



Humber Low Carbon Pipelines

Preliminary Environmental Information Report
Volume II Chapter 10 Cultural Heritage
October 2022

nationalgrid

Contents

10.	Cultural Heritage	3
10.1	Introduction	3
10.2	Legislation, policy and guidance	4
	Legislation	4
	Policy	4
	Guidance	6
10.3	EIA Scoping Opinion and engagement	7
	Response to the EIA Scoping Opinion	7
	Engagement undertaken to date	18
10.4	Assessment methodology and significance criteria	26
	Study Area	26
	Baseline data collection	26
	Impact assessment methodology	28
	Significance criteria	30
	Assumptions and limitations	31
10.5	Baseline conditions	31
	Existing baseline	31
10.6	Design development, impact avoidance and embedded mitigation	84
10.7	Preliminary assessment of potential impacts	85
	Construction	85
	Operation	98
	Decommissioning	105
10.8	Mitigation and enhancement measures	105
	Construction	105
	Operation	105
	Decommissioning	108
10.9	Summary of the preliminary assessment of potential significant effects	108
10.10	Next steps	127
10.11	References	128

10. Cultural Heritage

10.1 Introduction

- 10.1.1 This Chapter reports the results of the preliminary assessment of the potential impacts and effects of the Project on Cultural Heritage and describes:
- Relevant, legislation, policy and guidance;
 - Engagement undertaken to date;
 - The proposed assessment methodology and associated significance criteria;
 - Preliminary baseline conditions;
 - Potential impacts of construction, operation, and decommissioning;
 - Potential design, mitigation, and enhancement measures;
 - Summary of the preliminary assessment of potential significant effects; and
 - Next steps.
- 10.1.2 This assessment considers the simultaneous construction of a dual pipeline system (one for carbon dioxide and one for hydrogen), as well as the associated Above Ground Installations (AGIs). The majority of the carbon dioxide pipeline would be up to 600 mm (24") nominal diameter and the hydrogen pipeline would be up to 900 mm (36") nominal diameter. This is referred to as the Base Case in this Preliminary Environmental Information Report (PEIR). Also under consideration is the possibility of deploying a larger carbon dioxide pipeline, with a diameter up to 750 mm (30") (with the hydrogen pipeline remaining the same diameter as within the Base Case). This is referred to in this PEIR as Sensitivity 1. Further details regarding the Base Case and Sensitivity 1, as well as the diameter and capacity of the pipelines are provided in Sections 2.3 and 2.4 of Chapter 2: Project Description (Volume II). This chapter assesses the impacts and effects associated with the Base Case. It is anticipated that the types of potential impacts for the Base Case and Sensitivity 1 would be the same, although the magnitude of impacts may differ. A full assessment of Sensitivity 1 would be undertaken and recorded within the Environmental Statement (ES) if the larger carbon dioxide pipeline diameter is taken forward into the Development Consent Order (DCO) application.
- 10.1.3 This Chapter (and its associated figures and appendices) is intended to be read as part of the wider PEIR.
- 10.1.4 This Chapter is supported by the following figures:
- Figure 10.1 Cultural Heritage Assets Locations (Volume IV); and
 - Figure 10.2: Historic Landscape Characterisation (Volume IV).
- 10.1.5 This Chapter is supported by the following appendices:
- Appendix 10.1: Cultural Heritage Gazetteers (Volume III);
 - Appendix 10.2: Humber Low Carbon Pipelines Preliminary Geoarchaeology desk-based Assessment (Volume III); and

- Appendix 10.3: Humber Low Carbon Pipelines Archaeological desk-based assessment for the intertidal zone at Easington, Yorkshire (Volume III).

10.2 Legislation, policy and guidance

- 10.2.1 A summary of the international, national, and local legislation, planning policy and guidance relevant to the Cultural Heritage assessment for the Project is set out below.

Legislation

The Infrastructure Planning (Environmental Impact Assessment) Regulations (2017) (Ref 10.1)

- 10.2.2 In accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, an Environmental Impact Assessment (EIA) would be undertaken and recorded in the form of an ES, which will be submitted with the DCO application. The ES will include a description of the likely significant effects of the Project arising from risks to cultural heritage

Planning (Listed Buildings and Conservation Areas) Act (1990) (Ref 10.2)

- 10.2.3 The act applies special protection to buildings and areas of special aesthetic or historic value. In particular, section 66 (1) of the act states: *“In considering whether to grant planning permission for development which affects a Listed Building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special aesthetic or historic value which it possesses”.*

Ancient Monuments and Archaeological Areas Act (1979) (Ref 10.3)

- 10.2.4 The act gives statutory protection to any structure, building or work which is considered to be of particular historic or archaeological interest and regulates any activities which may affect such area. Under the act, any work that is carried out on a Scheduled Ancient Monument must first obtain Scheduled Monument consent.

Policy

- 10.2.5 The preliminary assessment undertaken in this Chapter adheres to National and Local policy as set out in the following documents:

National Policy Statement for Energy EN-1 (2011) (Ref 10.4)

- 10.2.6 The assessment of the historic environment is addressed under section 5.8 of EN-1 (Ref 10.4). Section 5.8 discusses the need for an applicant to provide an understanding of the extent of impact of a proposed development on the significance of any heritage assets affected:

“An applicant is to carry out a desk-based assessment, including the consultation of the relevant Historic Environment Record (as a minimum) to assess the archaeological interest of heritage assets within a development site. Where the desk-based assessment is insufficient to properly assess interest, a field evaluation should be carried out.”

- 10.2.7 Following assessment, where the loss of the whole or a material part of a heritage asset is justified, the Infrastructure Planning Commission [now the Planning Inspectorate] should require the developer to record and advance understanding of the significance of the heritage asset before it is lost. This recording should be undertaken in accordance with a written scheme of investigation and provide appropriate procedures are in place for the identification and treatment of previously unknown assets being discovered during construction.

Draft Overarching National Policy Statement for Energy (EN-1) (2021) (Ref 10.5)

- 10.2.8 The historic environment is addressed under section 5.9 . Under the draft statement, the requirements of assessment remains the same as the extant EN-1 (Ref 10.4).

National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines EN-4 (2011) (Ref 10.6)

- 10.2.9 There is no section on the historic environment in EN-4. The only note of the potential to impact heritage assets is through the action of dredging. This principally relates to the marine environment, which is scoped out of assessment (see Table 10.1) and therefore, not considered further.

Draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (2021) (Ref 10.7)

- 10.2.10 The draft document for EN-4 has no changes in respect heritage to the 2011 adopted version.

National Planning Policy Framework (2021) (Ref 10.8)

- 10.2.11 The historic environment is discussed in section 16 of the National Planning Policy Framework (NPPF). The NPPF is discussed in relation to the heritage baseline in the Route and Study Area in section 10.5 of this Chapter. The NPPF discusses Government planning policies for England and how these are expected to be applied. The NPPF provides a framework within which local and neighbourhood plans can be produced. Planning law requires that applications for planning permission must be determined in accordance with the development plan. The NPPF must be taken into account in the preparation of local and neighbourhood plans and is a material consideration in planning decisions. Furthermore, the NPPF requires that the significance of designation and non-designated heritage assets and their settings should be considered in relation to the benefits and impacts of proposed developments, with a view taken on whether the negative impacts constitute substantial harm or not on heritage assets. If substantial harm is identified, normally a development should be avoided unless the benefits of the project to the public outweigh the projected harm to the asset.
- 10.2.12 Other policy the heritage assessment will consider includes:
- **East Riding Local Plan Policy (Ref 10.9).** Policy ENV3 'Valuing our heritage' considers the historic environment with East Riding. The policy seeks to reinforce local distinctiveness and to conserve the significance, views, setting, character, appearance and context of heritage assets. Where preservation in situ is not justified, the developer will be required to make adequate provision for excavation and recording before or during development.

- **Selby District Core Strategy Local Plan (2013) (Ref 10.10)** includes Policy SP18, Protecting and enhancing the environment. Heritage is discussed in respect of the need to conserve historic assets which contribute most to the distinct character of the district.
- **Selby District Local Plan (Ref 10.11)**; includes numerous policies on the historic environment, principally focused on the need to preserve and or enhance the character of different heritage assets as part of future developments. These include policies focused on the historic character of landscapes (ENV15); Listed Buildings (ENV22); Conservation Areas (ENV25); setting of scheduled monuments (ENV27); and the need for archaeological assessment/evaluation where development proposals affect sites of known or possible archaeological interest (ENV28).
- **North Lincolnshire Local Development Framework (Ref 10.12)**, Policy CS6 aims to ensure the protection, conservation and enhancement of sites of historic and built heritage value are actioned , so that the sites continue to make a contribution to the area's scene and quality of life. The policy also notes the safeguarding of the Isle of Axholme landscape.
- **North Lincolnshire Local Plan (Ref 10.13)** Section 12 of the local plan addresses the Historic Environment. Included are individual policies, such as HE9, the need for archaeological investigations as assessment work, and the need for archaeological excavation as mitigation, where preservation in situ is justifiably not possible.
- **Central Lincolnshire Local Plan (Ref 10.14)** – Policy LP25 focuses on the Historic Environment. The policy sets out the requirement to assess a development proposal's impact on the significance of a heritage asset. Proposals would be supported which take into account the desirability of sustaining and enhancing non-designated heritage assets and their setting.

Guidance

10.2.13 The preliminary assessment undertaken in this Chapter adheres to professional standards and guidance as set out in the following documents:

- **Standard and Guidance for Historic Environment Desk-Based Assessment (2014) (Ref 10.15)**; defines good practice for the execution and reporting of desk-based assessment. The focal standard being the need to determine the nature, extent and significance of the historic environment within a specified area.
- **Principles of Cultural Heritage Impact Assessment in the UK (Ref 10.16)**; establishes a framework within which impact assessment can be undertaken.
- **Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (Ref 10.17)**; provides a heritage specific matrix for assessing impact on cultural heritage assets, not limited to world heritage sites.
- **Historic Environment Good Practice Advice in Planning note 2 (GPA2), Managing Significance in Decision-Taking in the Historic Environment – (Ref 10.18)**;
- **Conservation Principles Policies and Guidance for the Sustainable Management of the Historic Environment (Ref 10.19)**; the document provides a framework to support decision makers. Particular focus is on the defined

heritage values within the document, formed of evidential, historical, aesthetic or communal value.

- **The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Ref 10.20)**; The setting of heritage assets provides guidance to practitioners, local authorities and planners in assessment of setting of heritage assets. The guidance provides a five step staged approach to proportionate decision-taking in respect a heritage asset's setting, including establishing the role setting plays to an asset's significance and assessing the effects of the proposed development on the setting.

10.3 EIA Scoping Opinion and engagement

- 10.3.1 A summary of the EIA Scoping Opinion from the Planning Inspectorate (PINS) and responses to this EIA Scoping Opinion are outlined below. Furthermore, all relevant engagement undertaken to date is outlined in this Section.

Response to the EIA Scoping Opinion

- 10.3.2 An EIA Scoping Opinion was received by the Applicant from PINS on 20 May 2022 (Appendix 1.2: EIA Scoping Opinion (Volume III) (Ref 10.21)). Table 10.1 lists the comments that PINS and consultation bodies made in relation to Cultural Heritage and shows how the Applicant is responding to these.

Table: 10.1: Summary of EIA Scoping Opinion in relation to Cultural Heritage

Section reference	Applicant's proposed matter	Inspectorate's / consultation bodies comments	Response
3.6.1	Intertidal and marine archaeology at the Humber Estuary – construction and operation	<p><i>The Applicant proposes that, due to the distance of the proposed trenchless crossing and tunnel portals from the banks of the Humber Estuary (where potential archaeology may be present at low or high tide), this matter should be scoped out of the ES. The Applicant indicates this position is agreed with relevant consultation bodies.</i></p> <p><i>The Inspectorate agrees that this matter can be scoped out on that basis. However, should the further baseline studies proposed to inform assessment identify presence of archaeology that could be affected by the Proposed Development, the ES should include an assessment where significant effects to any such assets are likely.</i></p>	<p>Noted, the intertidal and marine archaeological environment of the Humber Estuary, are not considered further in the PEIR or the forthcoming ES.</p> <p>The intertidal environment at Easington landfall location is scoped into assessment and subject to a specific assessment, available in Appendix 10.3 (Volume III).</p>
3.6.2	Built heritage – physical impacts during construction and operation	<p><i>The Applicant proposes to assess effects resulting from changes to the setting of built heritage assets during construction and operation of the Proposed Development, but states that no impacts to the physical fabric of built heritage assets are anticipated since the majority of built heritage assets are located outside of the Scoping Route Corridor. Five Grade II Listed Buildings are located within the Scoping Route Corridor. Commitment 6 in Appendix F Draft Commitments Register (Scoping Report, Volume III) states that the Proposed Development “will seek to avoid any physical impacts to any Listed Buildings located within the Scoping Route Corridor”.</i></p> <p><i>The Inspectorate considers that on the basis of the information presented in the Scoping Report it is unlikely that there would be any significant effects to the physical fabric of built heritage assets; however, as the final route of the pipeline is not determined there</i></p>	<p>Noted, built heritage remains considered within the baseline of this document. All listed buildings have been removed from the Proposed Order Limits and impact is therefore anticipated to only be to the setting of built heritage, and not a physical impact.</p>

		<i>is potential for the five Grade II Listed Buildings within the Scoping Route Corridor to be physically impacted and if this is the case, the ES should include an assessment of physical impacts where significant effects are likely to occur.</i>	
3.6.3	Historic landscape character – construction and operation	<p><i>The Applicant proposes that this matter be scoped out of the ES (aside from Isle of Axholme area of special historic landscape interest, which is proposed to be scoped in) as the landscape will be reinstated following construction and effects would therefore be temporary, and because the AGIs will be located next to existing industrial emitters. The Applicant indicates that this position is agreed with relevant consultation bodies.</i></p> <p><i>The Inspectorate does not have sufficient information to exclude the possibility of significant effects to historic landscape character during construction or operation. The construction period is anticipated to be circa 44 months and it is unclear from information presented in the Scoping Report whether activities would impact on any areas of historic landscape character and/ or over what duration impacts might be experienced. In addition, there may be operational impacts as a result of pipelines bisecting parish boundaries, field systems and areas of well-preserved ridge and furrow.</i></p> <p><i>An understanding of historic landscape character is essential to an informed understanding of the significance of effects and the areas of particular attention required in terms of recording and reinstatement. The ES should include information about the baseline historic landscape character within the study area and how any features within it might be affected during construction and operation phases.</i></p> <p><i>Where significant effects are likely, an assessment should be included in the ES and the Applicant should make effort to agree the methodology for assessment, including any bespoke approaches required, e.g. for military installations and crash sites, with relevant consultation bodies including Historic England.</i></p>	<p>The PEIR includes a preliminary assessment of the Historic Landscape Character, following the Scoping Opinion.</p> <p>Further details of the Historic Landscape Character's significance will follow in the baseline report and the impact assessment in the ES.</p> <p>Military archaeology will be considered as part of the terrestrial desk-based assessment, which will be an appendix to the Environmental Statement.</p>

		<i>The Applicant's attention is drawn to the consultation responses from Historic England and North Lincolnshire Council in this regard (see Appendix 2 of this Opinion).</i>	
3.6.4	Decommissioning impacts	<p><i>The Scoping Report seeks to scope out effects to terrestrial archaeology, intertidal and marine archaeology, built heritage and historic landscape character from decommissioning activity on the basis that works would not cause any further physical impacts beyond those experienced during construction, works would be temporary, and works would reverse negative effects arising from changes to setting during construction and operation of the AGIs.</i></p> <p><i>The Inspectorate agrees that this matter can be scoped out on that basis, and on the basis that the pipelines would be left in situ following decommissioning.</i></p>	Noted, impacts from decommissioning are not considered further in the PEIR nor will they be within the assessment contained in the forthcoming ES.
3.6.5	Study area	<p><i>The Scoping Report describes that a 500 m study area will be applied from the Scoping Route Corridor for assessment of designated and non-designated heritage assets, extended in two instances to incorporate four (Grade I and II) Listed Buildings slightly beyond 500 m that have a historical and/ or functional relationship with other heritage assets within the 500 m study area. Due to the linear nature of the Proposed Development, it is stated that the 500 m study area is sufficient to understand archaeological potential and to identify any significant effects arising from changes to setting.</i></p> <p><i>The Inspectorate is content with this approach subject to consideration of the potential for significant effects to the setting of heritage assets over a wider study area arising from the presence of the proposed AGIs, in particular the proposed Easington Pumping Station, which includes a vent with a maximum height of 45 m. In this regard, the Inspectorate notes that the study area for the landscape and visual impact assessment, as described in Section 10 of the Scoping Report, extends to 1.5 km around the proposed AGIs and 5 km around the proposed Easington Pumping Station, with two Grade I and one Grade II* Listed Buildings, and</i></p>	<p>The Project will continue to utilise a principal 500 m Study Area from the Proposed Order Limits.</p> <p>The approach to consider assets outside of the established 500 m Study Area, will continue, especially where there is a clear historic association with assets within the study area.</p> <p>The current landscape Study Areas, established for proposed AGI locations will also be utilised for setting assessment.</p> <p>The onsite setting assessment work has</p>

		<p><i>two conservation areas, falling within this wider study area, which are not currently included within the 500 m study area for cultural heritage.</i></p>	<p>utilised the landscape study area to support the scoping of designated assets for assessment within the PEIR. The current landscape Study Areas are displayed on Figure 10.1 (Volume IV).</p>
3.6.6	Baseline conditions – archaeological investigation	<p><i>The Scoping Report states that a geoarchaeological desk-based assessment will be undertaken, including a deposit model, to support understanding of the potential for archaeological and paleoenvironmental remains. Following completion of this work, further discussion is proposed with relevant consultation bodies about whether a phase of targeted fieldwork may be needed to inform the understanding of baseline conditions for assessment in the ES.</i></p> <p><i>The Inspectorate notes North Lincolnshire Council's responses regarding below ground assets (see Appendix 2 of this Opinion) and that the Scoping Route Corridor has not been subject to previous investigation.</i></p> <p><i>The approach to establishing the baseline conditions must be sufficient to enable a robust assessment of likely significant effects and any mitigation required thereafter. The Inspectorate advises that the Applicant undertakes sufficient geophysical survey to inform the requirement for further targeted intrusive archaeological investigation.</i></p> <p><i>The Applicant should make effort to agree the scope of any geophysical survey and intrusive investigation with relevant consultation bodies.</i></p> <p><i>The attention is drawn to the consultation response from North Lincolnshire Council and the joint response from North Yorkshire</i></p>	<p>A meeting was held on 30 June 2022 to further discuss archaeological investigations with archaeological consultees (see Table 10.2).</p> <p>The Applicant is commencing with a programme of geophysical survey, with the intention to submit the available associated reports with the submission of the DCO application. A geoarchaeological assessment, will also be submitted with the DCO application.</p> <p>Discussion is ongoing in respect to the scope of geophysical survey and the requirement for further targeted intrusive archaeological investigations will be held, with heritage consultees,</p>

		<i>County Council and Selby District Council in this regard (see Appendix 2 of this Opinion)</i>	based on the available geophysical and geoarchaeological results.
3.6.7	Methodology – heritage asset value	<i>The Inspectorate advises that a clear justification should be provided for the allocation of sensitivity or value to each heritage asset considered in the assessment using the criteria in Table 9.3 of the Scoping Report. This should include reference to the relevant National Policy Statement(s) (NPS)/ National Planning Policy Framework (NPPF), other relevant guidance and baseline information and the results of any intrusive archaeological investigation where relevant. The Applicant's attention is drawn to the consultation responses from Historic England and North Lincolnshire Council in this regard (see Appendix 2 of this Opinion).</i>	<p>Table 10.3 below establishes parameters used in the assessment to provide a value or sensitivity to a heritage asset.</p> <p>Justification in assigning value to a heritage asset will be drawn out in the baseline report appendix to the ES. This will account for latest information available (e.g. fieldwork results), as well as the contribution the asset's setting makes and any demonstratable heritage values (evidential, historical, aesthetic, communal) of the conservation principles (Ref 10.19)) the asset holds. Changes to value, based on iterative assessment, post completion of the standalone baseline report, will be captured in</p>

			the ES to demonstrate the evolution of assessment.
3.6.8	Design, mitigation and enhancement measures	<i>The Scoping Report indicates that an Outline Heritage Mitigation Strategy (OHMS) will be submitted with the DCO application. In the event that the ES concludes that there is a requirement for further archaeological investigation and recording, the Inspectorate considers that an outline written scheme of investigation should form part of the OHMS.</i>	Noted, an outline written scheme of investigation will be included within the outline heritage mitigation strategy. The outline heritage mitigation strategy will be submitted with the DCO application and anticipated to remain a live document through examination, whilst fieldwork results become available.
3.6.9	Assessment methodology	<i>The Applicant has explained the proposed approach to determining significance of effect in the assessment of cultural heritage and archaeology in the ES. The ES should present the outcome of the assessment in a manner that enables the reader to understand the significance of effect in EIA terms, as well as the degree of harm to the significance of the heritage asset in the context of the relevant NPS(s) and NPPF. The Applicant's attention is drawn to the consultation response from Historic England in this regard (see Appendix 2 of this Opinion).</i>	There is no detailed matrix for cultural heritage EIA assessment and the recent Chartered Institute for Archaeologists (CIFA)/ Institute of Environmental Management and Assessment (IEMA)/Institute of Historic Building Conservation (IHBC) 'Principles of Cultural Heritage Impact in the UK' (Ref 10.16). The Principles note a simple graded scale of effects should be defined and applied (paragraph B.13, page 11).

			<p>Table 9.5 of the EIA Scoping Report (Ref 10.22) establishes the simple graded scale of effects to allow for the understanding of the value of the heritage asset to be weighed against the magnitude of impact (or degree of harm). Parameters for establishing the degree of harm are outlined in Table 9.4 of the EIA Scoping Report. It is noted that 'significance of effect' and 'effect on significance' are two separate concepts. To avoid confusion and provide clear differentiation in terminology, the matrix avoids using the term significance at the early stages of assessment and uses value instead. Therefore, the 'impact on value', provides the same qualitative assessment as an 'effect on significance'. An overall significance of effect is subsequently established to understand the degree of harm to an asset, based on the resultant effect of the</p>
--	--	--	---

			<p>Project's impact on parameters which define the asset's value. The significance of effect could be quantified as positive or negative.</p> <p>The qualitative assessment methodology established in section 9.9 of the EIA Scoping Report will support decision making for heritage consultees in their advice to the Planning Inspectorate, in the context of the EN-1 and NPPF..</p>
3.6.10	Visualisations	<p><i>The Scoping Report does not indicate whether visualisations would be produced to inform the assessment of indirect effects to the setting of heritage assets. Representative viewpoints are proposed as part of the assessment of landscape effects but the locations have not been provided so it is not clear whether these would be suitable. The Applicant should make effort to agree with relevant consultation bodies whether any additional visualisations are required and, if so, the number and location to be produced.</i></p>	<p>The heritage working group held on the 21 July 2022 included discussion with the Project's landscape lead.</p> <p>Preliminary visualisations were shared with heritage consultees for comment, with the topic remaining under discussion.</p>
3.6.11	Scope of assessment – description of likely significant effects	<p><i>The Applicant is advised that the potential for dewatering impacts on organic rich deposits (e.g., alluvium and peat) should be assessed for the construction and decommissioning phases of the Proposed Development where significant effects are likely to occur. The Applicant's attention is drawn to the consultation</i></p>	<p>The cultural heritage assessment will include a geoarchaeological assessment which will support the identification and understanding of</p>

		<p><i>response from Historic England in this regard (see Appendix 2 of this Opinion).</i></p>	<p>potential impacts to sensitive organic rich deposits of archaeological interest.</p> <p>The Applicant notes point 3.6.4 of the EIA Scoping Opinion (Ref 10.21) which agrees to the scoping out of impacts associated with decommissioning. Furthermore, Chapter 8, paragraph 8.8.3 of the Applicant's EIA Scoping Report notes that effects in operation (without mitigation) may include: <i>"reduction in flow to groundwater abstractions and surface water bodies and changes to soil hydrology due to requirement for dewatering during operation"</i>.</p> <p>Dewatering impacts anticipated during operation will be considered in the ES. Impacts from decommissioning remain scoped out in their entirety.</p>
--	--	---	--

3.6.12	Scope of assessment – description of likely significant effects	<i>The Applicant is advised that consideration should be given to the potential for construction impacts such as noise, dust and odour to result in likely significant effects on the setting of heritage assets.</i>	Noted, the heritage assessment with the ES, to comprise part of the DCO submission, will draw on construction information to inform the assessment and draw on assessment results of other environmental disciplines, where appropriate.
--------	---	---	--

Engagement undertaken to date

- 10.3.4 Table 10.2 provides a summary of the engagement undertaken to inform the cultural heritage assessment to date.
- 10.3.5 Engagement has utilised a Project specific 'heritage working group' comprising the following heritage officers:
- Archaeological Officer on behalf of North Yorkshire County Council;
 - Conservation Officer on behalf of Selby District Council;
 - Archaeological Officer and Conservation Officer on behalf of East Riding of Yorkshire Council;
 - Archaeological Officer and Conservation Officer on behalf of North Lincolnshire Council;
 - Archaeological Officer from Lincolnshire County Council, on behalf of West Lindsey;
 - Conservation Officer on behalf of West Lindsey District Council; and
 - Historic England Inspectors of Ancient Monuments on behalf of the Midlands and Yorkshire regions.

Table 10.2: Summary of engagement undertaken

Consultee	Date and method of engagement	Summary of issues raised	Response
Archaeological Officer and Conservation Officer to North Lincolnshire Local Authority	07 October 2021 (Microsoft Teams Call)	<p>The same presentation was given to each individual local authority heritage officer outlining the methodology proposed for the Cultural Heritage assessment, alongside a high-level introduction to the Project.</p> <p>The proposed methodology was discussed, and the comments received have informed the methodology outlined in this Chapter.</p> <p>The proposed approach to desk-based assessment was agreed. However, further comments from consultees focused on the need for further archaeological assessment to inform the EIA.</p>	<p>A document outlining the proposed assessment methodology was shared with heritage consultees by email on 23 November 2021 for comment.</p>
Archaeological Officer and Conservation Officer to East Riding of Yorkshire Local Authority	12 October 2021 (Microsoft Teams Call)		
Historic England	14 October 2021 (Microsoft Teams Call)		
Archaeological Officer to Lincolnshire County Local Authority	20 October 2021 (Microsoft Teams Call)		
Conservation Officer to West Lindsey Local Authority	20 October 2021 (Microsoft Teams Call)		

Archaeological Officer to North Yorkshire Local Authority	27 October 2021 (Microsoft Teams Call)		
First meeting of the Project's Heritage working group	9 December 2021 (Microsoft Teams Call)	<p>Comments were focused on the standalone methodology document shared on 23 November 2021.</p> <p>Key comments from the Heritage Working Group included:</p> <ul style="list-style-type: none"> • Agreement of the proposed scope of the assessment as presented in this chapter, including the scoping out of assessment of the marine and intertidal environment of the River Humber. • Agreement on the approach to the desk-based assessment, including a targeted walkover survey, supported by an aerial survey. • A level of commitment to further assessment, beyond a purely desk-based approach, was requested. This included the request for a geoarchaeological assessment and use of metal detecting, alongside geophysical survey and trial trench evaluation. <p>Further comments raised included the assessment of curtilage by the East Riding Conservation Officer, alongside the assessment of setting for built heritage.</p>	<p>An update of the methodology document was issued by email on 23 March 2022. The update included the commitment for a geoarchaeology assessment to be carried out to allow for the requested Geoarchaeologically led approach to assessment. Following the results of the geoarchaeological assessment and terrestrial archaeology baseline report, the Project proposes to hold further discussion on what targeted fieldwork may be proportionate and appropriate to further assessment and aid the DCO process.</p> <p>The Project, however, does not see value in metal detecting as an approach to further fieldwork, as it would not provide sufficient evidence to characterise the nature and or significance of any archaeological remains.</p> <p>Curtilage matters would need to be considered on a case-by-case basis. However, based on the design principle to avoid direct impacts to buildings, including Listed Buildings, it is anticipated there would be a limited number of cases where curtilage issues may arise.</p>

Conservation Officer to Selby District Local Authority	2 March 2022 (Microsoft Teams Call)	A call was held to discuss the Project's background and the methodology document, previously shared. The conservation officer agreed to the proposed methodology.	The methodology is carried through into the PEIR and will be further used in the forthcoming ES.
Heritage Working Group	13 April 2022 (Microsoft teams)	<p>A second call was held with the heritage working group. Updates were provided on the Project's development, in regards design used for the EIA Scoping Report, as well as a presentation of the inter-tidal heritage methodology. Consultees from East Riding of Yorkshire and Historic England, for whom the inter-tidal area is relevant, were not present in the call and the methodology notes were shared via email on 9 May 2022 (East Riding) and 8 June 2022 (Historic England). No comments have been received on the proposed inter-tidal methodology from either Historic England or the archaeological officer on behalf of East Riding of Yorkshire.</p> <p>The meeting, was an opportunity for consultees present to comment on the second draft of the heritage methodology document (issued 23 March, see above). Primary comments included:</p> <ul style="list-style-type: none"> • The heritage methodology note still lacks commitment (in terms of timeframes and proposed methods) to fieldwork. Evaluation needs to be undertaken to inform the EIA. • Historic Landscape Character (HLC) needs to be studied and not scoped out. Cannot assess the significance and setting of landscape features without an understanding of the HLC baseline. 	<p>The inter-tidal desk-based assessment is located in Appendix 10.3 (Volume III) and the Project welcomes comments on the document from consultees.</p> <p>Following comments from heritage consultees, the Project has procured an intrusive archaeological fieldwork supplier for geophysical survey and trial trench evaluation, where appropriate.</p> <p>HLC has been scoped into assessment for the PEIR and will be carried into the ES, as per the Scoping Opinion responses.</p>

