017 12:40

Approximate distance to site boundary: 2km

Approximate Elevation: 5m

Direction of View: South East

OS Reference: 464546 429017

Receptor Type: Road users/ Residents nearby

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 17: VIEW FROM PERMISSIVE PATH CLOSE TO BROWN COW LANE

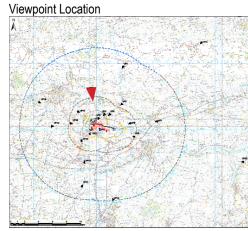
FIGURE 10.11.17b WINTER VIEW (PHOTOSTITCHED)













Date and time: 04.10.2017 07:19

Approximate distance to site boundary: 4.5km

Camera: Canon EOS 600D 55mm Full Frame

Approximate Elevation: 5m

Direction of View: South East

OS Reference: 465805 432321

Receptor Type: Road users/ Rail users/ Residents nearby

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

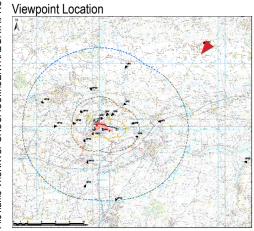
VIEW 18: VIEW FROM PUBLIC FOOTPATH ADJACENT TO A63 (HULL ROAD)

FIGURE 10.11.18a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 04.10.2017 08:35

Approximate distance to site boundary: 13km

Approximate Elevation: 5m

Direction of View: South West

OS Reference: 482054 438919

Receptor Type: Users of PRoW/ Congregation to All Saints Church (Grade I Listed Building)

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

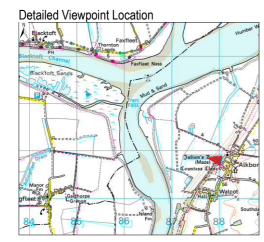
VIEW 19: VIEW FROM CHURCH HILL AND PRoW, HOLME ON SPALDING MOOR

FIGURE 10.11.19a AUTUMN VIEW (PHOTOSTITCHED









Date and time: 03.10.2017 15:57

Approximate distance to site boundary: 19km

Approximate Elevation: 5m

Direction of View: West/ North West

OS Reference: 488027 421749

Receptor Type: Users of PRoW/ Visitors to the SM $\,$

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

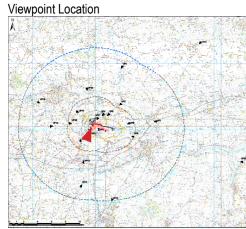
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

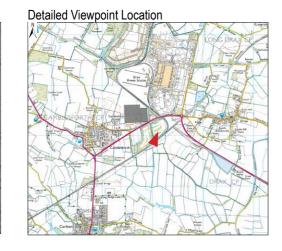
VIEW 20: VIEW FROM PROW AND JULIAN BOWER SCHEDULED MONUMENT, ALKBOROUGH FIGURE 10.11.20a AUTUMN VIEW (PHOTOSTITCHED)











Date and time: 13.12.2017 15:0

Approximate distance to site boundary:

Approximate Elevation: 5m

Direction of View: North/ North East

OS Reference: 466041 425910

Receptor Type: Users of PRoW/ Visitors to the SM

Camera: Canon EOS 600D 55mm Full Frame

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5 (2)(a)

THE DRAX POWER (GENERATING STATION ORDER)

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VIEW 21: VIEW FROM PRoW THROUGH DRAX GOLF COURSE

FIGURE 10.11.21b WINTER VIEW (PHOTOSTITCHED)





REFERENCES

- Ref. 10.1 Department for Energy and Climate Change (DECC), 2011, National Policy Statement for Energy (EN-1).
- Ref. 10.2 Department for Energy and Climate Change (DECC), 2011b, National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2).
- Ref. 10.3: Department for Energy and Climate Change (DECC), 2011b, National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4).
- Ref. 10.4: Department for Communities and Local Government (DCLG), 2012, National Planning Policy Framework, The Stationary Office, London.
- Ref 10.5 Ministry of Housing, Communities and Local Government, March 2018, National Planning Policy Framework – Consultation Proposals
- Ref. 10.6: Selby District Council, 2005, Selby District Local Plan, adopted February 2005, saved policies.
- Ref. 10.7: Selby District Council, 2013, Selby District Core Strategy Local Plan, adopted October 2013.
- Ref. 10.8: East Riding of Yorkshire Council, East Riding Local Plan Strategy Document 2012-2029, adopted April 2016.
- Ref. 10.9: Doncaster Metropolitan Borough Council, Core Strategy Development Plan Document, adopted May 2012.
- Ref. 10.10: Council of Europe, 2000, The European Landscape Convention.
- Ref. 1011: Department for Environment and Rural Affairs, 2000, Countryside and Rights of Way Act, HMSO.
- Ref. 10.12: Landscape Institute and Institute of Environmental Management and Assessment, 2013, Guidelines for Landscape and Visual Impact Assessment, Third Edition.
- Ref. 10.13: Tudor, C, 2014, An Approach to Landscape Character Assessment, Natural England.
- Ref. 10.14: Landscape Institute, 2011, Landscape Institute Advice Note 01/11
 Photography and Photomontage in Landscape and Visual Impact Assessment.
- Ref. 10.15: Ministry of Housing, Communities and Local Government, National Planning Practice Guidance Section Natural Environment, 21 January 2016.
- Ref. 10.16: British Standard Publication, BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations
- Ref. 10.17: Scottish Natural Heritage, 2017, Visual representation of Wind Farms Guidance, Version 2.2.
- Ref. 10.18: Natural England, 2013, NCA Profile 39: Humberhead Levels.
- Ref. 10.19: Chris Blandford Associates, 2011, North Yorkshire and York Landscape Characterisation Project, North Yorkshire County Council.
- Ref. 10.20: Carl Bro, 2005, The East Riding of Yorkshire Landscape Character Assessment, East Riding of Yorkshire Council.
- Ref. 10.21: ECUS Ltd, 2007, Doncaster Landscape Character Assessment and Capacity Study, Doncaster Metropolitan Borough.
- Ref.10.22: East Riding of Yorkshire, East Riding of Yorkshire Important Landscape Areas Boundary Refinement, July 2014
- Ref. 10.23: The National Joint Utilities Group, NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity of Trees, 16 November 2007
- Ref 10.24: Energy Network Association Technical Specification 43-8, Issue 4 2015