		The Project notes the receipt of further detailed annotations on the document from the archaeological officer at North Lincolnshire via email on 13 April 2022. Further comments on methodology have also been received via the EIA Scoping Opinion.	
Archaeological officers for North Yorkshire, East Riding of Yorkshire, North Lincolnshire, Lincolnshire and Historic England	30 June 2022 (Microsoft Teams)	<p>A call was held for the Project to discuss its proposed approach to archaeological fieldwork, as evaluation, with the archaeological officers at each respective local authority.</p> <p>The approach outlined included:</p> <ul style="list-style-type: none"> • Geoarchaeological monitoring of Ground Investigations (GI) to take the opportunity of supporting the geoarchaeological assessment (including deposit model) through analysis of these interventions. A written scheme of investigation (WSI) of the methodology for geoarchaeological monitoring of the GI works would be shared. • Geophysical survey within the latest design of the proposed construction working, plus proposed AGI locations. The Applicant proposed to scope areas of geophysics based on current understanding of areas where insufficient baseline data is located. For example, some detailed cropmark sites are known across the Project, which the Applicant believes would be sufficient to proceed straight to trial trench evaluation. • Trial trench evaluation- the requirement and scope of any trial trench evaluation would be informed by the latest available results of the 	<p>A written scheme of investigation (WSI) for the methodology of archaeological monitoring of the Project's engineering led ground investigations to support the geoarchaeological assessment, was shared for comment by email on 25 July 2022.</p> <p>The Project is commencing with a programme of geophysical survey from October 2022. The scope of the survey will seek to survey as much as possible (accounting for seasonal conditions and land access discussions) for submission with the DCO. The scope of the survey work will seek to use, at least, a 30m buffer around the latest construction working width, with extension of survey of proposed AGI locations and proposed temporary construction compounds. Some areas have been scoped out of survey, namely where previous geophysical survey has occurred and or where known land contamination has occurred.</p> <p>Comments in regards specific design elements, such as the use of bog matting at temporary construction</p>

		<p>geoarchaeological assessment and geophysical survey at the time of scoping.</p> <p>The principal comments from the archaeological officers were as follows:</p> <ul style="list-style-type: none"> • Agreement that the latest construction working width design, alongside extension for proposed AGI locations, could be used as a starting point for fieldwork assessment. • Concern around the proposed scoping approach to geophysical survey. Consultees would like to see 100% coverage for geophysical survey. Scoping out of cropmark sites may not be appropriate in some areas (e.g. North Yorkshire where there are no strong cropmark sites to target trial trenches; or in East Riding where cropmarks maybe misleading as to where archaeology is and therefore, a high percentage trenching approach (not targeted) would be required if the Project was to go straight to trenching and skip geophysical survey). Where the Project seeks to scope out geophysics, detailed justification would be required. • Question around temporary construction compounds being defined and included in assessment. Request that temporary construction compounds be bog matted, to avoid topsoil strip. <p>Historic England confirmed that they support the advice of the respective local authority archaeologists.</p>	<p>compounds, have been fed through for consideration with the design team.</p>
--	--	--	---

Heritage Working Group	21 July 2022/5 August with Historic England only who were unable to make the original date (both by Microsoft teams)	<p>The call ran through updates in the Project's design and programme and to further discuss elements of the EIA Scoping Opinion.</p> <p>Key points from discussion included:</p> <ul style="list-style-type: none"> • Concern over the western two proposed AGI options at Drax by North Yorkshire's archaeological advisor. This is due to proximity to sensitive archaeological remains that would be considered of equal value to the Scheduled remains at Drax Priory. • Project team outlined responses to the EIA Scoping Opinion, much of which is reflected in Table 10.1 of this PEIR chapter. • No issues were raised with the Project's proposed methodology for impact assessment, with the proposal outlined in Table 10.3 of this PEIR chapter (same as presented at Scoping stage). This provides the qualitative assessment required to understand the proposed impact and significance of effect in NPPF terms and in line with EN-1. • The group was joined by the Project's landscape lead to run through key landscape viewpoints taken to date and how these feed into the assessment. Some representative views are presented within the PEIR, and further discussion is anticipated. Historic England noted the need to consider 'dynamic and kinetic movement' in the landscape as part of the views. Also raised consideration of views from the North Sea, particularly to the church spires of Patrington and Hedon, used for historic navigation of ships around the 	<p>Design is evolving and concerns over potential impacts are being considered.</p> <p>Visibility of the church spires at Hedon and Patrington is already limited across the landscape with the existing infrastructure at the proposed Pump Facility location. This infrastructure has already impacted any potential views; as a result it is not foreseen new significant impact. Further discussion on these issues are anticipated with respective heritage consultees during future meetings of the heritage working group.</p>
------------------------	--	---	---

		<p>Holderness Coast and the potential blocking of this view by the Pump Facility at Easington due to its proposed height.</p> <ul style="list-style-type: none"> • The Project's geoarchaeological specialist presented on the initial baseline understanding for the Project's geoarchaeological potential. Consultees provided useful pointers of previous work which may be of interest in supporting future research and assessment. • Agreement by Historic England and archaeological officers to scope out assessment of decommissioning impacts to organic remains and therefore, scoping out of decommissioning impacts in their entirety. Impact from construction and operation to organic remains will be assessed. <p>Consultees raised some initial thoughts on material presented during the call but requested copies of the slides to be able to provide an informed decision. The slides and a Geographic Information System (GIS) shapefile of the latest project boundary were shared by email on 28 July 2022.</p>	
--	--	---	--

10.4 Assessment methodology and significance criteria

Study Area

- 10.4.1 The Project will principally use a 500 m Study Area from the latest Proposed Order Limits for both designated and non-designated heritage assets. Due to the linear nature of the Project, it is believed that 500 m will provide adequate information to understand the archaeological potential of the Project, while also characterising and contextualising the historic environment within the Project's wider environs.
- 10.4.2 To support assessment of potential setting impacts from proposed AGI features, assessment uses the established landscape Study Area of 1.5 km, or 5 km at the Pump Facility, respectively for assessment of designated heritage assets. This is in line with the Project's EIA Scoping Opinion outlined in Table 10.1.

Baseline data collection

Desk study

- 10.4.3 This section sets out the baseline data that will be relied upon to produce a detailed assessment of baseline conditions that will be contained within the PEIR and ES. Data will be drawn from a range of sources and managed through a Project specific GIS. These will include:
- Historic Environment Record (HER) data for known archaeological sites, monuments, find spots and events.
 - Data from the Historic England Archives (HEA) for known cultural heritage assets within the intertidal zone only.
 - Historic Landscape Character Information from the respective HERs.
 - Archaeological reports (grey literature) on archaeological interventions within the Proposed Order Limits and proposed AGI locations, including the Rapid Coastal Zone Assessment (Yorkshire and Lincolnshire).
 - Published archaeological journals and monographs, local history books and pamphlets, including local history websites as appropriate.
 - Historic maps, including Ordnance Survey (OS), estate maps, enclosure maps, tithe maps and military plans, all available scales of OS maps will be utilised.
 - Available aerial photographs, including a Project commissioned Unmanned Aerial Vehicle (UAV)/drone aerial survey.
 - LiDAR data, processed from a digital terrain and digital surface models captured from the UAV survey.
 - Data sets of designations from Historic England's National Heritage List for England.
 - Data from the Coastal and Intertidal Zone Archaeological Network (CITiZAN).
 - UK Hydrographic Office (UKHO) reviews of cartography, historic charts and sailing directions.

- Relevant Strategic Environmental Assessment (SEA) reports (e.g. UK continental shelf SEA archaeological baseline) and coastal survey assessment reports.
- Data held by the European Marine Observation and Data Network (EMODnet) and the Marine Environment Data Information Network (MEDIN).
- OceanWise wrecks and obstructions database and data held within wrecksite.eu.
- Conservation areas have recently become available as a data download from Historic England. Data for conservation areas will be cross referenced with the local authority websites to ensure accurate data is used.

Site visits and surveys

- 10.4.4 A programme of targeted walkover survey has been undertaken to increase the understanding of the baseline historic environment conditions. The targeted walkover survey has been supported by a Project commissioned UAV/drone aerial survey to establish the presence of existing infrastructure, buildings or dense vegetation and therefore, where the potential to add value to the baseline understanding is negligible. Areas of previous archaeological investigations have also been scoped out. The existing understanding of designated and non-designated heritage assets, alongside the aerial survey, was used to support an understanding of where value maybe added.
- 10.4.5 The targeted walkover survey took place between 21 February 2022 and 19 August 2022, over 12 weeks within that timeframe. The targeted walkover survey utilised the Scoping Route Corridor which informed the EIA Scoping Report. Some areas may need to be visited due to changes to the boundary between the EIA Scoping Report and the PEIR. Results of the walkover survey are being synthesised and are not reported on in this PEIR, but will be included in the Project's cultural heritage baseline report that will support the ES.
- 10.4.6 A setting assessment has also been undertaken concurrently with the targeted walkover survey. The setting assessment has used the landscape Zone of Visual Influence (ZVI), established around the Project's proposed AGI locations, and a 50 m buffer of the Scoping Route Corridor, to identify assets which may have a visual connection with the Project's footprint. The setting assessment has been undertaken to understand the present environs of a respective heritage asset and whether the area of the Project does or does not contribute to the significance of a heritage asset, through its setting.
- 10.4.7 Further surveys are intended to be undertaken, in support of the cultural heritage baseline data gathering. This includes:
- Monitoring of the Project's ground investigations. Survey will seek to better understand the sediment sequence across the Project's landscape, including the modelling of that data in support of assessment of the geoarchaeological significance and potential of the Project. Monitoring of ground investigations are anticipated to commence in Q4 2022.
 - Geophysical survey to identify any sub-surface features of archaeological interest, including sites of some known assets, with limited information, as well as identifying previously unknown assets. The purpose of identification will be to assess the nature and extent of archaeological remains, in support of the baseline understanding. Geophysical survey is anticipated to commence in October 2022.

- Trial trench evaluation, if appropriate. Any trial trenching would take a targeted approach to further assess gaps in the baseline. Scoping of trial trenching is dependent on the results of geophysical survey and geoarchaeological deposit modelling. Consequently, trial trenching and the associated reporting, would likely start in early 2023 and last through the examination phase of the DCO application.

Impact assessment methodology

10.4.8 The assessment of cultural heritage receptors comprises assessing the value of the heritage asset, the magnitude of impact (change in the baseline conditions) it would experience because of the Project and the resulting significance of effect, which is determined by comparing the value and impact. Where there is any potential for an impact to a heritage asset resulting from the Project, these assets will be assessed in full in the ES. This assessment will utilise the assessment of value assigned to heritage assets in the baseline study and will assess a potential level of impact in line with the most up to date design information for the Project. The value of a heritage asset derives from the asset's ability to illustrate one or more of the Conservation Principles, described in 'Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment'. The contribution of setting to the significance of a heritage asset will also be considered as part of the assessment of value, as per 'The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition)' (Ref 10.20). The following criteria in Table 10.3 will be used for assigning value.

Table 10.3: Heritage Value Assessment Criteria

Value	Criteria for HLCP
Very High	<p>World Heritage Sites (including nominated sites) inscribed for their cultural heritage importance.</p> <p>Assets that can contribute significantly to acknowledged international research objectives.</p> <p>Assets of acknowledged international importance.</p>
High	<p>Scheduled Monuments (including proposed sites).</p> <p>Grade I and II* Listed Buildings.</p> <p>Grade I and II* Registered Parks and Gardens.</p> <p>Registered Battlefields.</p> <p>Protected Wrecks.</p> <p>Conservation Areas containing buildings of predominantly high value.</p> <p>Non-designated assets of the quality and importance to be designated.</p> <p>Assets that can contribute significantly to acknowledged national research objectives.</p>
Medium	Grade II Listed Buildings.

Value	Criteria for HLCP
	<p>Grade II Registered Parks and Gardens.</p> <p>Conservation Areas containing buildings of predominantly medium value.</p> <p>Assets that contribute to regional research objectives and/or have exceptional quality in their fabric or historical associations.</p>
Low	<p>Locally Listed Buildings, or those of equivalent quality in their fabric or historical associations.</p> <p>Assets of local importance.</p> <p>Assets compromised by poor preservation and/or poor survival of contextual associations.</p> <p>Assets of limited value, but with potential to contribute to local research objectives.</p>
Negligible	<p>Assets with very little or no surviving archaeological/historical interest.</p> <p>Buildings of no architectural or historical note; buildings of an intrusive character.</p>
Unknown	<p>The importance of the resource has not been ascertained/is inaccessible.</p>

10.4.9 Drawing on the guidance from International Council on Monuments and Sites (ICOMOS) on 'Heritage Impact Assessments for Cultural World Heritage Properties' (Ref 10.17) and 'Principles of Cultural Heritage Impact in the UK' (Ref 10.16) the following terminology in table 10.4 will be applied to describe the magnitude of impact.

Table 10.4: Criteria for quantifying the magnitude of impact to heritage assets

Magnitude of Impact (term)	Criteria of impact
High	<p>Change to most or all key archaeological materials, such that the resource is totally altered.</p> <p>Comprehensive changes to setting of archaeology or built heritage.</p> <p>Change to key historic building elements, such that the resource is totally altered.</p>
Medium	<p>Changes to many key archaeological materials, such that the resource is clearly modified.</p> <p>Considerable changes to setting that affect the character of the asset.</p>

Magnitude of Impact (term)	Criteria of impact
	<p>Change to many key historic building elements, such that the resource is significantly modified.</p> <p>Changes to the setting of an historic building, such that it is significantly modified.</p>
Low	<p>Changes to key archaeological materials, such that the asset is slightly altered.</p> <p>Slight changes to setting.</p> <p>Change to key historic building elements, such that the asset is slightly different.</p> <p>Change to setting of an historic building, such that it is noticeably changed.</p>
Negligible	<p>Very minor changes to archaeological materials, or setting.</p> <p>Slight changes to historic building elements or setting that hardly affect it.</p>
No change	No change.

Significance criteria

- 10.4.10 The significance of effect will be assessed against the value of the heritage asset and the magnitude of impact it would experience as a result of the Project. The significance will be expressed as major, moderate, minor, negligible or neutral and can be adverse or beneficial. The matrix for reporting of significance of effect is shown in Table 10.5, adapted from 'Heritage Impact Assessments for Cultural World Heritage Properties' (Ref 10.17).
- 10.4.11 The matrix (Table 10.5) will be used as a check to ensure that judgements on value, magnitude of impact and significance of effect are balanced, but in all cases professional judgement will be used and the value and impact judgements will be revisited if the significance of effect is unreasonable. In EIA terms a significant effect is a moderate or major effect.

Table 10.5: Significance of effects matrix

		Value of Heritage Asset				
		Very High	High	Medium	Low	Negligible
Magnitude of impact	High	Major	Major	Major to moderate	Moderate to Minor	Minor
	Medium	Major to Moderate	Major to moderate	Moderate	Minor	Negligible

	Low	Major to Moderate	Moderate to Minor	Minor	Negligible	Negligible
	Negligible	Minor	Minor	Negligible	Negligible	Neutral
	No Change	Neutral	Neutral	Neutral	Neutral	Neutral

Assumptions and limitations

10.4.12 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- Heritage data will be obtained from third-party sources which are assumed to be accurate. However, this information will be supplemented by archaeological walkover, archive research and a Project-commissioned UAV/drone survey and therefore is considered to present a robust basis for assessment.
- The archaeological record can contain evidence of varying reliability. Antiquarian excavations (excavations carried out prior to the establishment of modern scientific methods) were conducted to standards that differ from modern investigations. The results of these investigations can no longer be verified where the remains no longer exist.
- Due to the nature of archaeological remains, their identification and assessment necessarily requires an element of assumption. In particular, the nature, extent, survival and even the precise location of buried archaeological remains are often uncertain, as the majority of such sites have never been subject to archaeological investigations to modern standards.
- Assessment is based on the current information provided in Chapter 2: Project Description (Volume II). The design of the Project will continue to be reviewed and assessed in advance of the DCO Application submission.
- The Project is commencing with a programme of geophysical survey in October 2022. The scope of the geophysical survey will seek to survey as much as possible (accounting for seasonal conditions and land access discussions) for submission with the DCO.
- The assessment will not include any internal inspections or surveys inside of any Built Heritage assets or properties.

10.5 Baseline conditions

Existing baseline

10.5.1 The Proposed Order Limits are separated into five sections, as defined in the Chapter 2: Project Description:

- Section 1 – Drax to Keadby;
- Section 2 – Keadby to Scunthorpe;
- Section 3 – Scunthorpe to Killingholme;

- Section 4 - Killingholme to Hedon (Humber Crossing); and
- Section 5 – Hedon to Easington.

- 10.5.2 This structure is carried forward into the baseline. Section 4 – Killingholme to Hedon (Humber Crossings) principally covers the Project's proposed crossing of the River Humber, which is scoped out of assessment. Assets west of the River Humber, around Killingholme are discussed in Section 3 – Scunthorpe to Killingholme, with assets east of the River Humber discussed in Section 5 Hedon to Easington, respectively.
- 10.5.3 This section of the Cultural Heritage chapter outlines the current baseline understanding of the Project's Historic Environment. Discussion is from west to east across the Project and led by groupings of assets in a chronological order. The baseline should be read in conjunction with Figure 10.1 and 10.2 (Volume IV).
- 10.5.4 The baseline is streamlined and scopes certain assets out of further assessment for impact. This is where an asset is located outside of the Proposed Order Limits and the setting of the asset does not extend to the Proposed Order Limits and/or the asset's setting does not contribute to the asset's value. Where the asset is of an archaeological nature and not considered further for assessment, this is based on an impact basis. Archaeological remains will be considered fully in the forthcoming desk-based baseline report for their contribution to the archaeological potential of the Proposed Order Limits.
- 10.5.5 Assets scoped out of assessment are located within Appendix 10.1 (Volume III), Gazetteers, with justification for their scoping out. Scoped out assets remain present on Figure 10.1 (Volume IV).
- 10.5.6 In the following baseline sections, all cultural heritage assets are attributed a value using the methodology described in Section 10.4 and set out in Table 10.3. The value awarded to an asset and presented in this baseline is from a solely cultural heritage perspective with no consideration of any other potential criteria.

Section 1: Drax to Keadby

- 10.5.7 This section of the Project crosses three local authority areas, of North Yorkshire, East Riding of Yorkshire, and North Lincolnshire.
- 10.5.8 All assets are present on Figure 10.1 (Volume IV) and labelled by their Project ID on the figure.

Prehistoric

- 10.5.9 Few assets of Prehistoric date are known within the section of the Project between Drax and Keadby. This is likely reflective of the limited previous archaeological interventions within the landscape. However, archaeological potential exists across the landscape for all archaeological periods within the Prehistoric. A series of currently undated features and cropmark sites, discussed within the unknown section below, could yield evidence of past human activity in Prehistory.

Neolithic

- 10.5.10 A later Neolithic buried landscape (37) is known within the Proposed Order Limits, to the west of Goole. The buried landscape holds evidential value to yield evidence of late Neolithic activity, and their interaction with the landscape and changing environmental conditions. Asset 37 is of medium value.

- 10.5.11 An isolated Neolithic flint blade (325) of low value was found within the Proposed Order Limits, south of the A161. The flint blade holds evidential value for its potential to provide evidence of Neolithic exploitation of the local landscape.

General Prehistoric

- 10.5.12 Cropmark features (39) are located within the Proposed Order Limits, at Goole Fields. The cropmark is interpreted as a potential enclosure feature, with some potential Post-Medieval activity also visible from later land management. 500 m to the east, further cropmarks of possible extraction pits (40) are also present within the Proposed Order Limits. Both assets 39 and 40 hold evidential value to yield evidence of Prehistoric settlement activity, including possible industrial activity. Both assets 39 and 40 are of medium value.

Roman

- 10.5.13 The known Romano-British resource across Section 1 – Drax to Keadby is principally restricted to two discrete areas of activity: one area of known settlement activity north of Newland within the Proposed Order Limits, and the potential activity suggested by cropmarks to the east of Crowle outside the Proposed Order Limits. Similar, to the Prehistoric period, the limited number of previous archaeological interventions within Section 1 is reflective of the lack of known assets, and not necessarily indicative of limited Romano-British activity within this Section.

Romano-British Settlement, North of Newland

- 10.5.14 A focal point of Romano-British settlement activity is known both within and on the edge of the Proposed Order Limits, approximately 1.1 km north of Newland and 1.3 km east of Drax Village. A farmstead site (26) at this location was excavated in the early 1960s and comprised a phase 1 building of five rooms with timber veranda and outhouse. Phase 2 comprised the demolition of the veranda and the construction of a corridor, more rooms and a stone veranda. The farmstead was abandoned at the end of the 4th century AD. The farmstead comprised its own stone-built foundations (28) and was associated with landscape features (25), a scatter of Romano-British pottery (27), a timber lined water tank and associated postholes (29), an ash pit (30), a dump of building stone (31) and a rubbish dump (32).
- 10.5.15 All assets associated with the Romano-British settlement grouping, north of Newlands, hold evidential value for their potential to provide information of high status living and life in rural communities, particularly their management of the landscape against environmental pressures of the wetlands. Their setting is influenced by their association with each other and their location within the rural landscape, which contributes to their value. Each asset (25, 26, 27, 28, 29, 30, 31, 32) is of medium value.

Early Medieval

- 10.5.16 The Early Medieval period is sometimes colloquially known as the ‘dark ages’ based on a paucity of historical sources and difficulty in identifying the period within the archaeological record. This is reflected in Section 1 – Drax to Keadby.
- 10.5.17 One asset of an Early Medieval chapel, known as St Wilfred’s (1) was identified via trial trenching within the Proposed Order Limits. The chapel holds evidential value for its potential to yield further evidence of early Christian practices within North Yorkshire and

its contribution and influence on rural life across the landscape. The asset is located 50 m to the north-west of the Romano-British Farmstead (26) and is of medium value.

Medieval

- 10.5.18 The Medieval period within this part of the Project is influenced by two high status moated sites, which form two distinct groups of assets; with the remainder of the assets representing the agricultural activity that formed the wider landscape and would have supported the upkeep of activities at the buildings.

Drax Priory

- 10.5.19 The asset grouping at Drax is principally centred around the Scheduled Monument of the 12th century Augustinian Priory (SM13). The Scheduled Monument is omitted from the Proposed Order Limits, but otherwise surrounded by the Proposed Order Limits.
- 10.5.20 The grouping of Drax Priory includes multiple features associated with its day-to-day upkeep, as well as architectural features associated with its boundary definition. Features include:
- A fishpond (5) to the west of the Scheduled Monument, located within the Proposed Order Limits;
 - A second fishpond (4) to the south of the Scheduled Monument, adjacent the western side of New Road, which remains extant as a pond within the Proposed Order Limits;
 - A moat (15) which would define the precinct area of the Priory complex, as both a symbol of high status but also defensive structure. Asset 15 is referenced within the Scheduled area of the Priory, however, it has the potential to be included within the Proposed Order Limits, depending on the width of its construction and overall size of the precinct; and
 - An earlier moat (1094) was identified as a soil mark, during a study of Drax Priory (Ref 10.23). This earlier moat is located south of the Scheduled area and within the Proposed Order Limits.
- 10.5.21 The setting of the assets at Drax Priory is principally informed by their proximity to each other, as part of a functional grouping, which contributes to their value. Their wider setting has been significantly altered through the introduction of Drax Power Station in the 1970s, within 500 m of the grouping and now dominating the landscape. The introduction of substantial ash tips, within 500 m to the west of the grouping has also further created an enclosed industrial setting, detracting from the historic rural character. What space is afforded Drax Priory, in the form of adjacent agricultural land, does provide a positive contribution to the asset's value and allows for the historic association of Drax Priory and its surrounding land to be understood in part. As the Priory is entirely surrounded by the Proposed Order Limits its setting extends into the Proposed Order Limits.
- 10.5.22 The complex of Drax Priory holds evidential and historical value for its potential to yield evidence of high-status religious activity and living; their management of the wider landscape; the architectural interest in construction methods; as well as evidence of key historic events, particularly the dissolution of the monasteries which suppressed ecclesiastical life in 1535. Although only SM13 is Scheduled, the remaining assets as part of the group should be considered to be of equal value to the Scheduled remains,

for their potential to contextualise and add to the understanding of the Scheduled area. Consequently, assets SM13, 4, 5, 15 and 1094 are all of high value.

- 10.5.23 A medieval fishery (6) is located 80 m north of the Proposed Order Limits and 500 m north-east of the Scheduled area. The HER notes that its reference is approximate. The fishery is known to have belonged to the Holy Trinity Priory in York, although the founding of Drax Priory is associated with the advice of Thurlston, the then Archbishop of York, which may provide a historic relationship between the two priories. Due to the currently unknown location and historic connection between the fisheries of Holy Trinity Priory in York and Drax Priory, asset 6 is of medium value.
- 10.5.24 The wider landscape of Drax Priory includes:
- Ridge and furrow (13) of low value within the Proposed Order Limits.
 - The Grade I Church of St Peter and St Paul (LB84) and associated Grade II cross base (LB112). Both are located on the edge of the 500 m Study Area, and 2 km south of Drax Priory but hold a historical association with the Priory as part of the endowment afforded to the Priory upon its founding. Their setting extends into the Proposed Order Limits, through a historical connection, although this contributes a small proportion of their value, which principally comes from their aesthetic and architectural value and location within Drax. LB84 is of high value and LB112 of medium value.

Scurff Hall Moated Site

- 10.5.25 Scurff Hall Moated Site (SM15) is a former moated manor site dating to the late 14th century. However, the asset is located within a larger moated enclosure (2, 16), which was established in the 13th century as part of the efforts to establish the site by reclaiming the land from the Fen. The Scheduled area is located outside the Proposed Order Limits, whilst the non-designated larger enclosure (2) is located in part within the Proposed Order Limits on the asset's western and southern extents.
- 10.5.26 An area of ridge and furrow is located within the Scheduled area (9), along with a ha-ha feature (22). A second area of ridge and furrow (8) is located to the north of the Scheduled area, but within the larger moat. These assets indicate an enclosed area of agricultural activity, managed by and used to support settlement activity associated with the 'vill' administrative unit which had been established by 1364.
- 10.5.27 An artefact scatter (7) was found and marked in two distinct areas within the Proposed Order Limits to the south of Scurff Hall, and represents a potential extension of activity, outside of the mapped moated enclosure and influence on the immediate landscape. The scatter illustrates potential for a spread of further activity associated with Scurff Hall to be present, particularly within the Proposed Order Limits. As the asset represents likely activity with the Scheduled Monument, the representative activity is considered to be of equal value.
- 10.5.28 The setting of Scurff Hall Moated Site is influenced by its proximity to the River Ouse and location within the rural landscape; as well as its proximity to Drax, with which it holds a historic connection as part of the administrative influence on the village as the seat of the Scurth family, whom were the free tenants of Drax in the 13th century. The setting of Scurff Hall Moated Site contributes to its significance, particularly through the local environmental influences of the lowland and River Ouse, which influenced the early construction activity of drainage to establish the enclosure. This setting extends into the Proposed Order limits.

- 10.5.29 The complex of the Scurff Hall Moated Site holds evidential and historical value for its potential to yield evidence of high status Medieval administrative influence and living; their management of the wider landscape and the architectural interest in construction methods. Although only SM15 is Scheduled, the remaining assets as part of the group should be considered to be of equal value to the Scheduled remains, for their potential to contextualise and add to the understanding of the Scheduled area. Consequently, assets SM15, 2, 8, 9, 16, 22 and 7 are all of high value.
- 10.5.30 A cropmark linear feature (1091) was identified via aerial imagery and mapped by the Project, to the north of Scurff Hall's larger moated enclosure (2). The western mapped extent extends into the Proposed Order Limits. The linear feature's nature and association with the Scurff Hall complex is currently unknown but the asset holds potential to yield further evidence of human activity associated with the site or may indicate an earlier activity at the site. Asset 1091 is of low value for its current poor context, but if proven to be associated with Scurff Hall Moated site, then it would be considered to be of schedulable quality.

Agricultural Medieval Assets

- 10.5.31 The Goole Fields area (1300), defined by Medieval strip fields and scattered farmsteads, located to the south of Goole and is crossed by the Proposed Order Limits. The asset is of medium value.
- 10.5.32 An area of ridge and furrow (10) to the south of Scurff Hall is located within the Proposed Order Limits. The asset is of low value.
- 10.5.33 An area of ridge and furrow (1306) to the north of Rawcliffe is partially located within the Proposed Order Limits. The asset is of low value.
- 10.5.34 As the Proposed Order Limits move south across the River Aire, multiple areas of ridge and furrow (35 and 36) are mapped, both within the Proposed Order Limits and the wider Study Area. All are of low value.
- 10.5.35 Drainage and field boundaries (457) of Medieval land management are located south of the A161, and 200 m east of the Proposed Order Limits. The setting of the asset is limited to its location within the immediate agricultural land and does not extend to the Proposed Order Limits and therefore, not considered further. Asset 457 is of low value.

Other Medieval Assets

- 10.5.36 The former Quarter Gate Lane (14) is referenced as a point 42 m south of the Proposed Order Limits. The roadway is a likely roadway, which is said to traverse across fieldstrips but in an unknown direction, but this has the potential to carry into the Proposed Order Limits. The lane is of low value.

Post-Medieval

- 10.5.37 The Post-Medieval period within this part of the Project's Study Area is characterised by the introduction of large-scale infrastructure, principally for transport and communication, alongside the continued agricultural management of the landscape.

Hull, Barnsley and West Riding Junction Railway

- 10.5.38 The Hull, Barnsley and West Riding Junction Railway (1092) was introduced into the landscape in the mid-19th century. The railway has been digitised by the Project using

the second edition OS map. The railway is reported to have carried material between Hull docks and the West Yorkshire woollen mills, although it never reached Barnsley (Ref 10.24). The railway crosses the Proposed Order Limits to the north of the present-day village of Drax and survives as an embankment lined by trees. A swing bridge (453) and engine house (474), which carried the railway over the River Ouse, were located immediately outside the Proposed Order Limits.

- 10.5.39 All three assets hold historical association and evidential value for the engineering feat of constructing the railway. The setting of all three assets is influenced by their location within the landscape which they have influenced in forging a communication and trade route; as well as their association to each other through a functional capacity. Consequently, the setting of assets 474 and 453 extend to the Proposed Order Limits.
- 10.5.40 The railway (1092) is of medium value for its historic value as an influence on the rural industrial landscape and development in the late 20th century, via establishing important trade connections. The surviving embankment also holds evidential value to yield information on construction techniques. Assets 474 and 453 are of low value for their poor preservation, including loss of machinery of the engine house, but hold historical value for their contribution to the course of travel for the railway.

Agricultural Activity/Drainage for reclamation of landscape

- 10.5.41 A complex of cropmarks (844) is located within the Proposed Order Limits and 1.1 km west of Pademoor. The cropmarks are of ditches and enclosures, visible on an aerial photograph to the north of Pauper's Drain. Most of the features correspond to Post-Medieval field boundaries recorded on the 1886 OS map. The asset holds historic and evidential value for its management of the landscape. This asset is of low value.
- 10.5.42 An area of earthen banks (20) traverse much of the Proposed Order Limits to the north of Newland and the River Aire. The banks were established to divert water across the landscape onto less productive areas. The banks hold historic and evidential value to demonstrate historic land management, which is characteristic across the Project landscape west of the River Trent particularly. The asset is of low value.
- 10.5.43 Ash Tree Farmhouse (LB104) is a Grade II Listed Building, located 90 m west of the Proposed Order Limits. The farmhouse holds evidential and historical value to yield evidence of historic farming activity and the architectural styles of farmsteads within the area. The setting of the asset is informed by the discrete plot of land it is located within, the neighbouring farm barns and the immediate surrounding rural farmland, with which it holds a historic functional relationship. This setting extends into the Proposed Order Limits. This asset is of medium value.
- 10.5.44 Moorend Farmhouse (LB72) and associated stable/granary (LB73) are both Grade II Listed Buildings off Oldlane Gate. The pair are located 570 m north of the Proposed Order Limits but located within the 1.5 km landscape Study Area for a proposed AGI location, 900 m south of the Listed Buildings, also off Oldlane Gate. The farmhouse holds evidential and historical value to yield evidence of historic farming activity and the architectural styles of farmsteads within the area.
- 10.5.45 The setting of both buildings is influenced by their position within the flat landscape, with a clear view across the agricultural land, for which they hold a historic and functional relationship. This setting contributes to the significance of the assets and extends into the Proposed Order Limits. Both LB72 and LB73 are of medium value.

- 10.5.46 Goole Mill Windmill Tower (1298) is located 490 m west of the Proposed Order Limits. The building is now a domestic dwelling but enough of its original architecture survives for it to hold evidential value for its potential to provide evidence of wind-powered crop processing. The setting of the asset is informed by its location within a farm complex; the proximity of the River Ouse and its transport links; and the flat, open landscape. This setting contributes to the significance of the assets and extends into the Proposed Order Limits. The asset is of low value.
- 10.5.47 Field House Farmhouse (1299) is located 310 m east of the Proposed Order limits and 70 m west Quay Lane. The farmhouse is 19th century in date and is associated with modern farm buildings. The farmhouse holds evidential and historical value to yield evidence of historic farming activity and the architectural styles of farmsteads within the area. The setting of the asset is influenced by its position within the flat landscape, with a clear view across the agricultural land, for which they hold a historic and functional relationship. This setting contributes to the significance of the assets and extends into the Proposed Order Limits. Asset 1299 is of low value.
- 10.5.48 The line of the Old River Don (1036) crosses the Proposed Order Limits and the wider Study Area, having been re-engineered in the 17th century. The course of the river holds evidential value to yield potential historic environmental conditions to contextualise the wider landscape. Asset 1036 is of low value.
- 10.5.49 Two farmsteads are located 165 m (596, 597) west of the Proposed Order Limits, with the Project relocating HER point 597 to be more reflective of its location depicted on historic mapping. The setting of both assets is informed by their isolated location within flat agricultural land, which contributes to their value through a historic and functional relationship.
- 10.5.50 The setting of Easingwold House (596) and Rainsbutt House (597) extends into the Proposed Order Limits. Rainsbutt House (597) is of low value for the poor retention of its historic form, whilst Easingwold House (596) is of medium value for its retention of its u-shaped courtyard form, with detached farmhouse at the south-east corner. The farmstead holds evidential and historical value to yield evidence of its architectural styles, based on this historic retention.
- 10.5.51 A network of warping drains (763) is mapped to the north of the South Soak Drain and west of Keadby. A second cropmark of a warping drain (1257) is located on Keadby Common c. 550m south-east of warping drains 763 and potentially may be part of the same complex. The drains are located within the Proposed Order Limits, and across the wider Study Area. They hold historic and evidential value for potential to yield information on historic land management and drainage, to combat localised environmental constraints in the successful farming of the land. Assets 763 and 1257 are of low value.
- 10.5.52 The site of a decoy pond (555) is located within the Proposed Order Limits at Keadby. The asset is within an area of the Keadby Power Station complex and assumed to have been removed due to the industrial activity at the site. The asset (555) is therefore of negligible value.
- 10.5.53 Ealand Grange farmstead (600) is located 155 m west of the Proposed Order Limits, with Ealand Warpings Farmstead (599) located 445 m south of asset 600 and 70 m west of the Proposed Order Limits. A third farmstead, North Pilfrey Farm (598) is located adjacent to the eastern side of the Proposed Order Limits. The setting of these assets is informed by their location within their immediate plot of land and the surrounding flat landscape of agricultural land, for which they hold a historic and

functional relationship. This setting extends into the Proposed Order Limits. All three, Ealand Grange Farm (600), Ealand Warpings farmstead (599) and North Pilfrey Farm (598) are of low value for their poor rate of retention to their historic form, although some evidential value remains in the fabric.

Aire and Calder Navigation Canal and Dutch River

- 10.5.54 The Aire and Calder Navigation Canal (670) and Dutch River (671) cross the Proposed Order Limits in a rough east/west direction, between the River Ouse and port of Goole in the east and Rawcliffe Bridge in the west. Both watercourses were established in the Post-Medieval period and used for trade across the region and continue to be used in the present day. They both hold historical and evidential value for their influence on trade and communication and for evidence of their construction methods. Both assets (670, 671) are of medium value.

Cropmarks

- 10.5.55 There is a complex of cropmarks (800) within the Proposed Order Limits on the eastern flank of Holme Lane.

Modern

- 10.5.56 The modern period within this part of the Project's Study Area is characterised by a rise in industrial infrastructure and the continual agricultural management of the landscape.
- 10.5.57 Evidence of continued land management of the rural agricultural landscape continues into the modern period via a Boundary ditch (18) located within the Proposed Order Limits, west of Red house Lane. It is of low value.

Undated

- 10.5.58 Due to the unknown data of multiple features within the Project's Study Area, it is difficult to contextualise and therefore group them, without further study to their date and nature. Consequently, the following undated assets are located within the area of the Project between Drax and Keadby:
- Field boundary (17) within the Proposed Order Limits 450 m south-west of Drax Augustinian Priory (SM13).
 - Field boundary soilmarks (24) immediately to the west of Drax Augustinian Priory (SM13), within the Proposed Order Limits.
 - Rectilinear enclosures (1095), crossed by a linear cropmark (1096) south of Drax Priory (SM13), digitised from aerial imagery by the Project, within the Proposed Order Limits. Their nature is currently unknown and therefore are of low value but hold evidential value. However, should further investigation identify their association with Drax Priory and the Medieval period, they would be considered of schedulable quality as part of the Drax Priory asset grouping.
 - Two potential enclosures (1088, 1089) have been mapped from aerial imagery by the Project within the Proposed Order Limits, south of Goole.
 - HER mapped cropmarks (842) within the Proposed Order Limits.
 - HER mapped cropmark (730), 285 m west of the Proposed Order Limits.

- 10.5.59 Unless stated otherwise, all the above cropmarks of unknown date and nature are considered to hold evidential value for their potential to yield information of past human activity. Due to the unknown nature of the activity, their setting cannot be established beyond the initial agricultural field in which they're located. Initial assessment of all enclosures is that they are of low value, but this may change with further assessment.

Section 1: Drax to Keadby Historic Landscape Characterisation

- 10.5.60 Historic landscape characters are displayed on Figure 10.2 (Volume IV).

North Yorkshire

- 10.5.61 From Drax Power Station to the county boarder at the river Aire c.5.4 km to the south-east, the Project is situated in the Selby District of North Yorkshire. The historic landscape of the Selby District has been assessed in the *Selby Landscape Character Assessment* (Ref 10.25) and the following section draws on this report and the HLC data provided by the North Yorkshire HER.
- 10.5.62 The western end of Section 1 is largely located within Character Area 5 Ouse Valley although it does intrude into Character Area 15 Camblesforth Farmland a little to the south. Key characteristics of Character Area 5 include: the flat, low-lying topography of floodplains of the river Ouse; heavily drained fields, commonly defined by ditches or grassed; localised areas of wetland and marsh; a significant number of settlements along the course of the Ouse; a lack of woodland and tree cover; and the prominent Drax Power Station. The small portion of Character Area 15 Camblesforth Farmland impacted by the Proposed Order Limits shares similar key characteristics to Character Area 5.
- 10.5.63 North Yorkshire Historic Landscape Character (HLC) data further classifies the land within the Proposed Order Limits as Ash Pile, Industrial (utilities including gas, electric etc), Modern Improved Fields and Unknown Planned Enclosure.
- 10.5.64 All the HLC types within the Proposed Order Limits in North Yorkshire are of low value.

East Riding of Yorkshire

- 10.5.65 From the river Aire to the County boarder c. 3.2 km north-west of Eastoft, the Project is situated in the East Riding of Yorkshire. The historic landscape of the East Riding of Yorkshire has been assessed in the *East Riding of Yorkshire Landscape Character Assessment* (Ref 10.26) and the following section draws on this report and the HLC data provided by the Humber HER.
- 10.5.66 Section 1 of the Project in the East Riding of Yorkshire passes through: Landscape Character Type 4 – River Corridors, specifically 4D: River Aire Corridor, Gowdall and Snaith to the Ouse Reach; Landscape Character Type 8 – M62 Corridor Farmland, specifically 8C: M62 Corridor Hook to Pollington; and Landscape Character Type 9 – Drained Open Farmland, specifically 9B: Goole Fields and 9C: Twin Rivers Farmland. All the Character Areas are located within the National Character Area: Humberhead Levels.
- 10.5.67 Key characteristic of Character Area 4D include: the distinctive meandering course of the river Aire set within the surrounding flat rectilinear landscape pattern of arable fields and drainage systems; limited development along the corridor but where settlement has taken place it has been linear along the line of the riverbank; and the strong lines of anthropogenic flood defensive banks.

- 10.5.68 Humber Historic Landscape Character data further classifies the land within the Proposed Order Limits in 4D as Parliamentary Planned Enclosure, Modern Fields, Landscape Park and Estate Fields.
- 10.5.69 The Parliamentary Planned Enclosure is of medium value, whilst the Modern Fields, Landscape Park and Estate Fields are of low value.
- 10.5.70 Character Area 8C is characterised by large arable fields either side of the M62. Humber Historic Landscape Character data further classifies the land within the Proposed Order Limits in 8C as Parliamentary Planned Enclosure, Modern Fields, Isolated Farm Complex, Woodland, Industrial Retail Park and Artificial Open Water.
- 10.5.71 The Parliamentary Planned Enclosure is of medium value, whilst the Modern Fields, Isolated Farm Complex, Woodland, Industrial Retail Park and Artificial Open Water are of low value.
- 10.5.72 Character Area 9B is characterised by intensively farmed arable land between Rawcliffe Bridge in the west and Swinefleet to the east. Many of the fields in the Character Area are long, linear enclosures radiating southwards from the villages of Old Goole and Swinefleet to the north. Settlement comprises of isolated farmsteads and residential which are often accessed by long private tracks or roads.
- 10.5.73 Humber Historic Landscape Character data further classifies the land within the Proposed Order Limits in 9B as Parliamentary Planned Enclosure, Modern Fields, Isolated Farm Complex, Early Enclosure and an Empty Housing Plot.
- 10.5.74 The Parliamentary Planned Enclosure and Early Enclosure are of medium value, whilst the Modern Fields, Isolated Farm Complex, and the Empty Housing Plot are of low value.
- 10.5.75 Character Area 9C is distinguished from Goole Fields by the more open, larger field pattern in the area. Humber Historic Landscape Character data further classifies the land within the Proposed Order Limits in 9C as entirely Modern Fields of low value.

North Lincolnshire

- 10.5.76 From the County border c. 3.2 km north-west of Eastoft to Killingholme c. 38 km to the east, the Project is situated in North Lincolnshire. The historic landscape of Lincolnshire has been assessed in *The Historic Character of The County of Lincolnshire* (Ref 10.27 and Ref 10.28) and the following section draws on this report and the HLC data provided by the North Lincolnshire HER.
- 10.5.77 From the County border c. 3.2 km north-west of Eastoft to South Soak Drain c.6.5 m to the south-south-east, the Proposed Order Limits passes through Regional Character Area 1 – The Confluence Character Area, specifically The Don Floodplain Character Zone (CON1). Zone CON1 consists of arable land to the west of the Trent. The roads and lanes found in the Don Floodplains are sinuous and indirect, giving a much less planned feel to the rural landscape. They are also noticeably raised above their surroundings due to the historic risk of flooding. There are four nucleated villages within the zone with several dispersed farmsteads.
- 10.5.78 North Lincolnshire Historic Landscape Character (HLC) data further classifies the land within the Proposed Order Limits as Parliamentary Planned Enclosure, Modern Fields and Derelict Industrial Land.
- 10.5.79 The Parliamentary Planned Enclosure is of medium value, whilst the Modern Fields and Derelict Industrial Land are of low value.

Section 2: Keadby to Scunthorpe

10.5.80 This section of the Project is located solely within North Lincolnshire. All assets are present on Figure 10.1 (Volume IV) and labelled by their Project ID on the figure.

Prehistoric

10.5.81 The Prehistoric period within this section of the Project is informed by some areas of concentrated activity, including as early as the Mesolithic period. A range of findspots have also been identified which contribute towards the archaeological potential of the Proposed Order Limits, and potential indication of dating of some currently undated cropmarks within this section.

Mesolithic

10.5.82 The single findspot of a Mesolithic Microlith (252) is known within the Proposed Order Limits, east of Holme Lane. There are, however, several Mesolithic record for the Study Area (275, 241, 275, 343, 344, 287, 311, 328, 329) indicating early prehistoric exploitation of the landscape. These assets are of medium value and hold evidential value for their potential to yield further evidence of Mesolithic activity.

Neolithic

- 10.5.83 Flint flakes (295) were located within the Proposed Order Limits, west of North Moor Lane. The asset is of low value.
- 10.5.84 An axe blade (243) within the Proposed Order Limits west of Holme Lane. The asset is of low value.
- 10.5.85 Flint Blade (325) is located within the Proposed Order Limits 0.33 km north of Carr Lane. The asset is of low value.
- 10.5.86 Jurassic Way trackway (1029) is located within the Proposed Order Limits, east of British Steel. Findspot of flint flakes is located adjacent Jurassic Way, outside the Proposed Order Limits (342). Both assets (342, 1029) are of low value.
- 10.5.87 The Neolithic findspots hold evidential value for their potential to provide evidence of Neolithic exploitation of the local landscape.

Bronze Age

10.5.88 The North Lincolnshire HER does not hold any Bronze Age records for within the Proposed Order Limits in Section 2. There are, however, findspots (239, 303, 253) and cropmark enclosures (267) in the wider Study Area. The findspots are of low value, the cropmarks are of medium value.

Iron Age to Roman

10.5.89 Evidence of Iron Age to Roman activity is sparse from Keadby, until the southern extent of Scunthorpe, before reaching British Steel.

Iron Age to Romano-British landscape south of Scunthorpe

10.5.90 A clear concentration of Iron Age to Romano-British activity is present south of Scunthorpe. A series of cropmark sites and past excavations have provided evidence of Iron Age industrial (high concentration of slag) and settlement activity, with some

continuation into the Romano-British period. This activity starts from the west of North Moor Lane, and continues as far east as the B1398, which crosses into Section 3 of the Project. To maintain understanding, all activity within and outside the Proposed Order Limits pertaining to this landscape is discussed here.

- 10.5.91 The following sites are part of the concentrated focal point for this period:
- Evidence for Iron Age industry within the Proposed Order Limits: 729, 774.
 - Evidence for Iron Age industry within the 500 m Study Area: 284, 286, 296, 326, 327, 872, 807, 874, 875, 876, 877, 886, 911.
 - Focal points of settlement in the Iron Age within the Proposed Order Limits: 268, 308, 749, 768, 770, 799, 995.
 - Focal points of settlement in the Iron Age within the 500 m Study Area: 773, 873.
 - Evidence of Romano-British industry within the 500 m Study Area: 357, 371.
 - Focal points of settlement activity in the Romano-British period, within the Proposed Order Limits: 372, 750, 908, 988.
 - Focal points of settlement activity in the Romano-British period, within the 500 m Study Area: 306, 354, 358, 369, 798, 905, as well as a potential cemetery site (359) 250 m north of the Proposed Order Limits.
 - Rectangular cropmarks (962) within the Proposed Order Limits ant East Marsh.
- 10.5.92 The above assets hold evidential value for their ability to provide evidence of past settlement activity within the Proposed Order Limits and Study Area. The evidence may include significant evidence of industry and management of resources; as well as hierarchical roles, trade and communication between potential individual settlements across the landscape, including potential relationships with the roadside settlement at Ermine Street (SM4). The concentration of known activity within the 500 m Study Area is a likely reflection of where past historic archaeological investigations have been located, opposed to a reflection of the concentration of the activity. The Proposed Order Limits within the vicinity are considered to have a high archaeological potential for further Iron Age to Romano-British activity. All Iron Age to Romano-British assets noted above are of medium value.
- 10.5.93 Multiple findspots are known in the area, both within the Proposed Order Limits (355) and the 500 m Study Area (235, 248, 259, 271, 277, 288, 366, 356, 361, 367, 368, 370, 383, 384, 387, 394, 395). These are of low value and principally add to the archaeological potential for this part of the Project to yield further Iron Age to Romano-British evidence.
- 10.5.94 Within the area of concentrated activity south of Scunthorpe, are a series of currently undated cropmark locations, within the Proposed Order Limits (766, 772, 802, 830, 832, 833, 834, 835, 836, 910, 994, 996, 1078, 1082 and within the 500 m Study Area (720, 778, 801, 802, 828, 829, 831, 879, 912, 913, 960). All assets hold evidential value to yield further evidence of Iron Age to Romano-British settlement and industrial activity, although earlier Prehistoric dates should not be discounted entirely with known Prehistoric activity known within the Project's Study Area. Due to the unknown nature of the activity, their setting cannot be established beyond the initial agricultural field in which they're located. Initial assessment of all enclosures is that they are of low value, but this may change with further assessment.

Early Medieval

- 10.5.95 The North Lincolnshire HER does not hold any Early Medieval records for the Proposed Order Limits in Section 2 of the Project. A findspot of two sherds (407) of Anglo-Saxon pottery is recorded in the Study Area south of West Butterwick.

Medieval

- 10.5.96 The Medieval period within Section 2 of the Project is characterised by the establishment of rural settlements and agricultural practice.

Derrythorpe

- 10.5.97 The settlement of Derrythorpe (458) is located 245 m north-east of the Proposed Order Limits. The settlement holds evidential and historical value for rural settlement life in the Medieval period and its influence/influences on, and from, surrounding settlements. Its setting is informed by its location on the western side of the River Trent and the surrounding low-lying agricultural land. This setting extends into the Proposed Order Limits. The asset is of medium value.

West Butterwick

- 10.5.98 The settlement of West Butterwick (430) is located within 200 m of the Proposed Order Limits. The settlement displays a range of archaeological features and buildings that illustrates its historic development from the Medieval and Post-Medieval (both discussed here) and contribute to the current character. Assets of a Medieval date include 426, 427, 428, 429, 991. The following assets are of a Post-Medieval date LB2, LB9, LB10, LB168, 504, 505, 506, 507, 508, 510, 511, 512, 513, 514, 885, 920. A modern war memorial (696) is also present on North Street.
- 10.5.99 The assets vary in value between low and medium and based on their evidential, historical and aesthetic values for demonstrating the development of a rural settlement, as well as its relationship with other rural settlements in the landscape. Their setting is informed by their location to each other and location within the settlement of West Butterwick. Collectively, the setting of West Butterwick, as a rural settlement is informed by its location on the western side of the River Trent and the surrounding agricultural land, which extends into the Proposed Order Limits. Consequently, assessment will consider impact to the setting of West Butterwick under 430, with a medium value for the evidential and aesthetic value, that the collective assets contribute to the historic development and current character of the asset.

Raventhorpe Medieval Settlement

- 10.5.100 The Scheduled Monument of Raventhorpe medieval settlement (SM11) is located adjacent to the Proposed Order Limits, south-east of British Steel. It holds evidential and historical value for evidence of rural settlement activity. The setting of the Scheduled Monument is informed by its location on the eastern side of a north/south valley. Despite the proximity of Raventhorpe farmstead, its setting as an isolated settlement can still be appreciated, which includes the land of the Proposed Order Limits. SM11 is of high value.
- 10.5.101 Additional medieval assets of pottery findspots (424, 425) within the Proposed Order Limits, the Raventhorpe Deserted Medieval Village (DMV) (765) and a boundary bank (904) adjacent to the Proposed Order Limits are known in proximity to the Scheduled Monument. However, their association is not known and are of low value.

Manby Settlement

- 10.5.102 The location of Manby settlement is located within the Proposed Order Limits, east of British Steel. The site began in the medieval period (422) with a later Post-Medieval Hall (538) and associated landscaped gardens (892) constructed on the site. All three assets (422, 538, 892) hold evidential value for their potential to yield evidence of high status living and are of medium value.
- 10.5.103 The site is now the location of Manby Hall Farm (612) constructed in the later Post-Medieval period. The farm is omitted from the Proposed Order Limits, which surrounds the asset on all four sides. The asset is of low value for its poor rate of retention of its historic form. Its setting extends into the Proposed Order Limits.

Other Settlement Activity

- 10.5.104 Within the Study Area Medieval activity is evidenced by a moated site (473) and a deserted medieval village (775).

Post-Medieval

- 10.5.105 The Post-Medieval period between Keadby and Scunthorpe, is principally represented by land improvement activities to support agricultural practice within the Proposed Order Limits. The Study Area is also reflective of this activity and rural character, including small hamlets and isolated farmsteads. However, evidence of infrastructure and the start of the industrialisation of the wider region, is evident in places.

Agricultural and local industry

- 10.5.106 The following assets of agricultural practice are present within the Proposed Order Limits of Section 2 of the Project:
- Cropmarks of land improvement drains (903), within the Proposed Order Limits, west of Keadby Two Lane.
 - The site of Low Farm (620) within the Proposed Order Limits, south of the A18.
 - Folly Drain (1027) located in part within the Proposed Order Limits, south of the A18.
 - Warping drains (958) within the Proposed Order Limits south of the A18.
 - Warping drains (959), partially within the Order Limits, south of the A18.
 - Land improvement drain (850), adjacent the Proposed Order Limits, at Clouds Lane.
 - Warping drains (1009), partially within the Proposed Order Limits, south of Clouds Lane.
 - Warping drains (951, 953, 954) within the Proposed Order Limits, with a fourth (838) adjacent the Proposed Order Limits; all east of the River Trent.
 - Field boundary ditch (957), partially within the Proposed Order Limits, east of North Moor Lane.
- 10.5.107 All assets above hold evidential value for their potential to yield evidence of Post-Medieval land management within the Proposed Order Limits and Study Area. All are of low value.

Built Assets

- 10.5.108 Pilfrey Farm (601) is located 160 m south of the Proposed Order Limits, north of the A18. The setting of Pilfrey Farm is informed by its location off the A18 and the surrounding agricultural land to the north, for which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits. The farm (601) is of low value for its poor rate of retention with only the farmhouse appearing to survive from mid-19th century mapping.
- 10.5.109 A Grade II Listed syphon (LB158) carries the south engine drain under the former course of the River Torne and extant A18. LB158 is located 40 m west of the Proposed Order Limits. The setting of the asset is informed by its location in connection to the south engine drain, the three rivers and A18, for which it holds a historic connection. The setting extends into the Proposed Order Limits, and vibration from trenchless crossing of the A18 should be considered for direct impact to the structural integrity of the asset. LB158 is of medium value.
- 10.5.110 Beltoft Grange (614) is located 245 m west of the Proposed Order Limits. Its setting is influenced by its isolated location within a defined plot of land and the surrounding agricultural land, which it holds a historic and functional relationship with. This setting extends into the Proposed Order Limits. The asset (614) is of low value for its poor retention of its historic form.
- 10.5.111 Derrythorpe Grange Farmstead (621) is located off Trentside, 260 m east of the proposed Order Limits. The setting of the asset is informed by the plot of land it is located within and the agricultural land to the west, which it holds a historic and functional relationship with. This setting extends into the Proposed Order Limits. The asset is of medium value for the rate of retention of its historic form.
- 10.5.112 Field Farm (622) is located 335 m west of the Proposed Order Limits. The setting of the asset is informed by its isolated location surrounding agricultural land, for which it holds a historic and functional relationship. The setting of the asset extends into the Proposed Order Limits, with the farm located on the western side of a north/south dry valley in the area, overlooking the Proposed Order Limits. The asset is of low value for its poor retention of the historic form.
- 10.5.113 Clouds Lane Farm (623) is located 175 m west of the Proposed Order Limits. The setting of the asset is informed by its location off Clouds Lane and the immediate surrounding agricultural landscape, for which it holds a historic and functional relationship. This setting extends into the Proposed Order Limits. Asset 623 is of medium value for the retention of its historic form.
- 10.5.114 Highfield Farm (637) is located adjacent to the Proposed Order Limits, off Butterwick Road. The setting of the farm is informed by its location within a discrete plot of land, and the immediate agricultural land, for which it has a historic and functional relationship. This setting extends into the Proposed Order Limits. Asset 637 is of medium value for the retention of its historic form, namely the U-shaped open courtyard plan.
- 10.5.115 Low Hill Farm (639) is located 200 m south of the Proposed Order Limits, west of North Moor Lane. The setting of the farm is informed by its location within a discrete plot of land, and the immediate agricultural land, for which it has a historic and functional relationship. The setting of the farm extends into the Proposed Order Limits. It is of low value for the poor retention of its historic form.

- 10.5.116 North Field Farm (640) is located adjacent the Proposed Order Limits. The setting of the farm is informed by its location within a discrete plot of land, and the immediate agricultural land, for which it has a historic and functional relationship. The setting of the farm extends into the Proposed Order Limits. Asset 640 is of medium value for the retention of its historic form.
- 10.5.117 Willow Farm (636) is located adjacent the Proposed Order Limits. The setting of the farm is informed by its location within a discrete plot of land, and the immediate agricultural land, for which it has a historic and functional relationship. The setting of the farm extends into the Proposed Order Limits. Asset 636 is of low value for the poor retention of its historic form.
- 10.5.118 Slate House Farm (635) is located 220 m south of the Proposed Order Limits, north of Holme Lane. The setting of the farm is informed by its location within a discrete plot of land, and the immediate agricultural land, for which it has a historic and functional relationship. The setting of the farm extends into the Proposed Order Limits. Asset 635 is of low value for the poor retention of its historic form.
- 10.5.119 Mendle Farm (616) is located 150 m from the Proposed Order Limits. The setting of the farm is informed by its location within a discrete plot of land, and the immediate agricultural land, for which it has a historic and functional relationship. The setting of the farm extends into the Proposed Order Limits. Asset 616 is of low value for the poor retention of its historic form.
- 10.5.120 The Grade II Listed Raventhorpe Farmhouse (LB159) and associated farmstead (615) are located adjacent to the Proposed Order Limits, east of British Steel. The setting of the assets is informed by their association to each other, as well as the agricultural land for which they hold a historic and functional relationship. This setting extends into the Proposed Order Limits. Both assets are of medium value due to their character and the retention of the southern range of farm buildings, although the northern range has been lost.

Transport Infrastructure

- 10.5.121 Two infrastructure assets cross the Proposed Order Limits, south of Keadby, on an approximate east/west alignment. The Stainforth and Keadby canal (1035) and the Former Barnsley to Barnetby Railway (1033) hold historic and evidential value for their impact on the landscape in forging communication and trade routes, as well as evidence of their construction methods. Both assets (1033, 1035) are of low value.

Settlement

- 10.5.122 The dispersed settlement of Holme (666) is located adjacent the Proposed Order Limits, south of Scunthorpe. The setting of the asset is informed by its isolated location, on the edge of Scunthorpe. This setting extends into the Proposed Order Limits. The asset is of low value.

East Butterwick

- 10.5.123 The settlement of East Butterwick is dispersed along the eastern side of the River Trent and within 200m north of the Proposed Order Limits. The settlement includes four assets comprising: the site of a chapel (509); Holly House Farm (515); the dog and gun hotel (726); and a modern war memorial (695). The character of East Butterwick is informed by its dispersed character along High Street, its location next to the River Trent and the agricultural land to the rear. The setting extends into the Proposed Order

Limits. The four assets will be considered collectively as East Butterwick, with a low value due to the relatively recent origin of the assets.

Modern

- 10.5.124 A possible searchlight battery (956) is located off Carr Lane, 270 m east of the Proposed Order Limits. The setting of the asset is influenced by its location in open land, away from urban centres for functionality, but also proximity to Scunthorpe and the ports of Hull, as a defensive feature. The setting extends into the Proposed Order Limits. Asset 956 is of low value.
- 10.5.125 The site of a Heavy Anti-Aircraft Battery (694) is located within the Proposed Order Limits 550 m south of Raventhorpe. If below ground remains survive, they would hold evidential and historical value as WWII defensive assets. It is of low value.
- 10.5.126 A World War II bomb decoy (693) is located adjacent the Proposed Order Limits. The setting of the asset is influenced by its location in proximity to Scunthorpe, which would have been designed to reduce the threat of second world war bombs hitting the urban population and redirecting attentions to the rural location. The setting extends into the Proposed Order Limits. The asset is of low value.

Undated

- 10.5.127 Due to the unknown date of multiple features within the Project's Study Area, it is difficult to contextualise and therefore group them, without further study of their date and nature. Consequently, the following undated assets are located within the area of the Project between Keadby and Scunthorpe:
- HER mapped earthwork complex (917), within the Proposed Order Limits, south of the M180
 - Outside the Proposed Order Limits and within the Study Area are further cropmark complexes (848, 849, 929, 851, 853, 854, and 725) and soilmarks (714). The above cropmarks of unknown date and nature are considered to hold evidential value for their potential to yield information of past human activity. Due to the unknown nature of the activity, their setting cannot be established beyond the initial agricultural field in which they're located. Initial assessment of all enclosures is that they are of low value, but this may change with further assessment.

Section 2: Keadby to Scunthorpe Historic Landscape Characterisation

- 10.5.128 Historic landscape characters are displayed on Figure 10.2 (Volume IV).
- 10.5.129 Section 2 of the Project is situated in North Lincolnshire. The historic landscape of Lincolnshire has been assessed in *The Historic Character of The County of Lincolnshire* (Ref 10.27 and Ref 10.28) and the following section draws on this report and the HLC data provided by the North Lincolnshire HER.
- 10.5.130 From South Soak Drain at Keadby to Messingham, approximately 18 km along the route of the Project to the south-east, the Proposed Order Limits passes through Regional Character Area 1 – The Confluence Character Area, specifically The Axholme Fens Character Zone (CON3). The Axholme Fens lie in the extreme north-west of the historic county of Lincolnshire and are found entirely within the boundary of the North Lincolnshire unitary authority. Zone CON3 consists of drained fen and marshland resulting in a flat arable landscape with broad views across long distances. Field

boundaries are predominantly delineated by a hierarchy of drainage ditches, or by the long, straight roads that traverse the landscape. There are very few trees and so very limited vertical intrusion. Much of the settlement in the zone comprises historic and modern farms set in a landscape of drained fen fields.

- 10.5.131 North Lincolnshire Historic Landscape Character (HLC) data further classifies the land within the Proposed Order Limits in CON3 as Modern Fields, Private Planned Enclosure, Ancient Enclosure (Post-Medieval to Modern), Parliamentary Planned Enclosure and Strip Fields (Medieval).
- 10.5.132 The Strip Fields and Parliamentary Planned Enclosure are of medium value, whilst the Modern Fields, Private Planned Enclosure, and Post-Medieval to Modern Ancient Enclosure are of low value.
- 10.5.133 From Messingham to just south-west of the A18, the Proposed Order Limit passes through Regional Character Area 2 – The Northern Cliff, specifically The Northern Cliff Foothills Character Zone (TVL1). The landscape of this zone is largely flat, with a gentle upward slope from the River Trent in the west to the foot of the Northern Cliff in the east. A line of settlements, aligned approximately north/south, runs through the middle of the zone from Messingham in the north to Sturton-by-Stow in the south. The settlements retain much of their historic character. There are also scattered isolated farmsteads.
- 10.5.134 North Lincolnshire Historic Landscape Character (HLC) data further classifies the land within the Proposed Order Limits in TVL3 as Modern Fields, Parliamentary Planned Enclosure, Ancient Enclosure (Post-Medieval to Modern), Private Planned Enclosure, Woodland, Plantation Woodland and Artificial Open Water.
- 10.5.135 The Parliamentary Planned Enclosure is medium value whilst the Modern Fields, Ancient Enclosure, Private Planned Enclosure, Woodland and Plantation Woodland are of low value. The Artificial Open Water is of negligible value.
- 10.5.136 From south-west of the A18 to British Steel, the Proposed Order Limits passes through the Regional Character Area 2 – The Northern Cliff, specifically The Broughton Woodlands Character Zone (NCL4). The Roman road Ermine Street transects NCL4 centrally on a north/south alignment. The zone is characterised by several blocks of conifer plantation, such as Rowland Plantation, scattered around a large central area of ancient broad-leaved woodland. The rural landscape is an approximately equal mix of medium-sized rectilinear fields and large modern fields.
- 10.5.137 North Lincolnshire Historic Landscape Character (HLC) data further classifies the land within the Proposed Order Limits in NCL4 as Modern Fields, Plantation Woodland, a Factory Site and Medieval Village Earthworks.
- 10.5.138 The Medieval Village Earthworks are associated with the Scheduled Monument Renthorpe Medieval Settlement (SM11) and so are of high value. The Modern Fields and Plantation Woodland are of low value whilst the Factory Site is of negligible value.

Section 3: Scunthorpe to Killingholme

- 10.5.139 This section of the Project traverses North Lincolnshire, before crossing the Lincolnshire Wolds within West Lindsey and then returning to North Lincolnshire.
- 10.5.140 All assets are present on Figure 10.1 (Volume IV) and labelled by their Project ID on the figure.

Prehistoric

Palaeolithic

- 10.5.141 A Palaeolithic (274) scrapper was recovered from within the Proposed Order Limits. The asset holds evidential value for its potential to provide evidence of Palaeolithic activity within the area. It is of low value.

Mesolithic

- 10.5.142 A range of Mesolithic assets are known between Scunthorpe and Killingholme. The Mesolithic records comprise of stray finds and lithic scatters. These assets hold evidential value for their potential to provide evidence of Mesolithic exploitation of the local landscape. Lithic findspots and scatters are recorded within the Proposed Order Limits (258, 264, 269, 254, 256) and in the wider Study Area (260, 270, 272, 276, 289, 290, 292, 294, 314). All are of low value.

Neolithic

- 10.5.143 Several Neolithic findspots and lithic scatters are recorded in Section 2 of the Project by the North Lincolnshire HER. These assets hold evidential value for their potential to provide evidence of Neolithic exploitation of the local landscape. Lithic findspots and scatters are recorded within the Proposed Order Limits (255, 261, 262, 293, 301, 302, 320, 321) and in the wider Study Area (205, 249, 251, 257, 265, 266, 282, 283, 285, 291, 297, 178, 310, 316, 300, 322, 323 339). These assets are of low value and contribute to the wider archaeological potential for the Neolithic period within this section of the Project. Whilst the findspots and scatters are of low value, it should be noted that any associated in situ archaeological remains could potentially be of medium value depending on level of survival and complexity.
- 10.5.144 Two trackways, with a date potentially as early as the Neolithic (186, 1028), cross the Proposed Order Limits north-east of Bigby. The assets are of medium value.
- 10.5.145 A trackway (1023), with a date as early as the Neolithic, crosses the Proposed Order Limits, either side of the Ulceby. It is of medium value.

Bronze Age

- 10.5.146 Between Brigg Road and the B1398, the Bronze Age is a relatively under-represented time period, potentially demonstrating a reduction in activity of the area at that time. However, the Bronze Age assets identified included ditches, pits, cremations and funerary monuments suggesting the perceived reduction in identified sites may be the result of a switch to more nucleated areas of settlements. The Bronze Age sites identified in the HER hold evidential value for their potential to provide evidence of Bronze Age exploitation of the local landscape and funerary activity.
- 10.5.147 The majority of the Bronze Age assets recorded on the HER are situated within the wider Study Area, however, the cropmark of a Bronze Age round barrow (309) is located within the Proposed Order Limits, south of Humberside Airport. Several other potential barrows are located at Killingholme, on the banks of the Humber Estuary. Of the eight potential barrows recorded by the HER in this area, three (336, 337, 338) are located within the Proposed Order Limits, with the remaining five assets (331, 332, 334, 335, 711) in the wider Study Area. The proximity of the Killingholme assets suggests the possibility of a funerary landscape. The round barrows are of medium value.

- 10.5.148 Galley Hill round barrow (315) of medium value is located 105 m north of the Proposed Order Limits. Its setting extends into the Proposed Order Limits.
- 10.5.149 Potential Bronze Age ditches and pits were excavated during an archaeological evaluation in 2008 at Killingholme (279) within the Proposed Order Limits. They are of medium value.
- 10.5.150 A Bronze Age flint assemblage (786) was partially located within the Proposed Order Limits, north of East Halton, and in proximity to peat deposits (862).

Iron Age

- 10.5.151 A series of Iron Age assets are known around the Roman road Ermine Street (1022), which crosses the Project on a north/south alignment. The activity has the potential to yield evidence of Romanisation in the earlier decades of Roman occupation, as well as the potential influence on Iron Age activity in pathing a way through the landscape. Assets include ditched boundaries (837) partially within the Proposed Order Limits; cropmarks (319, 859) and findspots (242, 281, 304, 340). Cropmark evidence (319, 837, 859) is of medium value, whilst findspots are of low value. All assets contribute to the archaeological potential of the Proposed Order Limits, in proximity to Ermine Street and are of evidential value.
- 10.5.152 A medium value late Iron Age enclosure (940) is located partially within the Proposed Order Limits, north of Bigby. (278)

General Prehistory

- 10.5.153 Linear ditches (782) of a general Prehistoric date are known partly within the Proposed Order Limits, west of the B1207 Station Road. They are of low value.
- 10.5.154 A Prehistoric settlement (219, 217) and second complex (233) are known within the Proposed Order Limits, north-west of Bigby. Both assets are of medium value.
- 10.5.155 The general Prehistoric sites identified in the HER hold evidential value for their potential to provide evidence of Prehistoric exploitation of the local landscape and potentially settlement activity.

Roman

- 10.5.156 This section of the report details evidence for Roman activity to the east of the B1398, however, some assets considered to be associated with the concentration of Iron Age/Romano-British activity to the west of the B1398 have been included in Section 2 above.

Roadside Settlement at Ermine Street

- 10.5.157 The Roman Road of Ermine Street (1022) crosses the Proposed Order Limits on a north/south alignment, along the current route of the A15. Ermine Street is the central thoroughfare through a Scheduled road settlement (SM4), which is 120 m south of the Proposed Order Limits. Ermine Street (1022) is of medium value, whilst the Scheduled roadside settlement (SM4) is of high value. The setting of the SM4 extends into the Proposed Order Limits.
- 10.5.158 There are several Romano-British HER records for the area around Ermine Street, particularly just to the south of the Proposed Order Limits in the area of the Scheduled Monument. Whilst many of these assets are located outside the Proposed Order Limits,

they are included here to contextualise Ermine Street within its Romano-British landscape. The HER records comprise:

- A cropmark trackway (923), partially within the Scheduled Monument and of high value;
- Areas of occupation and buildings (352, 947, 948) outside the Proposed Order Limits of medium value;
- Roman villa (391) in Sturton, on the edge of the 500 m Study Area and of medium value;
- Cremation urns (363, 349) outside the Proposed Order Limits of medium value; and
- Findspots (350, 351) and a tessellated pavement (364), of low value outside of the Proposed Order Limits.

10.5.159 The Project has also digitised a range of enclosures (1067, 1068, 1070, 1097) with other HER assets also mapped (731, 781) in proximity to Ermine Street which may hold association to the settlement activity. The nature of these assets is currently unknown, but they hold evidential value for their potential to yield further Iron Age to Romano-British (or later) activity. As they are of an unknown nature and date, they are of low value, but this may change with further assessment.

Iron Age to Romano-British Activity at East Halton/Killingholme

10.5.160 A concentration of Iron Age and Romano-British Activity is known from East Halton to the western banks of the Humber. The assets within and outside the Proposed Order Limits are included here as they are considered to represent a focus of Iron Age to Roman activity.

10.5.161 The assets represent a range of activity, principally settlement, and include:

- Iron Age activity within the Proposed Order Limits: 263, 374, 762, 789, 820, 821, 889, 890, 949;
- Iron Age activity within the Study Area: 333, 788;
- Romano-British activity within the Proposed Order Limits: 280, 345, 346, 347, 752, 755, 759, 791, 1002; and
- Romano-British activity within the Study Area: 378, 881, 1012.

10.5.162 The above assets hold evidential value for their ability to yield evidence of past settlement activity within the Proposed Order Limits and Study Area. The evidence may include significant evidence of industry and management of resources, as well as hierarchical roles, trade and communication between potential individual settlements across the landscape. The Proposed Order Limits within the vicinity are considered to have a high archaeological potential for further Iron Age to Romano-British activity. All Iron Age to Romano-British activity noted above are of medium value.

10.5.163 Multiple findspots are known in the area, both within the Proposed Order Limits (348, 373, 376, 377, 792) and the 500 m Study Area (375). These are of low value and principally add to the archaeological potential for this part of the Project to yield further Iron Age to Romano-British evidence.

- 10.5.164 Within the area of concentrated Iron Age to Roman activity at East Halton and Killingholme, is a series of undated cropmark, within the Proposed Order Limits (380, 708, 709, 710, 715, 717, 722, 734, 735, 737 738, 760, 790, 794, 795, 796, 797, 810, 811, 861, 863, 864, 865, 866, 867, 963, 1008) and within the 500 m Study Area (712, 990, 1001, 1006, 1007). All assets hold evidential value for their potential to provide further evidence of Iron Age to Romano-British settlement and land management activity (although earlier Prehistoric dates should not be discounted entirely with known Prehistoric activity known within the Project's Study Area). Due to the unknown nature of the activity, their setting cannot be established beyond the initial agricultural field in which they're located. Initial assessment of all enclosures is that they are of low value, but this may change with further assessment.

Additional areas of Romano-British Settlement

- 10.5.165 Romano-British settlement activity (390) is known adjacent to, and may extend into the Proposed Order Limits, west of Scawby Road. It is of medium value.
- 10.5.166 A Romano-British occupation site (909) is located partially within the Proposed Order Limits, north of Bigby. The asset is of medium value and maybe a continuation of late Iron Age enclosure 942.

Other Romano-British assets

- 10.5.167 Roman Pottery and Tile, South Street (385), and Roman Building South Street Area(386) are outside the Proposed Order Limits but have been scoped in due to their potential connection with the Medieval/Post-Medieval Settlement, Barnetby Le Wold (992) as 386 is central within 986, and 385 is just north of 992.
- 10.5.168 Roman Pottery (393) have been scoped into the assessment due to their location within the Late Anglo-Saxon and Medieval Occupation, Church Lane (969).
- 10.5.169 High Street Roman Road (1024) crosses the Proposed Order Limits, south of Humberside Airport. The asset is of medium value.
- 10.5.170 A Prehistoric or Roman trackway (1232) is located within the Proposed Order Limits close to the Killingholme coast, c. 3 km north-east of Goxhill. It is likely this asset is part of the cropmark complex (1002) suggestive of settlement activity and so of medium value.

Early Medieval

- 10.5.171 Early Medieval occupation activity is suggested by three finds scatters to the north of Manton. Manton was recorded in the Domesday Book, and it is possible the artefact scatters, which included animal bone, pottery and loom weights settlement, might represent outlying elements of the settlement and/or manuring. One of the scatters (402) was located within the Proposed Order Limits and 500 m Study Area, whilst scatter 404 was 440 m north of the Proposed Order Limits and scatter 403 was 150 m to the south. The assets hold evidential value to yield evidence of an under-represented period in British archaeology, as well as demonstrate potential social and political interactions between the assets. Each asset (402, 403, 404) is of medium value.
- 10.5.172 Further findspots (397, 398, 399, 400, 401, 405) are recorded both to the north and south of the Proposed Order Limits, and to the north of Manton. These assets are included here for their group value and combined with the scatters noted above, they indicate the potential for Early Medieval archaeological remains within this section of the

Project. The scatters and other findspots hold evidential value for their potential to provide evidence of Early Medieval rural activity. They are of low value, however, should below surface archaeological remains survive, they have the potential to be of medium value, depending on level of survival, function and complexity.

- 10.5.173 Early Medieval ditches (411) and nearby pits (412) are located within the Proposed Order Limits south of Church Side. They are of low value.

Medieval

- 10.5.174 The Medieval period is characterised by a continuation of land management and local industry. Some of the settlements recorded in the Domesday Book including Scunthorpe, Broughton, Scawby, Brigg, Wrawby, Ulceby, Wootton, Killingholme and East Halton, remained occupied and expanded.

Local Industry and agriculture

- 10.5.175 The industrial focus of the landscape west of the B1398 continues into the Medieval period, following the concentration of activity in the Iron Age to Romano-British period. Two concentrations of slag are known within the Proposed Order Limits (420, 888) with a third adjacent (887) to the Proposed Order Limits.
- 10.5.176 Cropmarks and earthworks indicative of Medieval agricultural land management are recorded by the HER. These assets comprise:
- Open field system (463) within the Proposed Order Limits;
 - Open field system, Hibaldstow (653) within the Proposed Order Limits;
 - Ridge and furrow (214) partly within the Proposed Order Limits;
 - Open Field System, Holme (423) within the Proposed Order Limits;
 - Hollow way (206) within the Proposed Order Limits;
 - An open field system (746) at East Halton extends into the Proposed Order Limits;
 - Curvilinear Ditch (779) 0.02km east of the Proposed Order Limits at 1.6km west of Twigmore. The setting extends into the Proposed Order Limits;
 - Ridge and furrow (446, 447, 450, 469 468, 470) within the Proposed Order Limits at Killingholme/Halton Marshes;
 - Historic field boundaries (449) within the Proposed Order Limits;
 - Possible saltern (452) within the Proposed Order Limits;
 - Field systems (448) within the Proposed Order Limits; and
 - Medieval ridge and furrow (1217) within the Proposed Order Limits.
- 10.5.177 All assets above hold evidential value for their potential to yield evidence of Medieval land management within the Proposed Order Limits and Study Area. All are of low value.

Manton Settlement

- 10.5.178 Manton Medieval settlement (891) is adjacent the Proposed Order Limits. The settlement is Medieval in origin, with later Post-Medieval structures (LB160, 918, 530, 527, 526, 528) now present. A nearby ditch and ridge and furrow (421) may be associated as maybe an open field system/ridge and furrow (418).
- 10.5.179 Manton Medieval settlement (891) and associated assets will be taken forward for assessment of setting, which extends into the Proposed Order Limits. Manton settlement is of medium value for its historical and evidential value of a Medieval to Post-Medieval rural settlement.

Sturton Settlement

- 10.5.180 Sturton settlement (406) has Medieval origins and is located south of Scawby and on the edge of the 500 m Study Area. The character of the settlement has developed over the Medieval and Post-Medieval periods and includes assets LB69, LB133, 496, 497, 498, 499, 706, 970, 971, 972, 973, 974, 975, principally of an agricultural nature, reflective of its historic rural character and economy. Sturton settlement holds historical and evidential value as a Medieval to Post-Medieval rural settlement.
- 10.5.181 Sturton settlement (406) and associated assets will be taken forward for assessment of setting, which extends into the Proposed Order Limits. Sturton settlement is of medium value for its historical and evidential value as a Medieval to Post-Medieval rural settlement.

Kettleby House

- 10.5.182 Kettleby House (LB3) is a Post-Medieval House located 230 m north-west of the Proposed Order Limits. However, earlier Medieval activity is known on the site as a Medieval moated complex and associated settlement (189, 193). The site has potential for both Medieval (211) and Post-Medieval landscapes (210, 288), with some earlier Early Medieval pottery also present at the site (194), with some of this activity potentially extending into the Proposed Order Limits. Kettleby Households historical value based on the retention of its historic fabric and evidential value based on its function.
- 10.5.183 The Kettleby House complex is of medium value.

Kettleby Thorpe

- 10.5.184 The second Medieval moated site of Kettleby Thorpe (190) is located within 700 m east of Kettleby House. The asset includes evidence of Medieval fishpond earthworks (188), with later Post-Medieval activity known through a cemetery (173) and quarrying (213).
- 10.5.185 The asset crosses slightly into the Proposed Order Limits and holds evidential value for further activity to be associated with its wider landscape to be present within the Proposed Order Limits. Its setting is informed by its rural location and proximity to Kettleby House (LB3) and landscape. This setting extends into the Proposed Order Limits.
- 10.5.186 Kettleby Thorpe complex is of medium value.

Barnetby Le Wold

- 10.5.187 The Medieval/Post-Medieval settlement of Barnetby Le Wold (992) is located 190 m north of the Proposed Order Limits. Barnetby Le Wold holds historical and evidential

value as a Medieval to Post-Medieval rural settlement. It is of medium value. The setting of the asset extends into the Proposed Order Limits.

Ulceby

- 10.5.188 The Proposed Order Limits pass to the west of settlement of Ulceby, which is formed by a range of assets from the Early Medieval to the Modern periods including:
- Early Medieval ditches (961) and occupation area (969);
 - Medieval Church of St Nicholas (LB118), churchyard cross (LB82); shrunken village (944), findspot of monastic stonework (432);
 - Post-Medieval site of smithy (822, 823), farmsteads on the edge of the settlement (LB126, 487, 488, 485, 490, 491), site of a school (826), site of a vicarage (824), The Old Thatch (LB119), a public house (922), Ulceby Grange (LB125), Holly Farmhouse (LB126); and
 - Modern Methodist chapel (697).
- 10.5.189 Each individual asset within Ulceby has its own respective value and contributes to the overall historic development and character of Ulceby. Ulceby holds historical and evidential value as a Medieval to Modern rural settlement. The setting of each asset is influenced by its location within Ulceby. The wider setting of Ulceby, as a settlement, is informed by its location between Scunthorpe and Immingham, on a flat landscape surrounded by agricultural land. This setting extends into the Proposed Order Limits.
- 10.5.190 Ulceby and associated assets will be taken forward for assessment of setting, which extends into the Proposed Order Limits. The Ulceby complex is of medium value for its historical and evidential value as a Medieval to Modern rural settlement.

Thornton Curtis Settlement

- 10.5.191 The Medieval to Post-Medieval settlement of Thornton Curtis (921) encroaches into the Proposed Order Limits, at the asset's eastern extent. Thornton Curtis holds historical and evidential value as a Medieval to Post-Medieval rural settlement. The site of a primitive Methodist chapel (556) is known at the southern edge of the settlement area and edge of 500 m Study Area. Two Post-Medieval farmsteads (590, 589) are extant within the present settlement area.
- 10.5.192 Thornton Curtis settlement (921) is taken forward for assessment with a medium value as its setting extends into the Proposed Order Limits.

Thornton Abbey

- 10.5.193 The Scheduled Monument of Thornton Abbey (SM8) is located south of College Road and 25 m south of the Proposed Order Limits. The asset holds historical value for its link to church and county records and the Dissolution and evidential value for its potential to provide evidence of ecclesiastical activities. The Scheduled area includes four Listed Buildings (LB80, LB117, LB162, LB163). The setting of Thornton Abbey Complex is informed by its location on higher ground, demonstrating its historic position in society and function to be seen as a religious institute over the rural landscape. This setting extends into the Proposed Order Limits.
- 10.5.194 The Thornton Abbey Complex (SM8, LB80, LB117, LB162, LB163) is of high value.

- 10.5.195 A fragment of monastic stonework (436) is located on the northern edge of College Road and likely associated with activity at Thornton Abbey. It is of low value.
- 10.5.196 The Abbey Gatehouse (LB1) is 0.7 km west of the Thornton Abbey Complex and is a Grade II Listed Building. It is 3 m south of the Proposed Order Limits. Its setting is informed by its connection with the complex and its function as an entrance point to the Medieval Abbey. The setting extends into the Proposed Order Limits.
- 10.5.197 Possible Fishponds, North of Thornton Abbey Gatehouse (434), and the Site of St James' Hospital (438), and the Bridge approximately 70m north of Thornton Abbey Ruins (442) are all outside of the Proposed Order Limits, but their settings extend as they are linked with historic and evidential value to Thornton Abbey (SM8) and the Complex associated with it.

East Halton

- 10.5.198 The Medieval to Post-Medieval settlement of East Halton (756) is located within the Study Area, south and west of the Proposed Order Limits. East Halton holds historical and evidential value as a Medieval to Post-Medieval rural settlement. The asset includes the Medieval Manor Farm moated site (SM6); medieval enclosures (455); the Medieval findspot of monastic stonework (454) and Medieval pottery (442), and historic field boundary (456); the Post-Medieval White Cottage (LB116); and Post-Medieval farms (575, 576, 577, 578, 579, 582, 583).
- 10.5.199 The setting of East Halton (756) is informed by its proximity to the River Humber and surrounding agricultural land. This setting extends into the Proposed Order Limits. East Halton (756) and associated assets will be taken forward for assessment of setting. The East Halton complex is of medium value for its historical and evidential value as a Medieval to Post-Medieval rural settlement.

Other Medieval Assets

- 10.5.200 Multiple Medieval findspots are known within this section of the Project, both within the Proposed Order Limits (198, 199, 414, 417) and the wider 500 m Study Area (215, 419, 415, 416, 459, 461, 465, 466). These assets hold evidential value as indicators of Medieval activity in this section of the Project. They are of low value.
- 10.5.201 Medieval earthwork enclosures (203) are known within the Proposed Order Limits, south of Brigg. They are of low value.
- 10.5.202 Enclosures (758) are located partially within the Proposed Order Limits, north-west of East Halton. They are of low value.
- 10.5.203 A historic parish boundary (453) extends into the Proposed Order Limits, north of Killingholme. It is of low value.
- 10.5.204 Cropmarks of likely Medieval rectilinear enclosures (858) are identified in the HER, partially within the Proposed Order Limits and 2.3 km north of East Halton. They are of low value.
- 10.5.205 The site of the Medieval port of Skottermuth (445) is likely situated along the current course of East Halton Beck (formally East Halton Skitter). Numerous Medieval and later references mention the settlement, but its exact location is unknown. The current HER point is an estimation but if remains of the settlement survive, they are likely to be situated within the Proposed Order Limits. The asset holds evidential value for its

potential to provide evidence of a Medieval port settlement. Depending on the level of survival and complexity, Skottermuth has the potential to be of low to medium value.

- 10.5.206 Potentially Medieval wooden structures, probably fish traps and jetty piles (451), were recorded on the Humber foreshore to the north-east of 445. The asset is of low value.
- 10.5.207 Historic Cultivation Marks (1220) are within the Proposed Order Limits, and also located within an Enclosure West of North Killingholme Refinery (762). The asset is of low value.
- 10.5.208 Medieval to Post-Medieval drain of flood defences (1215) at Halton Marshes within the Proposed Order Limits. This is a low value asset.

Post-Medieval

Post-Medieval Agriculture and Local Industry

- 10.5.209 Twigmoor Grange (634) and the earlier site of a Medieval farm (460), are located 70 m east of the Proposed Order Limits. The setting of the farmstead is informed by the surrounding agricultural land, which extends into the Proposed Order Limits. Both assets (460, 634) are of low value and hold evidential value.
- 10.5.210 Low Farm (641) is located south of Brigg Lane, 215 m west of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The setting of the farm is informed by the plot of land it is located within and the surrounding agricultural land. This setting extends into the Proposed Order Limits. The asset is low value for its poor retention of historic form.
- 10.5.211 Newlands Farm (646) is located 160 m south of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The setting of the asset is informed by the plot of land it is within and the surrounding agricultural land. This setting extends into the Proposed Order Limits. It is of low value for its poor retention of historic form.
- 10.5.212 A complex of buildings is located around Station Road. This includes Station Farmhouse (LB135) and Station Farm (630), 110 m south of the Proposed Order Limits. The assets hold evidential value for the partial retention of their original fabric. The setting of the farm extends into the Proposed Order Limits. Station Farm (LB135/630) is of medium value.
- 10.5.213 New Farm, Scawby (629) is located adjacent Scawby Road, 130 m south of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The setting of the asset is informed by the surrounding farmland, which extends into the Proposed Order Limits. The asset is of medium value for retention of its historic form.
- 10.5.214 Bentley Farm (185) is located 100 m north of the Proposed Order Limits on the western bank of Candley Beck Drain. The asset holds evidential value for the partial retention of its original fabric. Its setting is informed by the immediate farmland, which extends into the Proposed Order Limits. It is of low value.
- 10.5.215 Kettleby Carrs Farm (180) is located 70 m north of the Proposed Order Limits, at the edge of the A1084. The asset holds evidential value for the partial retention of its original fabric. The setting of the farm is informed by its location on the edge of the A1084 and views south across agricultural land, which extends into the Proposed Order Limits. The asset is of low value.

- 10.5.216 Kettleby Thorpe Farm (181) is located adjacent the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Its setting extends into the Proposed Order Limits and is of low value for its poor retention of historic form.
- 10.5.217 Deerpark at Kettleby (228) is located, at its closest, 0.05 km north of the Proposed Order Limits. The asset holds historic value in its possible connection to the Former Moated Site at Kettleby Thorpe, Bigby (190). Its setting extends into the Proposed Order Limits.
- 10.5.218 Prospect House Farm (619) is located 130 m north of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Its setting is influenced by the agricultural land around it and this setting extends into the Proposed Order Limits. It is of medium value for its retention of its historic form.
- 10.5.219 Bigby Top Farmstead (183) is located 175 m south of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Its setting is informed by its location within its own plot of land and surrounding agricultural land, which extends into the Proposed Order Limits. It is of low value.
- 10.5.220 Barnetby Wold Farm (613) is located 350 m north of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Its setting is informed by open agricultural land, which extends into the Proposed Order Limits. It is of low value.
- 10.5.221 An unnamed farmstead (595) is located 220 m west of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The setting of the farmstead is influenced by its location within its own plot of land and the surrounding agricultural land. This setting extends into the Proposed Order Limits and the asset is of low value for its poor retention of its historic form.
- 10.5.222 Vale House (609) is located 420 m west of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Its setting is informed by its location within open arable land, which extends into the Proposed Order Limits. The asset is of medium value for its retention of historic form.
- 10.5.223 Glebe Farm (608) is located 90 m south of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Its setting is informed by the immediate farmland which extends into the Proposed Order Limits. It is of low value for its poor retention of historic form.
- 10.5.224 Ashdale Farm (603) and Farmhouse (661) are located 430 m north-west of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The setting of the assets is informed by their relationship to each other and the surrounding landscape. The setting of the asset extends into the Proposed Order Limits. The assets are of medium value for their retention of historic character.
- 10.5.225 An unnamed farmstead (606) and Sweetbriar Farm (602) are located 440 m north-west of the Proposed Order Limits, east of Wootton. The asset holds evidential value. The settings of the assets are informed by the surrounding agricultural land, and they extend into the Proposed Order Limits. Both assets are of low value for their poor retention of historic form.
- 10.5.226 Staniwells Farm (645) is located c. 1.9 km north-west of Hibaldstow and 120 m south of the Proposed Order Limits. The farmhouse was built in the 19th century and is situated within a largely modern farming complex. The asset holds evidential value for the partial

retention of its original fabric. It is of low value and its setting extends into the Proposed Order Limits.

- 10.5.227 College Farm (592/560) is located 60 m north of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Its setting is informed by the surrounding arable farmland which includes the Proposed Order Limits. It is of low value for its poor historic retention.
- 10.5.228 Field Farm (587) is located 80 m north of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The setting of the asset is informed by the surrounding arable farmland which includes the Proposed Order Limits. It is of low value for its poor historic retention.
- 10.5.229 Two farms are known as Westfield Farm (584, 585), with a nearby architectural fragment (437) found. The assets are located within 180 m south of the Proposed Order Limits. Both farms setting extends into the Proposed Order Limits. Farm 584 is of medium value for its historic retention, whilst farm 585 and associated fragment (437) are both of low value.
- 10.5.230 Red House Farm (568) is located adjacent the Proposed Order Limits, on Skitter Road. The asset holds evidential value for the partial retention of its original fabric. The setting of the asset extends into the Proposed Order Limits. The asset is of medium value for its retention of its historic form.
- 10.5.231 East Halton Grange (573) and the site of the former Medieval grange (472) is located adjacent the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The asset's setting extends into the Proposed Order Limits. It is of medium value for the retention of its historic form.
- 10.5.232 An unnamed farmstead (562) is located adjacent the Proposed Order Limits. Only the farmhouse remains, and the remainder of the farmyard developed with modern sheds. The asset holds evidential value for the partial retention of its original fabric. It is of low value and its setting extends into the Proposed Order Limits.
- 10.5.233 Lincoln Hill Farm (628) is located 750 m north-east of Scawby and 110 m west of the Proposed Order Limits. The farmhouse is the only 19th century structure within a largely modern farming complex. The asset holds evidential value for the partial retention of its original fabric. It is of low value and its setting extends into the Proposed Order Limits.
- 10.5.234 The site of an unnamed 19th century outfarm (618) is located within the Proposed Order Limits south of Barnetby. This asset has been demolished and so is of negligible value.
- 10.5.235 Low Risby House Farm (563) is located 155 m north of the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. The setting of the asset extends into the Proposed Order Limits. It is of medium value for its retention of its historic form.
- 10.5.236 Spring Farm (564) and Pinessprings Lodge Farm (565) are both located on Chapelfield Road, adjacent the Proposed Order Limits. The asset holds evidential value for the partial retention of its original fabric. Their settings extend into the Proposed Order Limits, and both are of medium value.
- 10.5.237 The following assets of agricultural practice and local industry are present within the Proposed Order Limits in this section of the Project:
- Former clay pit (549) within the Proposed Order Limits, south of Brigg Road;

- Site of the former Manton Top Farm farmstead (647) within the Proposed Order Limits, west of the B1398;
- The routes of the New River Ancholme (1034) and the undated Old River Ancholme (1021) cross the Proposed Order Limits south of Scawby Brook;
- Limestone Quarry (197) and lime kiln (196) within the Proposed Order Limits;
- Extraction pits within the Proposed Order Limits (479, 521);
- Trackway (524) within the Proposed Order Limits;
- Site of unnamed farmstead (574) within the Proposed Order Limits at Halton marshes;
- Historically important hedgerows (1031) within the Proposed Order Limits at Halton marshes;
- Drainage system (481) on East Halton Skitters within the Proposed Order Limits;
- Enclosures (482, 744) within the Proposed Order Limits;
- Ponds (523, 650) within the Proposed Order Limits at Goxhill; and
- Cultivation marks (518) within the Proposed Order Limits at Goxhill.

10.5.238 All assets above hold evidential value for their potential to yield evidence of Post-Medieval land management within the Proposed Order Limits and Study Area. All are of low value.

Post-Medieval Settlement Activity

Scawby Park

10.5.239 Scawby Park (871) is located adjacent to the Proposed Order Limits to the east of the scoped out Scawby Conservation Area (CA7). The landscaped park is of low value and its setting extends into the Proposed Order Limits.

Brocklesby Park

10.5.240 The high value Grade I Registered Park and Garden of Brocklesby Park (RPG1) is located within 10 m of the Proposed Order Limits at Harborough Lane and is a prominent heritage landscape on the eastern side of the 500 m Study Area. A cluster of Listed Buildings are present within the RPG which include a memorial arch (LB161), two gate lodges (LB79, LB114) and Newsham Lodge (LB111). The setting of the Listed Buildings is informed by their location within Brocklesby Park and their contribution to its overall character. None of the Listed Buildings' settings extend into the Proposed Order limits and so they are scoped out of further assessment.

10.5.241 The setting of Brocklesby Park (RPG1) is informed by its location on the chalk hills of the Lincolnshire Wolds, providing a prominent position in the landscape over the coastal plain around Immingham. This setting contributes to the significance of the asset, as a wealthy pleasure grounds and place of status and symbol. This setting extends into the Proposed Order Limits.

Grimsby – New Holland – Barton Branch Railway

- 10.5.242 The Branch Railway (1020/1241) crosses the Proposed Order Limits west of Thornton Abbey. The site of the former Thornton Abbey train station (928) is located on the western side of the railway, 90 m south of the Proposed Order Limits. The Crossing Keeper's Gatehouse (LB1) is located at the railway's crossing point to College Road, 28 m south of the Proposed Order Limits. These assets have evidential value and are of medium value.
- 10.5.243 The setting of the train station (928) and Keeper's Gatehouse (LB1) is principally informed by their relationship to the railway, the surrounding communities which they serve and their rural location, which has seen little change since the construction of the railway. This setting extends into the Proposed Order Limits and so all three assets would go forward to assessment.

Kirton in Lindsey Railway

- 10.5.244 Ulceby (Brocklesby Junction) of the Kirton In Lindsey Railway (662) is located within the Proposed Order Limits 130 m south of the A1084. Ref 10.29 reports that the southern portal of one of the few railway tunnels in Lincolnshire is located at SE937 001, however, no further information was supplied. The asset, if present, is of low value.
- Other Post-Medieval Assets
- 10.5.245 The site of Ingold Toft Farm (868) is located 290 m west of the site of Chase Hill Farm inside the Proposed Order Limits. A now demolished 19th century farm (581) is recorded on the 1886 OS map, however, 'Ingold Toft' was recorded from the 13th century onwards and embodies a Viking personal name 'Ingald'. It may indicate the presence of a farmstead from the Danelaw period. Should archaeological remains dating to the Danelaw survive they would be of medium value. Remains of the farmhouse would be of low value.
- 10.5.246 The sites of the former coastguard station (815) and sea defence (870) are located just to the south of Skitter Road within the Proposed Order Limits. The station has been demolished whilst the defence partially survives as an earthwork. The assets are of low value.
- 10.5.247 The site of a former Primitive Methodist Chapel (869) is located 125 m north of Skitter Road within the Proposed Order Limits close to the Humber coast. The chapel is recorded on the 1886 OS map but was demolished before 1950. The asset is likely to be of low value, although it should be noted that human remains may be present.
- 10.5.248 An unnamed farmstead (478) is recorded on the 1886 OS map at the junction of East Marsh Road and Chapel Field Road, just within the Proposed Order Limits. The site is now occupied by the modern buildings of Fir Tree Farm with all earlier buildings demolished. The asset is of negligible value.
- 10.5.249 The site of a former brick works (484) is located 180 m north-east of the unnamed farm (478), within the Proposed Order Limits. The brickworks is recorded on the 1886 OS map, but has gone by the 1951 edition. Much of the asset has probably been lost to the sea and is, therefore, of negligible value.
- 10.5.250 The Wreck of the 'Louth', East Halton Skitter (473) and the Wreck of the 'William', East Halton Skitter (476) are located within the Proposed Order Limits on the coastline. Both of these assets are of low value. The Possible Wreck, South of East Halton Skitter (477) is outside of the Proposed Order Limit and within the Humber Estuary. Its setting extends into the Proposed Order Limit due to its group connection and proximity with the two other Wrecks, Louth (473) and William (476).

- 10.5.251 Historic Coastal Flood Defences are recorded at the East Halton Skitter (480) within the Proposed Order Limits, but these are now likely lost to the sea.

Modern

- 10.5.252 The modern period within Section 3 of the Project is represented by some industry and an increased concentration of military activity. This is representative of the section's proximity and relationship to Scunthorpe, the Humber, and the ports and infrastructure around the Humber.
- 10.5.253 The site of a First World War airfield (924) is located 140 m south of the Proposed Order Limits. The setting of the airfield is informed by its location within open arable land and its proximity to Scunthorpe and the River Humber. This setting extends into the Proposed Order Limits. The asset is of low value, with the western part of the asset removed by quarrying.

RAF Kirmington

- 10.5.254 RAF Kirmington is a second world war airfield stretching a total of approximately 233-hectare site (Ref 10.30), which includes the Proposed Order Limits in places.
- 10.5.255 Activity mapped include the bomb stores (897), Stanton shelter and barracks (987), air raid shelters (674, 675), dispersed living quarters around Kirmington village (804, 805, 900, 902, 979, 980), ancillary buildings (222) within the Proposed Order Limits. Additional activity within the Study Area includes the battle headquarters (672), additional air raid shelters (673), dispersed living quarters around Kirmington village (803, 898, 899, 901, 986), searchlight battery (884), and a prisoner of war camp (882).
- 10.5.256 Part of the airfield, including the runways were developed into the existing Humberside Airport during the 1970s (Ref 10.28). However, RAF Kirmington holds evidential and historical value to yield further evidence of wartime operations at the site.
- 10.5.257 RAF Kirmington asset grouping is of medium value for its historic value for its contribution towards the defence of the Humber region and battle of Britain, as an interim base for developing squadrons. The setting of the asset group is informed by the surrounding rural landscape and its strategic location close to the North Sea coast.

Goxhill Airfield

- 10.5.258 The majority of the Goxhill Airfield is located outside the 500 m Study Area. However, a series of dispersed camp sites are known both within the Proposed Order Limits (896, 978) and the 500 m Study Area (894, 895, 937, 976, 977, 1250), which would have supported military activity at the airfield.
- 10.5.259 All remains are of low value and hold evidential value to demonstrate life within the camps.

Military remains at the western banks of the Humber

- 10.5.260 The Humber was a focal point for military activity during both the First and Second World Wars, for its defence of industrial activity at Immingham and Hull, as well as the detection of inward bound enemy aircraft. A series of military features are present surrounding Killingholme and Goxhill which would have supported this defensive activity. The military assets hold historical value to their role in the defence of the British Isles during World War II and in some cases evidential value in their form.

10.5.261 Assets within the Proposed Order Limits comprise:

- First (679) and second (688) world war anti-aircraft batteries;
- Barrage balloon sites (880);
- Bomb craters (681, 683, 684, 687);
- Military buildings (686);
- World War II Decoys (771);
- Possible Second World War Military Installation (1218); and
- World War II bomb craters (1219).

10.5.262 Assets within the 500 m Study Area and included here as part of the group comprise:

- First World War seaplane base (878);
- Bomb craters (680, 682);
- Military buildings (685, 690) in proximity to barrage balloon sites (677, 691, 860);
- Early Twentieth Century Military Installation (1225);
- Second World War Military Installation (1228); and
- A bombing decoy (SM18) of high value.

10.5.263 Unless stated otherwise, all the above assets are of low value. Where they are located outside the Proposed Order Limits, their setting is judged to extend to the Proposed Order Limits through their historic association with assets within the Proposed Order Limits.

Railway

10.5.264 The low value Barton and Immingham Light Railway (1032) crosses the Proposed Order Limits to the north-west of East Halton.

Undated

10.5.265 Due to the unknown data of multiple features within the Study Area, it is difficult to contextualise and therefore group them, without further study to their date and nature. Consequently, the following undated assets are located within the area of the Project between British Steel and Killingholme:

- Geophysical anomalies (812, 808, 809) within the Proposed Order Limits;
- Linear Cropmarks (813), 270 m south of the Proposed Order Limits;
- Undated ditches (728) and linear/curvilinear cropmarks (776), 220 m south of the Proposed Order Limits;
- Possible cropmarks (703), 385 m south of the Proposed Order Limits;
- Project digitised enclosure (1066), partly within the Proposed Order Limits;
- Project digitised enclosures (1072, 1073, 1079, 1080, 1081, 1083) within the Proposed Order Limits;
- Possible cropmark (202, 204) partially within the Proposed Order Limits;

- Project mapped assets from aerial imagery partially or wholly within (1074, 1075, 1076) the Proposed Order Limits, south of Brigg;
- Project mapped assets from aerial imagery, partially within the Proposed Order Limits (1059);
- Cropmarks (925) partially within the Proposed Order Limits, north of Bigby;
- Linear cropmark (777) partially within the Proposed Order Limits;
- Road (716) with the potential to extend into the Proposed Order Limits;
- Linear soilmark (966) within the Proposed Order Limits;
- Ring ditch and linear ditch (816) partially within the Proposed Order Limits;
- Linear cropmarks (967), partly within the Proposed Order Limits;
- Enclosures (993) within the Proposed Order Limits;
- Linear cropmarks (847) partially within the Proposed Order Limits;
- Rectangular cropmarks (761) within the Proposed Order Limits, with the potential for other rectangular cropmarks (742) to also extend into the Proposed Order Limits;
- Soilmarks (999) partially within the Proposed Order Limits;
- HER mapped enclosed settlement (1258), a sub-square enclosure (1259), a rectangular enclosure (1260) and sub-rectangular ditched enclosure (1261) near East Halton;
- HER mapped asset, with additional Project mapped activity from aerial imagery within the Proposed Order Limits (997);
- Enclosures (1011) partially within the Proposed Order Limits;
- Circular cropmark (721) within the Proposed Order Limits;
- Undated boundary (736) within the Proposed Order Limits;
- HER mapped features (747) within the Proposed Order Limits;
- A possible headland or seabank on Halton Marshes (764) within the Proposed Order Limits. At Killingholme, adjacent the Proposed Order Limits;
- A possible headland or seabank on Halton Marshes (764) within the Proposed Order Limits;
- Field boundary ditches (1004) within the Proposed Order Limits;
- Cropmark and earthwork macula (224) within the Proposed Order Limits; and
- Undated Ditches (1221) within the Proposed Order Limits.

10.5.266 Unless stated otherwise, all the above cropmarks of unknown date and nature are considered to hold evidential value for their potential to yield information of past human activity. Due to the unknown nature of the activity, their setting cannot be established beyond the initial agricultural field in which they are located. Initial assessment of all enclosures is that they are of low value, but this may change with further assessment.

- 10.5.267 One undated findspot (733) is known within this section of the Project within the Proposed Order Limits.

Section 3: Keadby to Killingholme Historic Landscape Characterisation

- 10.5.268 Historic landscape characters are displayed on Figure 10.2 (Volume IV).
- 10.5.269 This section of the Project is situated in North Lincolnshire. The historic landscape of Lincolnshire has been assessed in *The Historic Character of The County of Lincolnshire* (Ref 10.27 and Ref 10.28) and the following section draws on this report and the HLC data provided by the North Lincolnshire HER.
- 10.5.270 From Manton to the south of British Steel in the west to the A1048 east of Brigg, the Proposed Order Limits passes through Regional Character Area 5 – The Clay Vale, specifically The Ancholme Carrs (Character Zone CLV4). The Ancholme Valley is characterised by flat arable countryside situated on either side of the New River Ancholme, which runs through the zone from Bishopbridge near Market Rasen in the south to the Humber Estuary in the north, a distance of over 30 km. The course of this man-made river is almost completely straight, with a slight curve at its northern end. The old River Ancholme is still present in the landscape as a series of watercourses which meander to either side of the man-made channel, creating a pattern of long thin islands. The agricultural landscape of the zone is open with large irregular fields.
- 10.5.271 North Lincolnshire HLC data further classifies the land within the Proposed Order Limits in CLV4 as Ancient Enclosure (Post-Medieval to Modern), Modern Fields, Private Planned Enclosure and Parliamentary Planned Enclosure.
- 10.5.272 The Parliamentary Planned Enclosure is of medium value whilst the Modern Fields, Ancient Enclosure, Private Planned Enclosure, Woodland and Plantation Woodland are of low value.
- 10.5.273 From the A1048 in the west to the Breedon Kettleby Quarry access road in the east, the Proposed Order Limits passes through a narrow 88 m wide section of The Kelsey Moors (Character Zone CLV5) still within The Clay Vale Regional Character Area 5. CLV5 is a transitional zone the Ancholme Valley and the foothills of the Wolds in the east. The zone is dominated by arable fields, generally defined by ditches rather than hedges, creating an open character with wide views in most directions.
- 10.5.274 There is no North Lincolnshire HLC for this section of the Project, but satellite imagery suggests Modern Fields associated with farmsteads to the north and south of the Proposed Order Limits.
- 10.5.275 From the Breedon Kettleby Quarry access road in the west to just south-west of the Humberside Airport, the Proposed Order Limits passes through Regional Character Area 4 – The Wolds, specifically The Caistor Spring-Line Character Zone (WOL2). Much of the farmland in this zone is the result of modern boundary removal, resulting in large irregularly shaped fields. There are small to medium sized areas of woodland throughout the character zone, which appear to be predominantly 18th and 19th century plantations.
- 10.5.276 North Lincolnshire HLC data further classifies the land within the Proposed Order Limits in zone WOL2 as Parliamentary Planned Enclosure, Modern Fields, Woodland, Plantation Woodland and Ancient Enclosure (Post-Medieval to Modern).

- 10.5.277 The Parliamentary Planned Enclosure is of medium value whilst the Modern Fields, Woodland, Plantation Woodland and Ancient Enclosure (Post-Medieval to Modern) are of low value.
- 10.5.278 From just south-west of the Humberside Airport in the south-west to Killingholme to the north-east, the Proposed Order Limits passes through Regional Character Area 3 – The Northern Marshes, specifically The Humber Bank Character Zone (NOM1). The zone is characterised by small towns and villages scattered through a rural landscape of large, open fields predominantly defined by ditches. Many of these fields are rectilinear, indicative of the planned drainage and enclosure of the historic marshland which once covered the zone.
- 10.5.279 North Lincolnshire HLC data further classifies the land within the Proposed Order Limits in zone NOM1 as Parliamentary Planned Enclosure, Modern Fields, Isolated Farmsteads, Private Planned Enclosure, Chemical Works, Livestock Rearing and Marsh.
- 10.5.280 The Parliamentary Planned Enclosure is of medium value whilst the Modern Fields, Isolated Farmsteads, Private Planned Enclosure, Livestock Rearing and Marsh are of low value. The Chemical Works are of negligible value.

Section 4: Killingholme to Hedon (Humber Crossing)

- 10.5.281 Assessment of the marine and intertidal historic environment of the Humber Crossing is scoped out of assessment.

Section 5: Hedon to Easington

- 10.5.282 This section of the Project is located solely within the unitary authority of East Riding of Yorkshire and within the geographical area known as Holderness.
- 10.5.283 All assets are present on Figure 10.1 (Volume IV) and labelled by their Project ID on the figure.
- 10.5.284 This section of the Project includes the area of the Proposed Order Limits at the Easington landfall location. Baseline assessment of the inter-tidal area is provided in Appendix 10.3 (Volume III) and not repeated in this Chapter.

Prehistoric

Mesolithic and Neolithic

- 10.5.285 The Prehistoric period is well represented within the Proposed Order Limits with the earliest records dating to the late Mesolithic/early Neolithic period. A late Mesolithic/early Neolithic flint core (136) was found near Halsham within the Proposed Order Limits, whilst a Late Mesolithic flint core (132) was recovered from the topsoil during the archaeological evaluation of the route of the Easington to Immingham Condensate Line, also within the Proposed Order Limits. A polished Neolithic stone axe (140) was found on land to the north-east of Paull and within the Proposed Order Limits. Neolithic worked flints were identified in mixed lithic assemblages also containing Bronze Age material during the construction of a new access road associated with the Humber Estuary Tidal Defences Flood Alleviation Scheme (143) and during groundworks associated with the same Scheme (138) to the South of Paull and immediately adjacent to the Proposed Order Limit. Residual Neolithic and Bronze Age

flint was also identified in the lithics assemblage recovered from the topsoil during works associated with the Easington to Immingham Condensate Line noted above (132).

- 10.5.286 Lithic scatters hold evidential value based on their ability to inform on the prehistoric phase represented and on prehistoric land-use patterns. Lithic scatters recovered from the surface and unstratified in the top and subsoils are of low value. Any in situ Mesolithic/Neolithic archaeological remains, particularly if representing occupation, would be of medium value. Neolithic funerary remains would be of medium value whilst evidence of Mesolithic funerary activity would be of high value.

Bronze Age

- 10.5.287 Other than a Bronze Age element in the lithic assemblages noted above (143, 138 and 136), the remaining evidence for Bronze Age activity within this section of the Project comprises cropmarks suggestive of a round barrow with associated field system (42), a round barrow (46) and a possible pit alignment (47) within the Proposed Order Limits and round barrows (43, 44, 45, 1133, 1144, 1152 and 1158) and evidence of late Bronze Age cremation (1106) in the wider Study Area (Ref 10.31).
- 10.5.288 The possible pit alignment (47), a land division likely of late Bronze Age to early Iron Age date, is situated within the Proposed Order Limit 640 m to the north-east of Thorngumbald Road. This asset has evidential value based on its potential to provide evidence of notional boundaries or significant alignments such as division of tribal land or to emphasise ancestral features within the landscape such as barrows or perhaps natural features imbued with meaning.
- 10.5.289 Round Barrow cropmarks 42 and 46 are located within the Proposed Order Limits 170 m east of Frodingham Lane and 90 m to the north-west of Burstwick Drain respectively. The round barrows 42 and 46 and those in the wider Study Area noted above, hold evidential value for their ability to provide evidence of Bronze Age funerary activity and, based on their locations within the landscape, allow for inferences to be made regarding regional territories. They may also provide evidence of social stratification and scientific analysis of human remains can also provide data on individual and population movement.
- 10.5.290 The pit alignment is of medium value and the remaining cropmarks if shown to be the remains of funerary monuments, perhaps with internal inhumations, would be of medium value.

Iron Age

- 10.5.291 The Iron Age is represented in this section of the Project by occupation remains and associated features identified during an excavation (1129), findspots (59, 60 and 68) of Iron Age material cultural suggestive of occupation, cropmarks (1100) the cropmarks of square barrows (62 and 1051) and perhaps the pit alignment (47) noted above. The majority of these assets are located outside the Proposed Order Limits and so are not considered further. However, possible square barrows 1051 are located within.
- 10.5.292 Square barrows are almost entirely restricted to the East Riding of Yorkshire and are associated with the Iron Age Arras culture. Cropmark 62 is located 320 m north-west of the Proposed Order Limit, 240 m south-west of Dairy House and comprises two possible square barrows. Cropmark 1051 comprises three possible square barrows, two of which are located within the Proposed Order Limits c. 400 m to the south of Causeway Ings Lane. The third possible square barrow lies 20 m outside the Proposed Order Limits. These assets have evidential value based on their ability to provide

evidence of Iron Age funerary activity and their potential to evidence tribal boundaries and social stratification, whilst scientific analysis of human remains can provide data on individual and population movement. Square barrows, particularly if they contain an inhumation would be of medium value.

General Prehistoric

- 10.5.293 Further general Prehistoric activity in this section of the Project is represented by two late Prehistoric flint assemblages (141) and a quern (3402) from within the Proposed order limits and a flint scraper (1180) and cropmarks of ring ditches and linear ditches (131) in the wider Study Area.
- 10.5.294 The two flint assemblages (141) were recovered as surface scatters from farmland within the Proposed Order Limits just to the north of Rose Hill Farm. The knapping was crude and so the assemblages are likely to date to the later Prehistoric period. The Quern (130) was found within the Proposed Order Limits, close to its eastern limit, and c. 680 m to the north of Hull Road. These assets have evidential value as they provide evidence of Prehistoric activity within the landscape. Residual finds such as these are of low value.

Iron Age to Roman

- 10.5.295 Based on cropmark analysis, this section of the Project is located within an intensive late Iron Age/Romano-British agricultural/pastoral landscape delineated by trackways, field systems and small enclosed settlements or farmsteads. Five cropmark complexes (55, 56, 160, 1042 and 1049) are located within the Proposed Order Limits whilst a further 14 (57, 58, 60, 61, 64, 66, 133, 137, 161, 1048, 1053, 1106 and 1127) are located within the Study Area.
- 10.5.296 Assets 55, 56, 57, 1049 and 1051 are located c. 2 km to the north-west of Halsham and possibly form a focal point for Iron Age/Iron Age to Roman activity within and extending outside the Proposed Order Limits. If the cropmarks represent areas of settlement within a wider enclosed landscape, they would be of medium value.
- 10.5.297 Archaeological investigation of the cropmark landscape within the Holderness region have shown that much of the landscape was established in the Iron Age and that human occupation was maintained through the Transitional period and on into the Romano-British period. The above assets hold evidential value for their ability to provide evidence of Iron Age to Roman settlement activity within the Proposed Order Limits and Study Area. The evidence may include significant evidence of industry and management of resources, as well as social stratification, trade and communication between potential individual settlements across the Holderness landscape and potentially beyond.
- 10.5.298 The settlement and associated archaeological remains are of medium value.

Roman

- 10.5.299 The Humber HER holds three Roman records for this section of the Project, all are situated outside the Proposed Order Limits.
- 10.5.300 The assets comprise two Roman coins dated to 200 AD – 409 AD (67), a fragment of a 1st to 2nd century silver finger ring (668) and a ditch of possible Roman date (65). These assets hold evidential value as they provide evidence of Roman activity within the Holderness landscape. They are of low value.

Early Medieval

- 10.5.301 The Humber HER hold four records of Early Medieval activity for this section of the Project, all are situated outside the Proposed Order Limits.
- 10.5.302 The assets comprise Nuthill DMV (1155), three Early Medieval ditches (49) found during an archaeological evaluation, Redmere DMV (48), inhumations on the site of an abandoned Iron Age/Romano-British settlement (1106) at Easington. These assets hold evidential value as they provide evidence of Early Medieval activity within the Holderness landscape. They are of low or medium value.

Medieval

Paull

- 10.5.303 Paull is recorded in the Domesday Book; however, little evidence of the Medieval settlement remains. The high value Grade I Listed Church of St Andrew (LB171) is located on the south side of Thorngumbald Road, approximately 300 m outside the settlement to the south-east. Construction of church began in 1355 following the destruction of the former church on site, likely incorporating useable stone from the earlier structure. The church was burnt in the siege of Hull during the Civil War before being repaired in 1663 and again in c. 1700. Restoration of the church was undertaken in c. 1890.
- 10.5.304 The setting of St Andrew's is informed by its rural setting close to the Humber Estuary. Its location outside of Paull on the Thorngumbald Road suggests it may have been situated to serve Paull to the north-west, Paull Holme to the south-east and possibly the deserted Medieval village (DMV) of Newton Garth to the north-east. These settlements are mentioned in the Domesday Book as is Thorngumbald further to the east, which may also have provided parishioners. There is some tree cover in the churchyard and the asset would be screened from the Proposed Order limits to the south. However, there is likely to be an open view to the west and the Proposed Order Limits and the proposed location of an 8m high Hedon proposed AGI (Option A). The setting of the asset, therefore, extends into the Proposed Order Limits.
- 10.5.305 St Andrew's has historic value based on its association with the Civil War and evidential value based on its ability to inform on Medieval and Post-Medieval settlement patterns.

Paull Holme

- 10.5.306 Paull Holme is located 70 m to the south of the Proposed Order Limits at the Projects landfall in Holderness. Paull Holme includes the site of a Scheduled Monument (SM7), which comprises a high value medieval moated manor and includes a dry rectangular moat surrounding a raised island measuring 190 metres north to south and 100 metres east to west. Earthworks visible on the island are the remains of a medieval manor house which formerly occupied the site. A high value Grade I Listed brick tower (LB166) also occupies the moated site. The now ruinous but consolidated tower is late 15th century in date and has a tunnel-vaulted basement with two upper storeys above.
- 10.5.307 The setting of the Scheduled Monument and the Listed Building is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. The setting of the assets contributes to their value and extends into the Proposed Order Limits.

- 10.5.308 The moated site (SM7) and tower (LB166) hold evidential value based on the ability to provide data on the distribution of moated sites in Holderness and evidence of a high-status household economy.
- 10.5.309 The fields to the south and south-east of the tower contain earthworks and ridge and furrow (50) interpreted as representing the remains of the shrunken Medieval village (SMV) of Holm first recorded in the Domesday Book. They have evidential value based on their potential to inform on the extent of the SMV. If these remains are directly related to the Scheduled Monument, they would be of high value based on group value.
- 10.5.310 The sites of Paull Holme Church (80) and Paull Holme Chapel (81) are located 70 m to the west of the Scheduled Monument (SM7); however, the Humber HER contains no further details for either site. They have evidential value based on their potential to inform on the extent and layout of Medieval Paull Holme. The Church and chapel sites have the potential to be of medium, or perhaps high value.

Newton in Paull DMV

- 10.5.311 Newton in Paull DMV (85), now Newton Garth (within the Proposed Order Limits), was mentioned in the Domesday Book as Newton in Paull or Newton in Holderness. The moated site of St Mary Magdalene's Leper Hospital (51) was located c. 100 m west of the DMV. The hospital was founded during the reign of Henry II (1133 – 1139) by William le Gros, Earl of Albemarle. Fieldwalking and metal detector finds recovered in the area comprise 1022 sherds of Medieval pottery (69), a mount, button and dress component (86), a 13th to 14th century silver buckle (87) and a strap end (78). The Medieval finds have evidential value based on their potential to locate the Newton in Paull DMV and leper hospital. The DMV and the site of the hospital are of medium value whilst the findspot are low value.

Hedon

- 10.5.312 The medieval town of Hedon (SM3) is a designated high value Scheduled Monument and located 75 m to the north of the Proposed Order Limits. The town was founded by the Counts of Aumale in the 12th century as a port to serve Holderness and in 1138 William-le-Gros, the Lord of Holderness, granted a "toft of land" in the town of Hedon to the hospital of St Leonard in York (Ref 10.32). William-le-Gros lived in a fortified manor at Burstwick, and established that Hedon, lying at the head of a navigable waterway leading to the Humber, would be an ideal site to create a port to serve his Seigniorship of Holderness. The port was subsequently built and prospered so rapidly that by 1160 Hedon had been granted a Charter by Henry II, giving the Burgesses of Hedon many privileges equal to those granted to York and Lincoln and establishing the importance of Hedon as a port.
- 10.5.313 The Scheduled area comprises northern and southern sections. The northern section is focused on the projected line of the northern and eastern town walls. The southern section covers Hedon Haven, the portside basin and surrounding area. The Scheduled Monument holds evidential value for its potential to provide archaeological remains which could inform on the range of activities undertaken in the town and how they were arranged within the geography of the town. The town also holds historic value for its links to historic county records and in its extant Medieval street plan. The setting of the Scheduled Monument is informed by its fossilised Medieval street plan and surviving Medieval buildings. The setting of the southern section of the Scheduling includes a key view to the east and the former route of Hedon Haven which fed into the basin and provided a link to the Humber. This view would include proposed AGIs Saltend Option C

and Saltend Option D, therefore, the setting of SM3 extends into the Proposed Order Limits.

- 10.5.314 Evidence of Medieval Hedon survives in the architecture of some of the town's Listed Buildings comprising the high value Grade I Listed Church of St Augustine (LB137) Grade II* Listed Ravenspurn Cross (LB120) and the Medium value Grade II LB46 and LB47 applied to two collections of Medieval monuments in the gardens of No. 1 (Windyridge), Market Hill and No. 3 (Ivy House), Market Hill respectively. The settings of these assets do not, however, extend to the Proposed Order Limits and so they are not considered further. The Humber HER holds numerous further records for elements of Medieval Hedon including the Hedon Haven Canal (1163), the town defensive ditch (1164), the Sturch Dike (1169) which served to flush out Hedon Haven, the former sites of the Haven Basin Windmill (1170), the Sherrif's Bridge (1173), the Lanbrigg (1174), St Michael's Bridge (1192), St Michael's Chapel (1166), St Leonard's Hospital (1165), Oxland Boundary Cross (1168), a Norman mint (743), a lime kiln (1175) and a brick and tile works (1172). These assets hold evidential value for their potential to inform on the geography of the Medieval town, the distribution of activities within the settlement and perhaps social stratification. As part of the Medieval Hedon town Scheduling (SM3), these assets are of high value.
- 10.5.315 Medieval findspots of low value within or considered to be associated with Hedon recorded in the Humber HER comprise pottery (1167, 1181, 1161) architectural fragments with medieval characteristics (1185).

Burstwick

- 10.5.316 The high value Scheduled Monument Burstwick Castle (SM1) is located south of the junction of the B1362 Hendon Road and Daisy Hill Road, 80 m to the east of the Proposed Order Limits and 470 m north-west of Burstwick town. It is defined by the earthworks of a moat, which encompassed the 14th century Burstwick manor house. The manor passed to the Crown through escheatment in 1274 and was granted away in 1355. Records show that work was carried out on the site at various times between 1277 and 1354. The manorial buildings were arranged around a courtyard and were mostly timber framed. They included great and little halls, two chapels, an outer and inner gatehouse, kitchens, cellars, a buttery, bakery, and brewhouse (Ref 10.33). The records also indicated that the fishponds 1147 and 1148 to the south-east of Burstwick Castle were constructed in 1294.
- 10.5.317 Although the buildings are now gone, the remains of Burstwick Castle hold evidential value for their potential to provide insight into life in a high-status Medieval manor house. Archaeological remains have the potential to provide information on the local environment, social organisation, diet, trade and commerce.
- 10.5.318 The setting of the Scheduled Monument is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits; however, modern development within the moated area itself and immediately to the south as well as a golf course being located to the east, limits the contribution.

Skeffling

- 10.5.319 The high value Grade I Listed Church of St Helen (LB97) is located in the post-Conquest settlement of Skeffling. It is situated east of Church Road in the south of the village 1.8 km to the south-west of the proposed AGIs at Easington. The church was

built in the 1460s and has a 19th century porch. Restoration works have been undertaken in the 20th century.

- 10.5.320 The Church of St Helen (LB97) holds historical value for its links to historic county records and for its place in the local community and its service as a place of worship and as a communal focus for births, weddings and funerals. Historical and evidential value is held in the fabric of the buildings and its graveyard and monuments as these assets recount the churches' history through evidence of repair and remodelling and through the historical use of the graveyard.
- 10.5.321 The setting of the church is informed by its location within the settlement and by the location of the settlement in a wider agricultural landscape with dispersed farmsteads and villages. The church grounds are lined with mature trees giving a sense of seclusion and limiting outward views. However, the church stands on a relatively raised piece of land and the church tower has a long-range view of the industrial facilities to the north of Easington. It is, therefore, likely that the proposed AGIs at Easington would create a limited change within the setting of the church.

Easington

- 10.5.322 Easington is mentioned in the Domesday Book and is in the smallest 40% of the settlements recorded. The Easington Conservation Area (CA1) covers the Medieval core of the village around High Street, North Church Street and South Church Street and Post-Medieval development along Black Well Road (now Seaside Road) to the east. The special character of the Easington Conservation Area is defined by the undisturbed dominance of the Church of All Saints (LB156) and the adjacent square; by agricultural buildings throughout the village; by the use of cobble as a building material; and, the uniqueness of the thatched Tithe Barn (LB19), being one of the oldest agricultural buildings in the East Riding. The setting of the Conservation Area is largely informed by its internal layout and the views and interplay between the assets and other elements of the designated area contributing to its value. The Easington Conservation Area Appraisal (Ref 10.34) does, however, report that the church tower is an important landmark and so views from the wider landscape back towards the Conservation Area contribute to its value. It is possible, therefore, that the proposed AGIs north of Easington would create a change within setting of the Conservation Area.
- 10.5.323 The Project would not introduce changes to the settings of the high value Grade I Listed Church of All Saints (LB156) and Grade II* Listed Tithe Barn (LB19) and so these assets are scoped out of further assessment.

Parish Boundary

- 10.5.324 The Humber HER records a parish boundary (1016) defined by an historic hedgerow between Goxhill and East Halton and partially within the Proposed Order Limits. This is a low value asset.

Deer Park

- 10.5.325 The site of a possible deer park (75) located 1.3 km west of Halsham and within the Proposed Order Limits is suggested by a field name. Given the lack of any further details in the HER and of physical remains for these landscape features, they are of negligible value.

Post-Medieval

Paull

- 10.5.326 Post-Medieval Paull is largely defined by the Paull Conservation Area (CA5). The Conservation Area includes Mains Street, which defines the 19th century historic core of the settlement and extends southwards to include much of the Scheduled Paull Point Battery, coastal artillery battery and Submarine Mining Establishment (SM16) and its associated Officer's residences and married quarters.
- 10.5.327 The setting of the Conservation Area benefits from open views of the Humber Estuary and views inland of open farmland. Views of industrialised East Hull, however, detract from the overall setting. The setting of the of the Conservation Area would be largely screened from the Proposed Order Limits by vegetation, the modern development of Paull and by the intervening landscape; however, the setting of the northern and southern extents of the Conservation Area extends into the Proposed Order Limits. The Conservation Area is of medium value.
- 10.5.328 The high value Scheduled Paull Point Battery (SM16) is situated within the Conservation Area and extends a little further to the south. In 1542, as part of Henry VIII's fortifications of Hull, a battery for 12 guns was constructed at Paull. During the Napoleonic Wars a new battery, known as Paull Cliff Battery, was built in 1807, but was dismantled sometime after 1815. The Paull Point Battery (LB107), the battery and defences that now stand within the area of the monument, was built in 1861-64 following the decommissioning of Hull Citadel, the large artillery fort on the east bank of the River Hull. In 1886 a Submarine Mining Establishment was set up just to the north of the battery to operate a minefield in the Humber. As part of this, a small concrete observation post was built into the battery's north-western rampart from where the mines could be detonated electronically. Around 1907, in the Modern era, three Defence Electric Light (DEL) emplacements were constructed, all powered from an engine room within the battery. One of these searchlight emplacements (128) covering the river still survives and forms part of the monument within a separate protected area to the south of the battery.
- 10.5.329 The Paull Point Battery (SM16/LB107) holds historical and evidential value based of its defence of the British Isles during historic conflicts over the centuries since its first iteration and in its architectural interest.
- 10.5.330 The setting of the Scheduled Monument and the Listed Building is informed by its relationship with the Humber estuary and its defensive location affording commanding views across the channel. The setting of the assets contributes to their value and extends into the Proposed Order Limits.
- 10.5.331 There are four further Listed Buildings located beyond the limits of the Conservation Area and Scheduled Monument to the south. The Thorngumbald Clough Low Lighthouse (LB15), which was built in 1870 and is still in use, is located 15 m to the north of the Proposed Order Limits. The Thorngumbald Clough High Lighthouse (LB128), also built in 1870 and also still in use, is located within the Proposed Order Limits. The lighthouses hold evidential value based on their locations and continued service. The key element of the setting of these Grade II Listed medium value assets is clear open views of the Humber estuary, which remain intact and contribute to their value. The setting of the assets extends into the Proposed Order Limits.
- 10.5.332 The Hall (LB14) and associated Stables and Coach House (LB108) are located within the Paull District to the north of Dark Lane and approximately 2.4 km south-east of the

Paull settlement. The assets are situated 50 m north-east of the Proposed Order Limits. The Hall (LB14) was built in the early to mid-18th century for the Carville family. The Stables and Adjoining Coach House (LB18) were built in the mid-18th century as part of the same complex. The assets are of medium value based on their historical and evidential value.

- 10.5.333 The setting of the Hall (LB14), Stables and Coach House (LB108) is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. The setting of the assets contributes to their value and extends into the Proposed Order Limits.
- 10.5.334 The Humber HER holds seven Post-Medieval records for the Paull area. A former swing bridge over Hedon Haven and the associated Swing Bridge House (1183) is recorded on the First Edition OS map of 1855. It is located within the Proposed Order Limits c. 70 m south of the current course of Hedon Haven. Depending on the level of survival and complexity, this asset could be of medium value.
- 10.5.335 The site of Far Barn (1184) is also recorded on the 1855 OS map. The site is within the Proposed Order Limits and is located 220 m west of Paull Road. This asset is of low value.
- 10.5.336 The site of an early Post-Medieval beacon (1193) is located offshore at the southern limits of the Conservation Area. It was lost to the sea in 1809. This asset is of low value.
- 10.5.337 The site of a second Post-Medieval beacon (82) is located within the Proposed Order Limits c. 520 m north-east of Thorngumbald Road. This is a low value asset.
- 10.5.338 The site of a brick and tile works (1285) is located within the Proposed Order Limits 120 m north of Paull. The works are apparent on the 1855 OS map. It is a low value asset.
- 10.5.339 The site of Preston Stakes (1292), described as a landing point, is located within the Proposed Order Limits on the north back of Hedon Haven 650 m north of Paull. This is a low value asset.
- 10.5.340 An 1812 Hull Leadworks copper penny (1187) was found 120 m to the west of the swing bridge site within the Proposed Order Limit. This is a low value asset.
- 10.5.341 The Humber HER does not include the exact locations of the Paull Vicarage House (1186) and the Paull Naval Shipyard (991). The 1855 OS map indicates that the Medieval Church of St Andrew (LB171) had a vicarage, and a small, unlabelled structure is shown in an area of garden to the rear of the church. It is not clear if this represents the vicarage. This asset (1186) is of low value.
- 10.5.342 Paull Shipyard (991) built several Naval ships including the 1870-ton HMS Anson launched on 11th May 1812, however, the site is recorded as unused in 1856. Its exact location is not known but it is described as being situated close to the Paull Battery Point (SM16). Depending on the level of survival and complexity, this asset is of low to medium value.
- 10.5.343 The Post-Medieval HER records noted above hold evidential value based on their potential to provide evidence of Post-Medieval land-use and activity in the Paull area.

Paull Holme

- 10.5.344 The site of a vicarage (79) is recorded by the HER although the Ordnance Survey co-ordinates are vague, and no reference is supplied. The possible location of the asset is 75 m to the south-south-east of the Farmhouse (121) and 180 m east of the Proposed

Order Limits. If present, and depending on the level of survival and complexity, this asset is of low to medium value.

Newton in Paull (Newton Garth)

- 10.5.345 The Humber HER holds three Post-Medieval records for the Newton Garth area.
- 10.5.346 The site of a brickworks (125) is located within the area currently occupied by extant structures and omitted from the Proposed Order Limits. No further details are available. The asset is of low value.
- 10.5.347 A Tudor purse hoard (127) comprising five silver coins was found within the Proposed Order Limits on farmland 125 m south-west of modern Newton Garth. This is a low value asset.
- 10.5.348 A gold finger ring (129) was found whilst metal detecting within the Proposed Order Limits on Farmland c. 370 m west of modern Newton Garth. This is a low value asset.
- 10.5.349 The Post-Medieval HER records for Newton Garth hold evidential value based on their potential to provide evidence of Post-Medieval land-use and activity in the Newton Garth area.

Hedon

- 10.5.350 The Post Medieval development largely took place on the Medieval grid of the old town and around Hedon Haven and Basin at the south of the town. To the north the town developed to accommodate commerce whilst development to the south was focused on managing water bourn traffic and the movement of trade goods. The Haven and Basin were still in use for transporting goods up to the end of the 19th century and remained open until the 1970s when they were finally backfilled. The historical character of these two areas is reflected in the Hedon Conservation Area (CA3) to the north and the Hedon Haven Conservation Area (CA2) to the south.
- 10.5.351 The special character of the Hedon Conservation Area (CA3), the first to be designated in Holderness, lies in its unique assembly of 18th and 19th century properties within a constricted town centre into which relatively little 20th century development has intruded.
- 10.5.352 The Hedon Conservation Area (CA3) contains four Grade II* Listed Buildings (LB41, LB58, LB62, LB63), and 67 Grade II Listed Buildings (LB26-40, LB43-45, LB48-56, LB58-61, LB64, LB65, LB88-95, LB98, LB99, LB102, LB103, LB105, LB106, LB121, LB129-31, LB138-147, LB149-154 and LB157). Changes in the settings of the Conservation Area and Listed Buildings would not arise through the Project and so these assets are scoped out of further assessment.
- 10.5.353 The character of the Hedon Haven Conservation Area (CA2) is rooted in its former role as one of the Humber's more significant harbours. Its commercial character has now largely disappeared, but there are sufficient remnants of it to give an impression of its former importance.
- 10.5.354 The Hedon Haven Conservation Area contains four medium value Grade II Listed Buildings comprising Farm Buildings (LB42 and LB148) to the south of Burstwick Drain and LB101 and LB136 on Sherriff Highway to the north.
- 10.5.355 The Listed Buildings of the Hedon Haven Conservation Area hold historical value for their potential to provide insight into the development of the port town during the Post-Medieval period. They also hold evidential value in their architecture and function.

- 10.5.356 The contribution of the settings to the significance of the Listed Buildings within the Hedon Haven Conservation Area to the south of Burstwick Drain is derived from their relationship with Hedon Haven and Hedon Basin and an understanding of how the local Post-Medieval portside functioned. Key views include views north and south along Sherriff Highway linking the town to the basin. Generally, views to open land beyond the settlement are not key to understanding the settings of these assets, however, the view to the east and the former route of Hedon Haven provides a link to the basin's function and its link to the Humber.
- 10.5.357 The Sherriff Highway was the major throughfare linking the Hedon Basin with the core of Hedon to the north. The contribution of the settings to the significance of the Listed Buildings on Sherriff Highway is derived from key views to the basin to the south and the town to the north and an understanding of the role of the route linking the basin and town. The setting of the Hedon Haven Conservation Area (CA2) extends into the Proposed Order Limits, as do the settings of Listed Buildings LB42 and LB148; the settings of LB25, LB101 and LB136, however, do not extend into the Proposed Order Limits and, therefore, these assets are scoped out of further assessment.
- 10.5.358 The Humber HER holds eight further Post-Medieval records for Hedon and the immediate area. All eight Post-Medieval HER records hold historical and/or evidential value for their potential to provide insight into the development of the port town during the Post-Medieval period, but assets 124, 1159, 1160, and 1179 have been scoped out due to their location being outside of the Proposed Order Limits.
- 10.5.359 The site of a windpump (1171) is recorded in the HER as being located close to the site of the earlier Medieval brick and tile works (1172). The site is located outside the Hedon Haven Conservation Area (CA2), 220 m north of the Proposed Order Limits. It is a low value asset.
- 10.5.360 The HER records a lime kiln (1162) close to the route of the A1033 and just within the Proposed Order Limits. The location is, however, vague (within 100 m which could locate it outside the Proposed Order Limits), and no reference is recorded. The asset is of negligible value.
- 10.5.361 Iveson's map of 1804 records 'Tile Mere' and 'Little Tile Mere', which are considered to be clay working sites (1176). Their approximate location situates them within the Scheduled Monument and Conservation Area and c. 160 m north-east of the Proposed Order Limits. The assets are of negligible to low value.
- 10.5.362 Two sections of the Hull to Withernsea Railway (1047) cross the Proposed Order Limits; one section between Hedon and Burstwick in the west and the other to the east between Hollym and Winestead. The Hull and Holderness Railway Company opened the Withernsea Railway from Withernsea to Victoria Dock Station in 1854. The line closed in 1965 and was dismantled. The asset is of low value.

Burstwick

- 10.5.363 The Post-Medieval period is represented in the Burstwick area by one Listed Building and a further six records held by the Humber HER.
- 10.5.364 The medium value Grade II Listed Ridgemont (LB13) is located c. 1.2 km east of Burstwick and 240 m south of the Proposed Order Limits. Ridgemont is a house that was built in 1824-5 for William Shokney and the Constable Estate. The asset holds historical value based on the retention of its historic fabric and evidential value based on its function.

- 10.5.365 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.
- 10.5.366 The six Post-Medieval HER records noted below hold evidential value for their potential to provide insight into Post-Medieval activity in the Burstwick area. Records 104, 105, 108, 1150, and 151 have been scoped out due to their location being outside of the Proposed Order Limits.
- 10.5.367 An Elizabeth I three pence coin (106) was also found by metal detectorist 320 m west of Burstwick Castle within the Proposed Order Limits. The asset is of low value. A hoard of three early Post-Medieval silver coins (107) was found by metal detectorists c. 300 m south of Burstwick Castle and 180 m east of the Proposed Order Limits in 2005. A musket shot was found nearby and may or may not be associated. The coins are believed to form part of a small purse hoard. The asset is of low value. These assets are scoped into the assessment due to their association with Burstwick Castle (SM1).

Clay Pits and Cropmark in the Burstwick Area

- 10.5.368 The cropmark complex (109) is located c. 1.1 km to the west of Burstwick and within the Proposed Order Limits. The cropmarks have been interpreted as Post-Medieval field boundaries and a subcircular possibly respecting a possible pond. The assets are of low value.
- 10.5.369 The site of the clay pit and brickyard (102) is recorded on the 1891 OS map. It is located within the Proposed Order Limits and c. 2.3 km east of Burstwick. It is a low value asset.
- 10.5.370 The two Post-Medieval HER records noted above hold evidential value for their potential to provide insight into Post-Medieval agricultural and industrial activity in the Burstwick area.

Eastholme Bridge

- 10.5.371 Eastholme Bridge (101) carried the Burstwick Road over the Halsham Drain and a stone bridge is mentioned at the location in the early 17th century. The site is located within the Proposed Order Limits. The date of the current bridge is not known, nor whether it incorporates anything of earlier structures. It is a low value asset.

Halsham

- 10.5.372 The Post-Medieval period is represented in Halsham and its immediate hinterland by two Listed Buildings and four Humber HER records.
- 10.5.373 The high value Grade II* Listed Constable Mausoleum (LB188) and the medium value Grade II Listed Halsham House (LB172) are located within the Halsham West Conservation Area (CA8). However, no changes in the settings of these assets would arise from the Project and so they are scoped out of further assessment.
- 10.5.374 The Humber HER states that Halsham Grange (1146) has existed since at least 1828. It is located 320 m north-west of Halsham West Conservation Area and 460 m north-east of the Proposed Order Limits. Halsham Grange (1146) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.

- 10.5.375 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.
- 10.5.376 The Humber HER states that Carr House Farm (1139) has existed since at least 1828. It is located off Fields Close Road and 340 m south of the Proposed Order Limits. Carr House Farm (1139) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.
- 10.5.377 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.
- 10.5.378 The Humber HER states that North End Farm (1141) has existed since at least 1828. It is located 150 m east of North End Road and 340 m south of the Proposed Order Limits. North End Farm (1141) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.
- 10.5.379 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.
- 10.5.380 Churchlands Farm (1140) was built in the 1850s and is recorded on the 1855 OS map. It is located south of Badger Lane 320 m south-east of the Proposed Order Limits. Churchlands Farm (1140) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.
- 10.5.381 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.

Hollym

- 10.5.382 The HER records three assets recorded for their evidential value and providing potential evidence of Post-Medieval industry in this area, however two of these, records 1121 and 1128, have been scoped out due to their location outside of the Proposed Order Limits.
- 10.5.383 Greenland Farmhouse (98) was built by 1851 and is recorded on the 1855 OS map. It is located 1.8 km south-west of Hollym to the south of the A1033 and 280 m north of the Proposed Order Limits. Greenland Farmhouse (98) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.
- 10.5.384 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.

Holmpton Road, Patrington

- 10.5.385 The HER records show five assets in this area recorded for their historic and/or evidential value. One asset, 1124, has been scoped out due to its location outside of the Proposed Order Limits.
- 10.5.386 The Humber HER states that Eastend House (1123) is described as 'East End' in the 18th and 19th centuries, however, no reference is given. The structure is recorded on the 1855 OS map. Eastend House is located south of Holmpton Road, c. 900 m east of

Patrington and 450 m south of the Proposed Order Limits. Eastend House (1123) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.

- 10.5.387 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.
- 10.5.388 Eastfield House (1122) was built by 1851 and is recorded on the 1855 OS map. Eastfield House is located north of Holmpton Road, c. 1.2 km east of Patrington and 190 m south of the Proposed Order Limits. Eastfield House (1122) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.
- 10.5.389 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.
- 10.5.390 A probable farm building (97) is recorded on the 1855 OS map and is last apparent on the OS map of 1891. The site of the former building is situated 260 m east of Eastend House (1123) and 270 m south of Eastfield House (1122). The asset's site holds evidential value for its potential to contain archaeological deposits. It is a low value asset. This asset is scoped into the assessment due to group value with Eastfield House (1122).
- 10.5.391 Little Ploughland, or Ploughland Cottage (1113), as recorded on the 1855 OS map, was probably built in 1804. It is located 140 m south of Holmpton Road/Wakefield Lane and 240 m east of the Proposed Order Limits. Ploughland Cottage (1113) holds historical value based on the retention of its historic fabric and evidential value based on its function. It is a low value asset.
- 10.5.392 The setting of the asset is informed by the surrounding agricultural landscape, with which it holds a historic and functional relationship. This setting contributes to the value of the asset and extends into the Proposed Order Limits.

Skeffling

- 10.5.393 The Post-Conquest settlement of Skeffling is centred c. 1.5 km south-west of the proposed AGIs at Easington. As well as the Grade I Listed Medieval Church of St Helen noted above, the settlement contains three Post-Medieval Listed Buildings. The buildings are all medium value Grade II Listed and comprise:
- Wilberforce Farmhouse (LB132); and
 - Old Hall (Skeffling Hall) (LB169).
- 10.5.394 The Listed Buildings of Skeffling hold historical value for their potential to provide insight into the development of the town from the Medieval through to the Post-Medieval period. They also hold evidential value in their architecture and function.
- 10.5.395 The settings of Wilberforce Farmhouse (LB132) and Old Hall (Skeffling Hall) (LB169) are also informed by their locations within the settlement and by the surrounding agricultural landscape, with which they hold historic and functional relationships. The settings of the assets contribute to their value, however, both assets are located on the eastern periphery of the settlement, and it is likely their settings would extend to the Proposed Order Limits, particularly the proposed AGIs situated north of Easington.

- 10.5.396 The Humber HER holds three further Post-Medieval records for the Skeffling area. These records are noted for their evidential value illustrating their potential for archaeological deposits. However, Records 90, 91 and 94 have been scoped out of the assessment due to their location being outside of the Proposed Order Limits, and/or that the asset and its associated asset are no longer extant.

Out Newton

- 10.5.397 Out Newton is mentioned in the Domesday Book (Niuueton) and is in the smallest 20% of the recorded settlements. The Humber HER describes the village as a 'Medieval to Post-Medieval settlement, consisting of a few houses loosely strung along a N-S road to Holmpton (1109).
- 10.5.398 The Humber HER holds three further Post-Medieval records for the Out Newton Area. The assets have been recorded for their evidential value and/or potential for archaeological deposits or marine value and are negligible-low value assets. All three assets (88, 92, and 93) have been scoped out of further assessment due to them being non-extant (88 and 92) or offshore (93).

Easington

- 10.5.399 Post-Medieval Easington is represented by one medium value Grade II Listed Building and one HER record; Rectory Farmhouse (LB155). Rectory Farmhouse, North Church Side (LB155) is located 55m west of the Grade I Listed Medieval All Saints Church (LB156). The Farmhouse was built in the late 18th century and there has been later alterations. The asset holds historical value based on the retention of its historic fabric and evidential value based on its function.
- 10.5.400 The setting of the asset is informed by its location within the Easington Conservation Area (CA1) and its views and interplay between it and other elements of the designated area including the Church (LB156) and the Tithe Barn (LB19) with which it has a historical relationship. The setting, therefore, contributes to the value of the asset. The setting of Rectory House has limited long range views, and none to the north and the proposed AGIs. The setting of the asset does not, therefore, extend into the Proposed Order Limits and so it is scoped out of further assessment.
- 10.5.401 The Humber HER holds one Post-Medieval record for the Easington area. The site of Easington Cottage (1101) is located within the Proposed Order Limits 340 m west of Dimlington Road and 450 m south of Warmer Lane. The building is recorded in the 1855 OS map and was built before 1829. The asset was demolished ahead of the construction of the gas terminal. The asset's site holds evidential value for its potential to contain archaeological deposits. Depending on levels of survival and complexity any archaeological remains of the asset could be of low to medium value.

Agricultural Features

- 10.5.402 The Humber HER records historic hedgerows (1013, 1015, 1017, 1018) within the Proposed Order Limits. These assets are of low value.

Modern

- 10.5.403 Modern period assets within this section of the Project are dominated by World War II remains. There are also two Listed Buildings; the Rimswell Water Tower (LB16) and associated Gate, Flanking Walls and Railings (LB96).

- 10.5.404 Rimswell Water Tower (LB16) was built in 1916 for Hull Corporation Waterworks. The Tower is Grade II Listed and of medium value. It is associated with a gate, flanking walls and railings (LB96), which are Grade II Listed as part of a group. The assets are located at the intersection of the B1362, Tower Road and Chantry Lane, 360 m south of Proposed Order Limits. The assets hold historical value based on the retention of their historic fabric and evidential value based on their function. The assets' rural setting has changed very little since their construction and so contributes to their value. The setting of the assets extends into the Proposed Order Limits.

World War II Assets

- 10.5.405 The World War II assets can be split into three groups comprising those to the west on the banks of the Humber Estuary, those to the east on the North Sea coastline and those central to Holderness near Burstwick. However, the majority of these assets are located outside the proposed Order Limits and comprise 114, 115, 116, 119, 126, 128, 1182, 1099, 52, 95, 1105, 1107, 1110 and 1111.
- 10.5.406 The World War II assets within the Proposed Order Limits comprise:
- Site of Concrete Structure (120) located c. 150 m north-west of Paull Holme;
 - Site of a barrage balloon anchorage (1294) is located 210 m north-east of Paull;
 - The Site of WWII Military Defences (1039) located on the coast. Aerial photographs show World War II military coastal defences in the form of fortified Post-Medieval farm buildings (1040), military buildings of unknown function, two weapons pits, a trench and barbed wire fences. Now lost to the sea; and
 - The Site of a ROC Post (1102) now lost to the sea.
- 10.5.407 The World War II asset holds historical value based on their involvement in the defence of the British Isles during wartime and evidential value based on an appreciation of their function.

Undated

- 10.5.408 Due to the unknown data of multiple features within the Project's Study Area, it is difficult to contextualise and therefore group them, without further study to their date and nature. Consequently, the following undated assets are located within the area of the Project between Saltend and Easington:
- 10.5.409 The Humber HER holds 50 undated records for this section of the Project. Those located within the Proposed Order Limits comprise:
- HER record of an undated findspot (1190) inside the Proposed Order Limit close to Post-Medieval swing bridge (1183);
 - A ladder settlement, enclosure and ridge and furrow (1058) digitised from aerial imagery by the Project within the Proposed Order Limits. Recorded as undated but form suggests Iron Age to Roman and Medieval activity;
 - HER mapped cropmark of an enclosure (168), inside the Proposed Order Limits;
 - HER mapped oval cropmark (164) inside the Proposed Order Limits;
 - Linear cropmark feature (1052) digitised from aerial imagery by the Project within the Proposed Order Limits. 90 m south of Iron Age/Roman/Medieval cropmarks 1053;

- Enclosure cropmark feature (1069) digitised from aerial imagery by the Project partially within the Proposed Order Limits;
- Linear cropmark features (1050) digitised from aerial imagery by the Project. Just within the Proposed Order Limits and strongly associated with Iron Age/Roman enclosures (55 and 1049) and possible square barrows (1051);
- HER mapped cropmarks of one complete rectilinear enclosure and one partial (134), within the Proposed Order Limits;
- HER mapped cropmarks of a field system (154), inside the Proposed Order Limits;
- HER mapped cropmark of a square enclosure (156), inside the Proposed Order Limits;
- HER mapped cropmark of a rectangular enclosure (148), within the Proposed Order Limits; and
- Cropmarks (1043) digitised from aerial imagery by the Project, within the Proposed Order Limits.

10.5.410 Unless stated otherwise, all the above assets of unknown date and nature are considered to hold evidential value for their potential to yield information of past human activity. Due to the unknown nature of the activity, their setting cannot be established beyond the initial agricultural field in which they're located. Initial assessment of all assets is that they are of low value, but this may change with further assessment.

Section 5: Hedon to Easington Historic Landscape Characterisation

10.5.411 Historic landscape characters are displayed on Figure 10.2 (Volume IV).

10.5.412 From Saltend in the west to Easington in the east, the Project is situated in the East Riding of Yorkshire. The historic landscape of the East Riding of Yorkshire has been assessed in the East Riding of Yorkshire Landscape Character Assessment (Ref 10.26) and the following section draws on this report and the HLC data provided by the Humber HER.

10.5.413 From Project landfall in Holderness on the Humber Estuary coast in the west to Thorgumbald in the east, the Proposed Order Limits passes through Landscape Character Type 21, specifically The Paull Farmland Character Area (21D). Land use is predominantly arable, and fields are medium in size, relatively irregular in shape and bound by a combination of ditches and fragmented hedges. Paull is the only settlement with a few scattered farmsteads. Prior to drainage, the land adjacent to the Humber would have been wet pasture.

10.5.414 Humber Historic Landscape Character data further classifies the land within the Proposed Order Limits in 21D as Mud Flats, Coastal Management, Parliamentary Planned Enclosure, Medieval Village Earthworks, Water Treatment, Fuel Distribution, Modern Fields, Estate Buildings, Early Enclosure (c. 1500), Reorganised Early Enclosure, Rough Grassland/Scrub, Nurseries and Private Planned Enclosure.

10.5.415 The Medieval Village Earthworks may be associated with Paull Holme moated site and tower (SM7) and therefore, of high value. The Parliamentary Planned Enclosure, Early Enclosure (c. 1500) and Reorganised Early Enclosure are of medium value. The Mud Flats, Coastal Management, Modern Fields, Estate Buildings, Rough Grassland/Scrub,

Nurseries and Private Planned Enclosure are of low value. The Water Treatment and Fuel Distribution types are of negligible value.

- 10.5.416 From Thorngumbald in the west to a little west of Easington, the Proposed Order Limit passes through Landscape Character Type 19, specifically The Burstwick to Withernsea Farmland Character Area (19E). Land use consists of open agricultural land, mainly intensively managed arable, with large rectilinear fields bordered by hedgerows and tracks fields but with limited woodland. Settlements are well scattered, and farmsteads are common. Traces of Medieval strip field systems are located around Preston, Hedon and Bilton.
- 10.5.417 Humber Historic Landscape Character data further classifies the land within the Proposed Order Limits in 19E as Modern Fields, Plantation Woodland, Re-organised Early Enclosure, Artificial Open Water, Early Enclosure, Golf Course, Parliamentary Planned Enclosure and Private Planned Enclosure.
- 10.5.418 The Parliamentary Planned Enclosure, Early Enclosure (c. 1500) and Reorganised Early Enclosure are of medium value. The Modern Fields, Plantation Woodland, Golf Course, and Private Planned Enclosure are of low value. The Artificial Open Water is of negligible value.
- 10.5.419 From a little west of Easington to the North Sea Coast, the Proposed Order Limits passes through Landscape Character Type 20, specifically the Withernsea to Spurn Point Character Area (20A). Area 20A covers a strip of coastline between Withernsea and Spurn Point. Land use is predominantly arable farmland but includes infrastructure associated with the Natural Gas Terminal north of Easington. Settlements within 20A are limited to isolated farmsteads and the villages of Easington and Holmpton. Beyond the villages, fields tend to be large and rectilinear in shape. However, small water courses do break up the regular pattern of the fields at intervals.
- 10.5.420 Humber Historic Landscape Character data further classifies the land within the Proposed Order Limits in 20A as Parliamentary Planned Enclosure, Modern Fields, Early Enclosure (c. 1500), Fuel Distribution and Beach.
- 10.5.421 The Parliamentary Planned Enclosure, and Early Enclosure (c. 1500) are of medium value whilst the Modern Fields are of low value. The Fuel Distribution and Beach are of negligible value.

Future baseline

- 10.5.422 Future changes to the baseline are anticipated to be restricted to the archaeological resource, because of archaeological fieldwork. Changes in baseline may include:
- Identification of archaeological assets through fieldwork which were previously unknown; and
 - Increased or decreased value of archaeological assets, as a result of an understanding of either the archaeology's rate of preservation or their evidential value displayed through excavation.

10.6 Design development, impact avoidance and embedded mitigation

- 10.6.1 The design will include embedded mitigation measures which would avoid or reduce impact to heritage receptors. These measures are factored into impact assessment

10.6.2 The principal mitigation measures include:

- Trenchless crossing of major infrastructure would avoid direct physical impact to those identified as heritage assets, within the Proposed Order Limits; and
- An outline Construction Environmental Management Plan (CEMP) will be issued with the DCO application and be accompanied by a Register of Commitments. The outline CEMP will capture good practice construction working activities. This will include dampening down of loose material to reduce dust, traffic management practices, and waste management. This would support reducing potential impacts to the setting of heritage assets from construction related activity.

10.7 Preliminary assessment of potential impacts

10.7.1 This Section details the preliminary assessment of potential impacts for the Project during construction and operation. The decommissioning phase is scoped out of assessment.

10.7.2 The construction of the proposed pipelines has a limit of deviation applied, to allow flexibility of design. For the purposes of the PEIR, the limit of deviation is assumed to enable movement of the pipelines, anywhere within the Proposed Order Limits, which ensures that a precautionary approach to assessment has been taken.

10.7.3 This Chapter seeks to present a worst-case scenario, and as such any asset that is located within the Proposed Order Limits is considered for physical impact from construction related activities. Any asset physically impacted by construction will be assumed to have been removed by this phase of works and therefore, is not considered for assessment under operation.

Construction

10.7.4 Impact to the cultural heritage baseline from construction activity may have the following impacts:

- Direct physical impact resulting in the complete or partial removal of an asset from construction methods associated with either the establishment of proposed AGI structures; the excavation of trenched pipelines; the excavation associated with trenchless crossing points; and/or the location of temporary construction compounds;
- Changes to the setting of a heritage asset, which contribute to the asset's significance, through either temporary works associated with construction of the pipelines aspect of the Project, including temporary construction compounds. Works associated with proposed AGIs, where a long-term visual intrusion is being introduced to the landscape, would result in permanent impacts to the setting of a heritage asset; and
- Changes to setting may also occur from temporary access routes, which are in development and not discussed in detail.

10.7.5 Any impacts to assets of an archaeological nature (including geoarchaeological), and the historic landscape would be permanent and irreversible.

- 10.7.6 The potential impacts for Cultural Heritage associated with the construction phase are detailed below and split by route section.
- 10.7.7 Findspots are assumed to have been removed from site and are therefore, not discussed further.
- 10.7.8 Tables 10.6, 10.7, 10.8 and 10.9 present assets which are considered for impact at construction. The tables are split by respective Project section and visible on Figure 10.1 (Volume IV).

Table 10.6: Construction phase –preliminary assessment of potential impacts: Section 1 Drax to Keadby

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Activity at Scurff Hall (2, 4, 5, 7) Old moat and fishponds at Drax Priory (4, 1094)	High	Removal in part or whole by direct impact, depending on the final design of the Project.
St Wilfred's Chapel (1), Romano-British activity at Newlands (25, 26, 28, 29, 30, 31, 32), Neolithic buried land surfaces (37), Prehistoric activity (39, 40), Drax Railway (1092), Goole Fields (1300), HLC Type Parliamentary Planned Enclosure	Medium	Removal in part or whole by direct impact, depending on the final design of the Project.
Ridge and furrow (10, 36, 1306), Quarter Gate Lane (14), Boundary ditch (18), Post-Medieval bank (20), Flint blade (325), Warping drains (763, 1257), Undated cropmarks (842, 843), Old River Don (1036), Potential cropmarks digitised by HLCP (1088, 1089, 1091, 1095, 1096), HLC Types Modern Fields, Modern Improved Fields and Unknown Planned Enclosure, Landscape Park, Estate Fields, Isolated Farm Complex, Woodland, and Empty Housing Plot;	Low	Removal in part or whole by direct impact, depending on the final design of the Project.
HLC Types: Industrial Retail Park, Open Water, Derelict Industrial Land, Ash Pile, Industrial (utilities, including gas, electric etc).	Low	Based on the existing character and the likely industrial character of the Project, the following HLC types within the Proposed Order Limits are anticipated to experience no change:
Aire and Calder Navigation Canal (670) and Dutch River (671)	Medium	Both assets would be subject to trenchless crossing and physical impact is therefore, likely to be designed out. A temporary impact would be experienced through a change in setting during construction.

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
RAF Barlow (16, 21) and decoy house (555)	Low	Located within areas of existing infrastructure at Drax and Keadby emitters and are assumed removed by previous works.
Drax Priory Complex (SM13, 4, 5, 15, 1094) and Scurff Hall Moated site (SM15, 2, 8, 9, 22, 7),	High	Temporary changes in setting during construction.
Moorend Farmhouse and granary (LB72/LB73), Ash Tree Farmhouse (LB104), Easingwold House (596).	Medium	Temporary changes in setting during construction.
Goole Mill Windmill Tower (1298), Field House Farmhouse (1299), North Pilfrey Farm (598), Ealand Warpings Farmstead (599), Ealand Grange Farmstead (600), Rainsbutt House (597), the site of Ouse Swing Bridge (453) and Ouse Swing Bridge Engine House (474),	Low	Temporary changes in setting during construction.
Church of St Peter and St Paul (LB84)	High	No change to setting anticipated during construction.

Table 10.7: Construction phase –preliminary assessment of potential impacts: Section 2 Keadby to Scunthorpe

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
HLC Type Medieval Village Earthworks	High	Removal in part or whole by direct impact, depending on the final design of the Project.
The Grade II listed Syphon (LB158)	Medium	Asset could be physically impacted by vibrations caused by works associated with a trenchless crossing of the Three Rivers and A18
Iron Age to Romano-British settlement activities (268, 308, 372, 749, 750, 770, 774, 799, 908, 988, 995); Medieval burial and activity (442), Site of Manby Hall and landscaped gardens (538, 892), Peat deposits (723), Ironworking site (729), Prehistoric settlement activity (768)	Medium	Removal in part or whole by direct impact, depending on the final design of the Project.
Site of Low Farm (620), undated enclosures and cropmarks (766, 772, 802, 830, 832, 833, 834, 835, 836, 910, 917, 994, 996, 1078) Warping and land improvement drains (838, 850 903, 951, 953, 954, 958, 959, 1009, 1027), boundary bank (904), field boundary ditch (957), Trackway (1029), site of a Heavy Anti-Aircraft Battery south of Raventhorpe (694); and HLC Types Modern Fields, Private Planned Enclosure, Ancient Enclosure (Post-Medieval to Modern), Woodland and Plantation Woodland	Low	Removal in part or whole by direct impact, depending on the final design of the Project.
HLC Types: Factory Site, Artificial Open Water.	Low	Based on the existing character and the likely industrial character of the Project, the following HLC types within the Proposed Order Limits are anticipated to experience no change:

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Former Barnsley to Barnetby Railway (1033) and Stainforth and Keadby Canal (1035)	Medium	Both assets would be subject to trenchless crossing and physical impact is therefore, likely to be designed out. A temporary impact would be experienced through a change in setting during construction.
Raventhorpe Medieval settlement (SM11), Raventhorpe Farmhouse (LB159) and Farm (615)	High	Temporary changes in setting during construction.
Settlements of West Butterwick (430), Derrythorpe (458) and Holme (666); Derrythorpe Grange (621), Clouds Lane Farm (623), Highfield Farm (637), North Field Farm (640),	Medium	Temporary changes in setting during construction.
Pilfrey Farm (601), Beltoft Grange (614), Mendle Farm (616), Field Farm (622), Slate House Farm (635), Willow Farm (636), Low Hill Farm (639), second world war decoy (693) and searchlight battery (956)	Low	Temporary changes in setting during construction.

Table 10.8: Construction phase –preliminary assessment of potential impacts: Section 3 Scunthorpe to Killingholme

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Neolithic Trackways (186, 1023, 1028). Bronze Age Barrows (309, 336, 337, 338), Activity associated with previously excavated Bronze Age ditches, pits (279) and flint assemblage (786). Iron Age ditched boundary (837). Iron Age enclosure (838), Prehistoric settlement and complex (219, 223), Iron Age and Roman activity at East Halton/Killingholme (263, 280, 345, 346, 347, 752, 755, 759, 762, 789, 791, 820, 821, 889, 890, 949, 1002, 1232), Roman settlement activity (390, 909), High Street Roman Road (1024), Early Medieval settlement (404), Archaeological remains associated with Medieval Kettleby (193, 211), moated site at Kettleby Thorpe (190), Thornton Curtis settlement (921), RAF Kirmington (897, 987, 674, 675, 894, 805, 900, 902, 979, 980, 222), undated peat deposits (739), HLC Types Parliamentary Planned Enclosure.	Medium	Removal in part or whole by direct impact, depending on the final design of the Project.
Prehistoric ditches (782), Project mapped enclosures (1067, 1068, 1070, 1097); undated cropmarks around East Halton/Killingholme (380, 708, 709, 710, 711, 715, 717, 722, 734, 735, 737, 738, 760, 790, 794, 795, 796, 797, 810, 811, 861, 863, 864, 865, 866, 867, 963, 1008); Early Medieval ditches and pits (411, 412), Medieval field systems (448, 463, 653, 746, 779); Medieval ridge and furrow (214, 446 447, 450, 468, 469, 470) Medieval Hollow Way (206); Medieval hedgerows and field boundaries (1031, 449); Medieval saltern (452), Medieval enclosures (203,	Low	Removal in part or whole by direct impact, depending on the final design of the Project.

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
<p>758, 858), Medieval parish boundary (453), Medieval port activity (445, 451); former clay pit (549), cropmarks of former field boundaries (907), Historic Hedgerow (669), site of former Manon Top Farmstead (647), limestone quarry (197), sites of unnamed farmstead (478, 574, 588), extraction pits (479, 521), trackway (524), Post-Medieval enclosures (482, 744), Ponds (523, 650), cultivation marks (518), former coastguard station (815) and sea defence (870), site of primitive Methodist church (869), site of brickworks (484), Goxhill Airfield (896, 978), military remains at East Halton (679, 688, 880, 681, 683, 684, 687, 686), Barton and Immingham Light Railway (1032), Ulceby (Brocklesby Junction) of the Kirton In Lindsey Railway (662); unnamed outfarm south of Bartonby (618), unnamed outfarm north Killingholme (1295), parish boundary (1016), Historic hedgerows (1013, 1015, 1017, 1018); undated enclosures and cropmarks (1066, 202, 204, 1074, 1075, 1076, 1059, 925, 777, 967, 993, 847, 761, 742, 997, 1011, 747); undated road (716), soilmarks (966, 999), enclosed settlement (1258), sub-square enclosure (1259), rectangular enclosure (1260), sub-rectangular ditched enclosure (1261), ring ditch and linear ditch (816), seabank (764), undated field boundary ditch (1004), Historic Drainage Ditches (1215), Medieval ridge and furrow (1217), possible WWII installation (1218), WWII bomb craters (1219), Historic Cultivation Marks (1220), undated ditches (1221), HLC Types Ancient Enclosure (Post-Medieval to Modern), Modern Fields, Private Planned</p>		

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Enclosure, Woodland, Plantation Woodland, Isolated Farmsteads, Livestock Rearing and Marsh.		
HLC Type: Chemical Works.	Low	Based on the existing character and the likely industrial character of the Project, the following HLC types within the Proposed Order Limits are anticipated to experience no change:
Ermine Street (1022); the Old and New routes of the River Ancholme (743, 1034); the Grimsby-New Holland-Barton Branch Railway (1020/1041)	Medium	Both assets would be subject to trenchless crossing and physical impact is therefore, likely to be designed out. A temporary impact would be experienced through a change in setting during construction.
Thornton Abbey (SM8);	High	Temporary changes in setting during construction.
Bronze Age Barrows (315, 331, 332, 334, 335, 711); Manton Settlement (891); Kettleby House Complex (LB3); Kettleby Thorpe Complex (190, 188, 173, 213); Barnetby Le Wold (992); Ulceby settlement; East Halton (756); Station Farmhouse (LB135) and Farm (630); New Farm Scawby (629); Prospect House Farm (619); Bibby Top Farmstead (183); Glebe Farm (608); Unnamed Farmstead (606); Sweetbriar Farm (602); College Farm (592); Field Farm (587); Westfield Farm (584); Red House Farm (568); East Halton Grange (573, 472); Low Risby Farm (563); Spring Farm (564) and Pinessprings Lodge Farm (565); Brocklesby Park (RPG1); Sturton settlement (406); Sturton settlement (406); Thornton Curtis settlement (921); Vale House (609); Ashdale Farm (603) and Farmhouse (661).	Medium	Temporary changes in setting during construction.

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Lincoln Hill Farm, Scawby (628); Staniwells Farm (645); Twigmoor Grange (634/460); Bentley Farm (185); Kettleby Carrs Farm (180); Kettleby Thorpe Farm (181); Bibby Top Farmstead (183); Glebe Farm (608); Unnamed Farmstead (606); Sweetbriar Farm (602); College Farm (592); Field Farm (587); Westfield Farm (585); Unnamed Farmstead (562); Mesolithic flint working site (272); Low Farm (641); Newlands Farm (646); Unnamed Farmstead (595); Scawby Park (871).	Low	Temporary changes in setting during construction.

Section 4: Killingholme to Hedon (Humber Crossing)

This Section of the Project is scoped out for consideration of impacts as the crossing of the River Humber, which has been scoped out of assessment, as per Table 10.9.

Table 10.9: Construction phase –preliminary assessment of potential impacts: Section 5 Hedon to Easington

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Medieval Village Earthworks historic landscape character, Dimlington Stadial deposits at the Easington Landfall .	High	Removal in part or whole by direct impact, depending on the final design of the Project.
See-saw electric light emplacement, Thorngumbald (128); Possible pit alignment, north-west of Boreas Hill (47); St Mary Magdalene's leper hospital & moat, west of Newton Garth (51); Site of swing bridge, Hedon Haven (1183); Langham round barrows (1058); Round barrow (46); Trackway, enclosures and ditches (56); Iron Age to Romano-British rectilinear enclosure and associated field boundaries (1049); Three square barrows (1051); Rectilinear enclosures, linear features and field boundaries (1042); Iron Age to Romano-British rectilinear enclosure and field boundaries (55); Cropmark: linear ditches and enclosure (160); Ring ditches and field system (42); HLC Types Parliamentary Planned Enclosure, Early Enclosure (c. 1500) and Reorganised Early Enclosure	Medium	Removal in part or whole by direct impact, depending on the final design of the Project.
Site of concrete structure (120); Site of beacon, Boreas Hill (82); Site of Far Barn (1184); Site of Preston Stakes (1292), site of a barrage balloon anchorage (1294), Hull to Withernsea Railway (1047); Cropmark: subcircular enclosure (109); Cropmark: enclosure fragment (168); Oval cropmark (164); Linear cropmark feature west of Green Lane (1052); site of brick and tile yard (1285); Site of clay pit and brickyard (102); Eastholme Bridge (101); Linear cropmarks, north	Low	Removal in part or whole by direct impact, depending on the final design of the Project.

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
of Halsham Branch Drain (1050); Two rectangular enclosures (134); Field system, north of Little Newsome (154); Cropmark: square enclosure (156); Cropmarks: Towns Carr Hill (148); Cropmarks (1043); Easington Cottage (1101); Site of WWII military defences, Dimlington (1039); Dimlington, former site of cart shed, building, house (1040); HLC Types Mud Flats, Coastal Management, Modern Fields, Rough Grassland/Scrub, Nurseries and Private Planned Enclosure, Plantation Woodland, Golf Course		
Site of lime kiln, south of Hedon Haven (1162); Site of possible deer park, Halsham (75);	Negligible	Removal in part or whole by direct impact, depending on the final design of the Project.
HLC Types: Water Treatment, Artificial open water, Fuel Distribution and Beach, Estate Buildings,	Low	Based on the existing character and the likely industrial character of the Project, the following HLC types within the Proposed Order Limits are anticipated to experience no change:
Paull Holme Moated site and Tower (SM7); Paull Holme Tower (LB166); Church of St Andrew, Thorngumbald Road (LB171); Church of St Helen, Humber Lane, Skeffling (LB97); Paull Point Battery, Coastal Artillery Battery and Submarine Mining Establishment (SM16); Paull Point Battery, Battery Road (LB107).	High	Temporary changes in setting during construction.
The Hall, Thorngumbald Road (LB14); Stables and Adjoining Coach House Approximately 40 Metres East of The Hall (LB108); Paull Conservation Area (CA5); Thorngumbald Clough Low Lighthouse, Thorngumbald Road (LB15); Thorngumbald Clough High Lighthouse, Thorngumbald Road	Medium	Temporary changes in setting during construction.

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
(LB128); Hedon Haven Conservation Area (CA2); Ridgemont, New Laid Lane (LB13); Rimswell Water Tower, B1362 (LB16); Gate, Flanking Walls and Railings Approximately 10 Metres West of Rimswell Water Tower, B1362 (LB96); Greenland Farmhouse (LB98); Wilberforce Farmhouse, Winsetts Road, Skeffling (LB132); Old Hall (Skeffling Hall), Chapel Lane, Skeffling (LB169);		
Eastend House (1123); Eastfield House (1122); Halsham Grange (1146); Carr House Farm (1139); North End Farm (1141); Churchlands Farm (1140).	Low	Temporary changes in setting during construction.

Operation

- 10.7.9 Most impacts from construction are not expected to be carried forward into operation. Where a heritage asset is directly impacted, it is expected to have been removed during the construction phase of works. The nature of the majority of the Project, as a buried pipeline with land to be reinstated, results in the majority of setting impacts also being limited to temporary changes during the construction phase only.
- 10.7.10 However, the Project would introduce some permanent, operational changes to the landscape of the Proposed Order Limits, through the presence of proposed AGIs. These proposed AGIs have the potential to introduce a new industrial character to the landscape and setting of heritage assets, for whose setting extends into the Proposed Order Limits and in proximity to proposed AGIs. Only those assets which have the potential to have their setting changed from a proposed AGI are discussed in this section.
- 10.7.11 Impacts from dewatering, should they continue into the operational phase, have the potential to impact on sensitive organic remains of geoarchaeological significance and potential. This would lead to damage and decay of paleoenvironmental remains through the drying out of previous wet deposits. Further discussion on potential dewatering impacts is available in Chapter 9: Geology and Hydrogeology (Volume II).
- 10.7.12 The potential impacts for Cultural Heritage, associated with the operational phase are provided in subsequent tables. A table is provided per section of the Project, as presented in the baseline, Section 10.5. The tables (10.10, 10.11, 10.12, 10.13) provide assessment of impact, prior to implementation of mitigation measures.

Table 10.10: Operational phase –preliminary assessment of potential impacts: Section 1 Drax to Keadby

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Drax Priory Complex (SM13, 4, 5, 15, 1094)	High	<p>Four proposed AGI options for Drax Power Station are in close proximity to the Drax Priory Complex.</p> <p>Proposed AGI options C and D represent the closest proposed AGI options to Drax Priory, within 100 m south of the principal and Scheduled area of activity. Either proposed AGI would reduce what space remains afforded to the asset and its association with agricultural land to the south.</p> <p>Proposed AGI options A and B are located at least 220 m south east of the Drax Priory Scheduled area, although within 80 m of the associated fishponds (4). Either proposed AGI option has benefits, compared to Options C and D, in providing more spacing to Drax Priory to the south, with some separation provided from New Road. Existing field boundaries east of New Road currently limit views to the east and southeast from the monument. However, either proposed AGI would represent an extension of the Drax Power Station Infrastructure, and introduction of a new character within the existing agricultural land.</p> <p>A landscape type 1 visualisation has been created to illustrate how the views from the scheduled monument to the east, may look in proximity to the proposed AGI options A and B; see Figure 11.4 (Volume IV), viewpoint 01-02.</p>
Moored Farmhouse (LB72) and associated stable/granary (LB73)	Medium	<p>The assets are located 850 m north of the proposed AGI block valve KP 19.3. The introduction to the proposed AGI has the potential to alter people's experiences of the Moored Farm complex. The proposed AGI would break up views towards the assets along Oldlane Gate. Although, the proposed AGI would be in keeping with the energy landscape around it, with the nearby solar farm, the landscape is currently open and it would introduce a breakup of views, including those too and from Moored Farmhouse (LB72/LB73).</p>
Ealand Grange (600)	Low	<p>The asset is located 420 m southeast of proposed Keadby AGI option C. Its setting is informed by the surrounding flat agricultural landscape. The proposed</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		<p>AGI represents a new character on the landscape, although east of the Proposed Order Limits, in this location includes existing wind turbines. Keadby proposed AGI option C is considered to be a limited intrusion on the wider setting of asset 600.</p> <p>Proposed Keadby AGI options A and B are located to the east of the existing ash tips, associated with the Power Station, and would have no intrusion on the setting of the asset.</p>
Ealand Warpings Farmstead (599)	Low	<p>The asset is located 820 m south of proposed Keadby AGI option C. Although the landscape is flat, the proposed AGI option is considered to represent a limited intrusion on the setting of asset 599.</p> <p>Proposed Keadby AGI options A and B are located to the east of the existing ash tips, associated with the Power Station, and would have no intrusion on the setting of the asset.</p>
North Pilfrey Farm (598)	Low	<p>The asset is located 700 m south of proposed Keadby AGI option C. Although the landscape is flat, the proposed AGI option is considered to represent a limited intrusion on the setting of asset 598.</p> <p>Proposed Keadby AGI options A and B are located to the east of the existing ash tips, associated with the Keadby Power Station, and would have no intrusion on the setting of the asset.</p>

Table 10.11: Operational phase –preliminary assessment of potential impacts: Section 2 Keadby to Scunthorpe

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Raventhorpe Medieval Village (SM11)	High	<p>The Scheduled Monument is located 470 m south of proposed British Steel AGI option B. Some visibility between the proposed AGI and the asset maybe possible, but it is anticipated to be limited.</p> <p>No change would be anticipated to in the setting of the Scheduled Monument for proposed British Steel AGI option A.</p>
Raventhorpe Farmhouse (LB159) and associated farmstead (615)	Medium	<p>LB159 and 615 are 415 m south of proposed British Steel AGI option B. Some visibility between the AGI and Raventhorpe Farm complex may be possible, but it is anticipated to be limited.</p> <p>No change would be anticipated to the setting of the asset for proposed British Steel AGI option A.</p>
Manby Hall Farm (612)	Low	<p>Manby Hall Farm (612) would be located adjacent to the proposed British Steel AGI option B. This would alter the setting of the asset and introduce a new industrial character.</p> <p>Proposed British Steel AGI option A would be located 130 m north-west of asset 612. Woodland, north of Manby Hall Farm, if retained, would maintain a buffer in this situation. However, proposed AGI option A also represents an encroachment of industrial activity on the setting of Manby Hall Farm (612).</p>

Table 10.12: Operational phase –preliminary assessment of potential impacts: Section 3 Scunthorpe to Killingholme

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Brocklesby Park (RPG1)	High	<p>Two proposed AGI options neighbouring each other, are in proximity to Brocklesby Park and have the potential to impact the views to and from the park. The setting of Brocklesby Park is influenced by its location on a high point in the landscape, with the intention to be seen as a symbol status. Views towards Brocklesby Park, particularly along the B1211 Brocklesby Road, are already broken up, by blocks of planting; of which the proposed AGI would be cited next to one. However, the introduction of the proposed AGI would be a new character type to the landscape and impact views by people approaching Brocklesby Park. Views from Brocklesby Park, although limited on foot, would also be impacted and any visibility of the proposed AGI would further break up views towards the lowlands.</p> <p>A landscape type 1 view has been created to aid understanding, see Figure 11.4 (Volume IV), view 06-01 and 06-05.</p>
East Halton (756)	Medium	<p>The proposed AGI at Killingholme is located 740 m east of the settlement activity at East Halton. It is anticipated that the proposed AGI would sit within the existing infrastructure here, and therefore blend into the industrial character, with little alteration to the current setting to the settlement of East Halton.</p>

Table 10.13: Operational phase –preliminary assessment of potential impacts: Section 5 Hedon to Easington

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Church of St Andrew, Thorngumbald Road, Paull (LB171)	High	<p>The Listed Building is located c. 1.2 km west-south-west of proposed Hedon AGI Option A. The asset has an open view to the east-north-east potentially leading to some visibility of the proposed AGI.</p> <p>The Listed Building is located c. 1.55 km south-west of the proposed Hedon AGI Option B. The asset has an open view to the north-east and potentially some visibility of the proposed AGI, however, Low Paull Farm and tree lines are situated within the intervening landscape, and they may partially obscure or entirely obscure the proposed AGI.</p> <p>No change in setting would be anticipated for proposed Saltend AGI Options A, B, C and D</p>
Church of St Helen, Humber Lane, Skeffling (LB97)	High	<p>The Listed Building is c. 1.8 km south-west of the proposed Pump Facility Option B. The asset is located at an elevated location that might allow a long-range view of the 50 m tall vent to the proposed Pump Facility. The churchyard is lined by mature trees that may screen the asset to a degree.</p> <p>A similar impact may be experienced should proposed Pump Facility Option A be employed.</p>
Hendon Medieval Town (SM3)	High	<p>The south-western limit of the Scheduled Monument is located 810 m east of proposed Saltend AGI Option A. A key view from the Scheduled Monument is to the east along the line of Hedon Haven and its connection to Humber Mouth. There would be a clear, open view of the proposed AGI from the western limit of the Scheduled Monument.</p> <p>No change in setting would be anticipated for proposed Saltend AGI Options B, C or D and for proposed Hedon AGI Options A and B.</p>
Paull Conservation Area (CA5)	Medium	<p>The northern limit of the Conservation Area is located 300 m south of proposed Saltend AGI Option D. There would be a clear, open view of the proposed AGI from the northern limit of the Conservation Area.</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		No change in setting would be anticipated for proposed Saltend AGI Options A, B or C and for proposed Hedon AGI Options A and B.
Hedon Haven Conservation Area (CA2)	Medium	<p>The western limit of the Conservation Area is located 810 m east of proposed Saltend AGI Option A. A key view from the Conservation Area is to the east along the line of Hedon Haven and its connection to Humber Mouth. There would be a clear, open view of the proposed AGI from the western limit of the Conservation Area.</p> <p>No change in setting would be anticipated for proposed Saltend AGI Options B, C or D and for proposed Hedon AGI Options A and B.</p>
Wilberforce Farmhouse, Winsetts Road, Skeffling (LB132)	Medium	<p>The Listed Building is located c. 1.7 km south-west of the proposed Pump Facility Option B. The asset has a partially obscured view to the north-east leading to some visibility of the proposed Pump Facility.</p> <p>A similar impact may be experienced should proposed Pump Facility Option A be employed.</p>
Old Hall (Skeffling Hall), Chapel Lane, Skeffling (LB169)	Medium	<p>The Listed Building is located c. 1.35 km south-west of proposed Easington Pump Facility Option B. The asset has a clear, open view to the north-east and so Option B would impact the setting of the Old Hall.</p> <p>A similar impact may be experienced should proposed Pump Facility Option A be employed.</p>
Halsham Grange, Halsham (1146)	Low	Halsham Grange is located 700 m east of proposed AGI Block Valve KP 109.6. The asset has a clear, open view to the west and so the proposed AGI would impact the setting of the Grange.

Decommissioning

- 10.7.13 Assessment of decommissioning impacts have been scoped out of the cultural heritage assessment.

10.8 Mitigation and enhancement measures

- 10.8.1 This Section sets out the preliminary avoidance, mitigation and compensation measures which are likely to be required to address the potential impacts as assessed in Section 10.7.

Construction

Below Ground Archaeological Remains

- 10.8.2 This Chapter has presented a worst-case scenario for potential impacts by considering any asset within the Proposed Order Limits for direct physical impact, to account for the limit of deviation to the pipeline route.
- 10.8.3 This section will focus on secondary mitigation.
- 10.8.4 Secondary mitigation for archaeological remains would seek to reduce impact. This would be through a form of archaeological excavation and recording (to be defined in the outline mitigation strategy). Reduction in impact would be achieved by preventing the loss of any archaeological information, without proper study and allowing the archaeological remains to be understood individually and within a wider context. This understanding can subsequently be communicated to the wider public via reporting and deposition within the relevant Historic Environment Record. However, it is acknowledged that EN-1, paragraph 5.8.19 (Ref 10.4) and the forthcoming draft EN-1, paragraph 5.9.30 (Ref 10.5) note that our ability to record an asset is not adequate mitigation of any harm. Consequently, no change in magnitude of impact, from those reported in Section 10.6 would be achieved.
- 10.8.5 Impacts from dewatering of sensitive organic remains of archaeological significance, could be managed via a suitable drainage design to mitigate changes in hydrology.

Changes to setting

- 10.8.6 The majority of construction impacts would be changes to the aspect of an asset's setting which contributes to its significance. This would be temporary, until the pipeline is laid, and the land reinstated to agricultural land. No further mitigation is proposed at construction, further to the embedded good practice of construction activity.

Operation

- 10.8.7 Operational mitigation would be focused on reducing the visual intrusion of proposed AGI infrastructure on the surrounding landscape. The footprint of proposed AGIs allow for an area of landscaping, where required to mitigate potential visual intrusion and screen the infrastructure, to maintain the overall green landscape.
- 10.8.8 Discussion of operational mitigation is listed by proposed AGI below.

Proposed Drax AGI Options

- 10.8.9 Mitigation through landscaping would block a visual intrusion to the Drax Priory Complex (SM13) from proposed AGI Option A or B, respectively. This would be in keeping with the existing landscaping around the eastern part of Drax Priory, where the character of the land breaks up views across the landscape by tree lined field boundaries or blocks of woodland planting.
- 10.8.10 Proposed AGI options C and D would utilise landscaping, preferably, on their northern boundaries to screen their location from Drax Priory (SM13). This would aim to mitigate the visual intrusion, with the view south to be similar to the existing view, across fields to the existing landscaped northern boundary of Drax Power Station Complex. However, either option would still reduce spacing around the Drax Priory complex, altering its current setting by removing association with agricultural land, which likely formed part of the wider landscape of the Priory Complex.

Proposed Block Valve KP 19.3

- 10.8.11 The landscape of its proposed location is open flat land, principally broken up by either farm complexes or wind turbines. Landscape planting around the proposed AGI would be in keeping with the use of planting around farms (inclusive of Moored Farmhouse LB72/LB73).

Proposed Keadby AGI Options

- 10.8.12 Proposed AGI options A and B are located within the existing Keadby Power Station boundary. Their view to heritage assets is blocked by existing infrastructure. Therefore, no heritage specific mitigation would be anticipated for either option.
- 10.8.13 Proposed AGI option C would utilise landscape mitigation to reduce its visual intrusion onto the landscape. The proposed AGI would be located within a flat landscape with little vegetation, so would result in breaking up of the viewpoints across the landscape. However, some impact has already occurred via the introduction of a solar windfarm, directly east of the proposed location and the introduction of the proposed AGI would be in keeping with the evolving energy landscape across North Lincolnshire.

Proposed Block Valve 46.3

- 10.8.14 The settings of heritage assets are not adjudged to extend to the location of this proposed AGI and therefore, no heritage specific mitigation for operation is anticipated.

Proposed British Steel AGI Options

- 10.8.15 Landscape mitigation around either proposed option A or B would not alter the anticipated impact for either Raventhorpe Medieval Village (SM11), Raventhorpe Farmhouse (LB159) and associated farmstead (615), or Manby Hall Farm (612).

Proposed Block Valve KP 57.4

- 10.8.16 The settings of heritage assets are not adjudged to extend to the location of the proposed AGIs and therefore, no heritage specific mitigation for operation is anticipated for either proposed option A or option B.

Proposed Block Valve KP 75.1

- 10.8.17 Landscape mitigation around either proposed AGI option A or option B in this location would not mitigate the further breaking up of the landscape and views to and from Brocklesby Park (RPG1). However, landscape mitigation would support a reduction of industrial character being introduced to the landscape and be more in keeping with the blocks of woodland which currently break up the landscape. An existing block of woodland within the Proposed Order Limits is located to the east of both proposed AGI options and therefore, could be extended as part of any landscaping.

Proposed Killingholme AGI

- 10.8.18 The proposed AGI is located within an area of existing infrastructure and no heritage specific mitigation for operation is anticipated.

Proposed Saltend AGI Options

- 10.8.19 Proposed options A and B would utilise landscape mitigation to reduce their visual intrusion onto the landscape. The proposed AGIs would be located within a flat landscape with little vegetation, so would result in the breaking up of viewpoints across the landscape. The south-western limit of the high value Hedon Medieval Town Scheduled Monument (SM3) is located 680 m east of proposed option A and 1.4 km to the east of proposed option B. The view to the west is open along the route of the Hedon Haven linking the port to the River Humber and beyond and it contributes to the asset's value. Intervening landscaping would mitigate against this visual intrusion. The western limit of the medium value Hedon Haven Conservation Area (CA2) is located 800 m east of proposed option A and 1.4 km to the east of proposed option B. The view to the west is open along the route of the Hedon Haven linking the port to the River Humber and beyond and it contributes to the asset's value. Intervening landscaping would mitigate against this visual intrusion.
- 10.8.20 Proposed option C is not located within the setting of any identified heritage assets. Therefore, no heritage specific mitigation would be anticipated for this option.
- 10.8.21 Proposed option D would utilise landscape mitigation to reduce its visual intrusion onto the landscape. The proposed AGI would be located within a flat landscape with little vegetation, so would result in the breaking up of viewpoints across the landscape. The northern limit of the **medium value** Paull Conservation Area (CA5) is located 300 m south of the proposed AGI and would be visible from the Conservation Area. Intervening landscaping would mitigate against this visual intrusion.

Proposed Hedon AGI Options

- 10.8.22 Proposed options A and B would utilise landscape mitigation to reduce their visual intrusion onto the landscape. The proposed AGIs would be located within a flat landscape with little vegetation, so would result in the breaking up of viewpoints across the landscape. The high value Grade I Church of St Andrew (LB171) is located on Thorngumbald Road 1.2 km west-north-west of proposed option A and 1.5 km to the south-west proposed option B and has an open view towards the AGIs. Intervening landscaping would mitigate against this visual intrusion.

Proposed Block Valve KP 109.6

- 10.8.23 Proposed Block Valve KP 109.6 would utilise landscape mitigation to reduce its visual intrusion onto the landscape. The apparatus would be located within a flat landscape

with little vegetation, so would result in the breaking up of viewpoints across the landscape. The low value Halsham Grange (1146) is located 700 m east of the apparatus and has an open view to the west. Intervening landscaping would mitigate against this visual intrusion.

Proposed Pump Facility Options

Options A and B

- 10.8.24 Proposed Pump Facility options A and B might utilise landscape mitigation to reduce its visual intrusion onto the landscape. The apparatus might be located within a flat landscape with little vegetation, so would result in the breaking up of viewpoints across the landscape. The village of Skeffling is situated 1.4 km to the south-west of proposed Option B, 1.9 km south-west of proposed Option B and contains the Grade I high value Church of St Helen (LB97) and the Grade II medium value Wilberforce Farmhouse (LB132) and Old Hall (LB169). The Old Hall has a clear, open view to the north-east and the proposed AGIs whilst St Helen's and the Farmhouse have interrupted views. Intervening landscaping should mitigate against this visual intrusion.

Decommissioning

- 10.8.25 Assessment of decommissioning impacts have been scoped out of the cultural heritage assessment.

10.9 Summary of the preliminary assessment of potential significant effects

- 10.9.1 Tables 10.14, 10.15, 10.16, 10.17 below, summarise the preliminary assessment of potential significant effects associated with the respective sections of the Project derived from the assessment undertaken to date. This summary is preliminary with aspects of assessment anticipated to change, either through changes in sensitivity of a receptor from further assessment work, and or from changes in design which may change potential impacts. The summary represents the worst-case scenario, particularly for archaeological assets which assumes their direct physical impact where located within the Proposed Order Limits.
- 10.9.2 A preliminary assessment of non-significant effects can be found in Appendix 10.1 (Volume III).

Table 10.14: Summary of the preliminary assessment of potential significant effects for Section 1: Drax to Keadby

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Section 1: Prehistoric Assets					
Later Neolithic buried landscape (37)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Cropmark features (39) and nearby possible extraction pits (40)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 1: Roman Assets					
Romano-British Settlement activity, North of Newland, within the Proposed Order Limits (25, 26, 28, 31, 29, 30, 32)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 1: Early Medieval Assets					
Site of St Wilfred's Chapel (1)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 1: Medieval Assets					
Drax Priory Complex (SM13, 4, 5, 15, 1094)	Construction and Operation	High	Potential impact would be caused from two aspects of the Project: Archaeological remains associated with the Drax Priory Complex and of schedulable quality may be removed, in part or in whole, as a result of construction activity associated with either propose Drax AGI Options C or	Archaeological excavation and recording during construction Landscaping around the	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
			<p>D, as well as the open trench construction of pipelines</p> <p>Changes in the setting of the Drax complex would be experienced through intrusion of infrastructure on what remaining space is afforded the asset, particularly to the south. This part of the asset's setting is highly susceptible to change</p>	proposed AGI to reduce setting impacts during operation	
Scurff Hall Moated Site (SM15, 2, 8, 9, 22, 7)	Construction	High	<p>Potential impact would be caused from two aspects of the Project:</p> <p>Archaeological remains associated with the Scurff Hall Moated Site and of schedulable quality, may be removed in part or in whole, as a result of temporary construction</p> <p>Temporary changes in setting from construction activity within the rural setting of the asset</p>	Archaeological excavation and recording	Significant
Section 1: Post-Medieval Assets					
Hull Barnsley and West Riding Junction Railway (1092)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 1: Historic Landscape Character					
HLC Type: Parliamentary Planned Enclosure	Construction	Medium	Potential impact from construction activity associated with open trench construction	Reinstatement	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
HLC Type: Early Enclosure (1500)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Reinstatement	Significant

Table 10.15 Summary of the preliminary assessment of potential significant effects for Section 2: Keadby to Scunthorpe

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Section 2: Prehistoric Assets					
Peat deposits (723)	Construction	Medium	Located adjacent to the Proposed Order Limits. Deposits may extend into Proposed Order Limits Potential impact would occur from construction activity associated with open trench construction, for remains within the Proposed Order Limits	Archaeological excavation and recording	Significant
Section 2: Roman Assets					
Iron Age to Romano-British landscape south of Scunthorpe within the Proposed Order Limits (729, 774, 268, 308, 749, 768, 770, 799, 995, 372, 750, 908, 988)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 2: Medieval Assets					
Raventhorpe Medieval Settlement (SM11)	Construction	High	Changes in setting from construction activity within the Proposed Order Limits	Good practice	Significant
Manby Settlement (442, 538, 892)	Construction	Medium	Potential impact would occur from construction activity associated with open trench construction and proposed British Steel AGI Option A	Archaeological excavation and recording	Significant
Section 2: Post-Medieval Assets					

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Grade II syphon (LB158)	Construction	Medium	Potential impact may come from vibration work caused by trenchless construction under the A18, 40 m from the Listed Building	Good practice	Significant
Manby Hall Farm (612)	Construction/Operation	Low	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction Landscaping to screen visual sight of infrastructure in operation	Significant
Section 2: Undated Assets					
Cropmarks within the Proposed Order Limits, in proximity to the Iron Age to Romano-British activity, south of Scunthorpe (766, 772, 802, 830, 832, 833, 834, 835, 836, 910, 994, 996, 1078, 1082)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
HER mapped earthwork complex (917)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 2: Historic Landscape Character					
HLC Type: Medieval Village Earthworks	Construction	High	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
HLC Type: Parliamentary Planned Enclosure	Construction	Medium	Potential impact from construction activity associated with open trench construction	Reinstatement	Significant
HLC Type: Strip Fields	Construction	Medium	Potential impact from construction activity associated with open trench construction	Reinstatement	Significant

Table10.16 Summary of the preliminary assessment of potential significant effects for Section 3: Scunthorpe to Killingholme

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Section 3: Prehistoric Assets					
Neolithic trackways (186, 1023, 1028)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Bronze Age Barrows (309, 336, 337, 338)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Bronze Age Barrows (315, 331, 332, 334, 335, 711)	Construction	Medium	Works within the Proposed Order Limits would result in the removal of a series of Bronze Age barrows, which would impact the setting of those outside of the Proposed Order Limits, through a loss of understanding of the funerary landscape they form	Archaeological excavation and recording of barrows within the Proposed Order Limits.	Significant
Activity associated with Bronze Age ditches, pits and flint assemblages (279, 786)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Iron Age ditched boundary (837)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Iron Age enclosure (838)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Prehistoric settlement and complex (219, 223)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Prehistoric ditches (782)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 3: Romano-British Assets					
Iron Age to Romano-British Activity at East Halton/Killingholme (263, 280, 345, 346, 347, 752, 755, 759, 762, 789, 791, 820, 821, 889, 890, 949, 1002, 1232)	Construction	Medium	Potential impact from construction activity associated with open trench construction and working areas to support trenchless crossing of the River Humber	Archaeological excavation and recording	Significant
Roman settlement activity (390, 909)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
High Street Roman Road (1024)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 3: Early Medieval Assets					
Early Medieval Settlement Activity (404)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Early Medieval ditches and pits (411, 412)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Section 3: Medieval Assets					
Archaeological remains associated with Medieval Kettleby (193, 211)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Moated site at Kettleby Thorpe (190)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Medieval field systems (448, 463, 746)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Medieval ridge and furrow (214, 446 447, 450, 468, 469, 470)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Medieval Hollow Way (206)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Medieval hedgerows and field boundaries (1031, 449)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Medieval saltern (452)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Medieval enclosures (203, 758, 858)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Medieval parish boundary (453)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Medieval port activity (445, 451)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 3: Post-Medieval Assets					
Former clay pit (549)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Cropmarks of former field boundaries (907)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Historic Hedgerow (669)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Site of former Manon Top Farmstead (647)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Limestone quarry (197)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Sites of unnamed farmstead (478, 574, 588)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Extraction pits (479, 521)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Trackway (524)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Post-Medieval enclosures (482, 744)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Ponds (523, 650)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Cultivation marks (518)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Former coastguard station (815) and sea defence (870)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Site of primitive Methodist church (869)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Site of brickworks (484)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Brocklesby Park (RPG1)	Construction and Operation	High	Changes in setting from construction activity within the Proposed Order Limits	Good practice/proposed AGI landscaping	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
			Impact would be experienced in operation after landscaping mitigation of proposed AGI location KP 75.1 due to the breaking up of landscape of views to and from RPG1		
Section 3: Modern Assets					
RAF Kirmington (897, 987, 674, 675, 894, 805, 900, 902, 979, 980, 222)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Goxhill Airfield (896, 978)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Military remains at East Halton (679, 688, 880, 681, 683, 684, 687, 686)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Barton and Immingham Light Railway (1032)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 3: Undated Assets					
Undated archaeological sites identified by cropmarks (380, 708, 709, 710, 711, 715, 717, 722, 734, 735, 737 738, 760, 790, 794, 795,	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
796, 797, 810, 811, 861, 863, 864, 865, 866, 867, 963, 1008, 1067, 1068, 1070, 1097, 1066, 202, 204, 1074, 1075, 1076, 1059, 925, 777, 967, 993, 847, 761, 742, 997, 1011, 747)					
Undated road (716)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Soilmarks (966, 999)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Ring ditch and linear ditch (816)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Seabank (764)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Undated field boundary ditch (1004)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 3: Historic Landscape Character					
HLC Type: Parliamentary Planned Enclosure	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Table 10.17 Summary of potential significant effects for Section 5: Hedon to Easington

Resource/ receptor	Stage	Sensitivity of resource/ receptor	Description of potential impact/change	Mitigation	Potential significant effects
Section 5: Prehistoric Assets					
Possible Bronze Age pit alignment, north-west of Boreas Hill (47)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Langham, possible Bronze Age round barrows (1058)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Possible Bronze Age round barrow (46)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Ring ditches and field system (42)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Three possible Iron Age square barrows (1051)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 5: Iron Age to Roman Assets					
Cropmarks of trackway, enclosures and ditches (56)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Rectilinear enclosures, linear features and field boundaries (1042)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/ receptor	Stage	Sensitivity of resource/ receptor	Description of potential impact/change	Mitigation	Potential significant effects
Cropmarks of rectilinear enclosure and associated field boundaries (1049)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Cropmarks of rectilinear enclosure and field boundaries (55)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Cropmarks of linear ditches and enclosure (160)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 5: Medieval Assets					
Hedon Medieval Town (SM3)	Construction/ Operation	High	Changes in setting from construction activity within the Proposed Order Limits Changes in setting during operation within the Proposed Order Limits	Good practice during construction Landscaping to screen visual sight of infrastructure in operation	Significant
Church of St Andrew, Thorngumbald Road, Paull (LB171)	Construction/ Operation	High	Changes in setting from construction activity within the Proposed Order Limits Changes in setting during operation within the Proposed Order Limits would also be experienced	Good practice during construction Landscaping to screen visual sight of infrastructure in operation	Significant

Resource/ receptor	Stage	Sensitivity of resource/ receptor	Description of potential impact/change	Mitigation	Potential significant effects
Paull Holme Moated site (SM7) and Tower (LB166)	Construction	High	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction	Significant
Paull Holme Tower (LB166)	Construction	High	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction	Significant
Section 5: Post-Medieval Assets					
The Hall, Thorngumbald Road (LB14) and associated Stables and Coach House (LB108)	Construction	Medium	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction	Significant
Site of swing bridge, Hedon Haven (1183)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Site of Far Barn (1184)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Hull to Withernsea Railway (1047)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Cropmark of a Subcircular enclosure (109)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Site of Easington Cottage (1101)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant

Resource/ receptor	Stage	Sensitivity of resource/ receptor	Description of potential impact/change	Mitigation	Potential significant effects
Site of clay pit and brickyard (102)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Eastholme Bridge (101)	Construction	Low	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Section 5: Modern Assets					
Paull Point Battery, Coastal Artillery Battery and Submarine Mining Establishment (SM16) and Paull Point Battery (LB107)	Construction	High	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction	Significant
Thorngumbald Clough Low Lighthouse (LB15)	Construction	Medium	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction	Significant
Thorngumbald Clough High Lighthouse (LB128)	Construction	Medium	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction	Significant
Rimswell Water Tower (LB16) and associated Gate, Flanking Walls and Railings (LB96)	Construction	Medium	Changes in setting from construction activity within the Proposed Order Limits	Good practice during construction	Significant
WWII See-saw electric light emplacement, Thorngumbald (128)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
Inter-tidal location at Easington					

Resource/ receptor	Stage	Sensitivity of resource/ receptor	Description of potential impact/change	Mitigation	Potential significant effects
Dimlington Stadial deposits	Construction	High	Potential impact from construction activity associated with either Horizontal Directional Drilling (HDD) or micro-tunnelling option at Easington landfall location.	Archaeological excavation and recording	Significant
Section 5: Historic Landscape Character					
HLC Type: Medieval Village Earthworks	Construction	High	Potential impact from construction activity associated with open trench construction	Archaeological excavation and recording	Significant
HLC Type: Parliamentary Planned Enclosure	Construction	Medium	Potential impact from construction activity associated with open trench construction	Reinstatement	Significant
HLC Type: Early Enclosure (c. 1500)	Construction	Medium	Potential impact from construction activity associated with open trench construction	Reinstatement	Significant
HLC Type: Reorganised Early Enclosure	Construction	Medium	Potential impact from construction activity associated with open trench construction	Reinstatement	Significant

10.10 Next steps

- 10.10.1 A full EIA will be undertaken to further develop the understanding of significance of effects, in line with methodology described in this PEIR and the technical methodology note shared with consultees.
- 10.10.2 A historic environment baseline report will be completed in draft and issued to consultees, as part of the heritage working group, for comment. The baseline report will include (among other information) a review of LiDAR data, being processed from models provided from the Project's commissioned aerial survey specialists.
- 10.10.3 Further technical assessments will continue to be developed and include:
 - Inter-tidal study at the Holderness Coast landfall, including a draft baseline report for issue to consultees.
 - Geoarchaeological desk-based assessment and modelling, including the monitoring of the Project's Ground Investigation works to tailor and strengthen the baseline understanding and deposit model. The geo-archaeological assessment will help inform a targeted approach to trial trench evaluation and appropriate mitigation proposals.
- 10.10.4 Geophysical survey within the latest proposed pipeline working width and the respective proposed AGI locations will be undertaken. The results of which will be used to inform the baseline understanding of the historic environment, as well the potential need for further evaluation fieldwork and mitigations. Due to time constraints, the geoarchaeological assessment will not be completed, prior to the commencement of geophysical survey, to support the scoping of this fieldwork. Geophysical survey will also be constrained due to the presence of crop across the Proposed Order Limits, which will limit timings and availability of surveyable areas.
- 10.10.5 Following the results of the geoarchaeological assessment and geophysical survey results, if appropriate, targeted trial trench evaluation may be undertaken. The scope of the trial trenching will be developed in consultation with the respective archaeological officers within the heritage working group. The results of the trial trenching will be expected during the examination period and further support detailed assessment and proposals of mitigation needs, where appropriate.
- 10.10.6 A mitigation strategy will be developed in consultation with the Project's heritage working group based on the latest design and impact assessment. To allow for results of the fieldwork to inform the need for mitigation, the mitigation strategy is expected to be finalised for the end of the examination period.
- 10.10.7 Continued engagement will be undertaken with members of the Project's heritage working group, established with consultees from Historic England and the respective local authority archaeological advisors.
- 10.10.8 A review of viewpoints and the Zone of Visual Influence model, developed for the Landscape and Visual Assessment (see preliminary assessment at Chapter 11: Landscape and Visual (Volume II)) will be undertaken to assist in the assessment of effects on sensitive assets, particularly around proposed AGI locations. A review of the hydrology and land drainage chapter, alongside the geoarchaeological assessment will also be undertaken to understand potential changes in hydrology which may affect sensitive organic deposits of archaeological and paleoenvironmental interest.

10.11 References

- Ref 10.1: HM Government (2017): *The Infrastructure Planning (Environmental Impact Assessment) Regulations*. Available at: <https://www.legislation.gov.uk/ukxi/2017/572/introduction/made> (Accessed 03 October 2022).
- Ref 10.2: HM Government (1990): *Planning (Listed Buildings and Conservation Areas) Act*. Available at: <https://www.legislation.gov.uk/ukpga/1990/9/contents> (Accessed 03 October 2022).
- Ref 10.3: HM Government, (1979), *Ancient Monuments and Archaeological Areas Act (1979)*. Available at <https://www.legislation.gov.uk/ukpga/1979/46> (Accessed 03 October 2022).
- Ref 10.4: Department of Energy and Climate Change, (2011). *Overarching National Policy Statement for Energy (EN-1)*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf (Accessed: 1 September 2022).
- Ref 10.5: Department for Business, Energy and Industrial Strategy, (2022) *Draft Overarching National Policy Statement for Energy (EN-1)*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015233/en-1-draft-for-consultation.pdf (Accessed 14 September 2022)
- Ref 10.6: Department of Energy and Climate Change, (2011). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47857/1941-nps-gas-supply-oil-en4.pdf (Accessed 14 September 2022)
- Ref 10.7: Department for Business, Energy and Industrial Strategy (2021). *Draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015237/en-4-draft-for-consultation.pdf (Accessed 28 September 2022).
- Ref 10.8: Ministry of Housing, Communities & Local Government, (2021). *National Planning Policy Framework*. Available at: National Planning Policy Framework - Guidance - GOV.UK (www.gov.uk) (Accessed 14 September 2022)
- Ref 10.9: East Riding of Yorkshire Council, (2016). *East Riding Local Plan Policy*. Available at: *East Riding Local Plan (adopted April 2016)* (Accessed 14 September 2022)
- Ref 10.10: Selby District Council, (2013). *Selby District Core Strategy Local Plan*. Available at: https://www.selby.gov.uk/sites/default/files/Documents/CS_Adoption_Ver_OCT_2013_REDUCED.pdf (Accessed 14 September 2022)
- Ref 10.11: Selby District Council (2006) *Selby District Local Plan*. Available at: <https://www.selby.gov.uk/selby-district-local-plan-sdlp-2005> (Accessed 14 September 2022)

- Ref 10.12: North Lincolnshire County Council, (2011) *North Lincolnshire Local Development Framework*. Available at: <https://m.northlincs.gov.uk/public/planningreports/corestrategy/adopteddpd/FullCoreStrategy.pdf> (Accessed 14 September 2022)
- Ref 10.13: North Lincolnshire County Council (2020). *North Lincolnshire Local Plan (emerging)*. Available at: North Lincolnshire Local Plan (2017 to 2036) (northlincs.gov.uk) (Accessed 14 September 2022)
- Ref 10.4: Central Lincolnshire Council (2017). *Central Lincolnshire Local Plan* Available at: Local Plan | Central Lincolnshire (n-kesteven.gov.uk) (Accessed 14 September 2022)
- Ref 10.15: Chartered Institute for Archaeologists, (2020). *Standard and Guidance for Historic Environment Desk Based Assessments*. Available at: CIfAS&GDBA_4.pdf (archaeologists.net) (Accessed 14 September 2022)
- Ref 10.16: Chartered Institute for Archaeologists et al. (2021). *Principles of Cultural Heritage Impact Assessment In The UK*. Available at: [Principles-of-CHIA-V2\[4\].pdf](http://Principles-of-CHIA-V2[4].pdf) (ihbc.org.uk) (Accessed 14 September 2022)
- Ref 10.17: International Council on Monuments and Sites, (2011). *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*. Available at: icomos_guidance_on_heritage_impact_assessments_for_cultural_world_heritage_properties.pdf (iccrom.org) (Accessed 14 September 2022)
- Ref 10.18: Historic England, (2015) *Historic Environment Good Practice Advice in Planning Note 2 (GPA 2) Managing Significance in Decision-Taking in the Historic Environment*. Available at: Managing Significance in Decision-Taking in the Historic Environment (historicengland.org.uk) (Accessed 15 September 22)
- Ref 10.19: Historic England, (2008). *Conservation Principles, Policies and Guidance*. Available at: <https://historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/conservationprinciplespoliciesandguidanceapril08web/> (Accessed 14 September 2022)
- Ref 10.20: Historic England, (2017). *Historic Environment Good Practice Advice in Planning Note 3 (2nd edition) (GPA 3) – The Setting of Heritage Assets*. Available at: <https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/heag180-gpa3-setting-heritage-assets/> (Accessed 15 September 2022)
- Ref 10.21: Planning Inspectorate, (2022). *HLCP Scoping Opinion*. Available at: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN070006/EN070006-000025-HLCP%20-%20Scoping%20Opinion.pdf> (Accessed 14 September 2022)
- Ref 10.22 Arcadis, (2022). *Humber Low Carbon Pipelines: EIA Scoping Report. Volume 1*. Available at: EN070006-000026-HL-P - Scoping Report Volume I.pdf (planninginspectorate.gov.uk) (Accessed 14 September 2022)
- Ref 10.23: Ronan, D. (1998). *Drax Abbey Farm, North Yorkshire. Archaeological Evaluation*. Northern Archaeological Associates. Available at: <https://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1144838&recordType=GreyLitSeries> (Accessed 14 September 2022)

- Ref 10.24: Hull and Barnsley Railway Bridge - River Ouse – Yorkshire. Available at: <http://www.movablebridges.org.uk/BridgePage.asp?BridgeNumber=429> (Accessed 14 September 2022)
- Ref 10.25: Landscape Use Consultants, (2019) *Selby Landscape Character Assessment*, LUC Report.
- Ref 10.26 AECOM, (2018) *East Riding of Yorkshire Landscape Character Assessment*, East Riding of Yorkshire Council.
- Ref 10.27: Lord and MacIntosh, (2011a) *The Historic Character of The County of Lincolnshire*, English Heritage and Lincolnshire County Council.
- Ref 10.28: Lord and MacIntosh, (2011b) *The Historic Character of The County of Lincolnshire: The Historic Landscape Character Zones*, English Heritage and Lincolnshire County Council
- Ref 10.29: Flitcroft, M.(2007) *Archaeological Impact Assessment, Brigg Railway Line Improvement Works, Brigg Embankment*, CGMS.
- Ref 10.30: *RAF Kirmington*. Available at: RAF Kirmington (raf166squadron.com) (Accessed 14 September 2022)
- Ref 10.31: Richardson, J. (2011) *Bronze Age Cremations, Iron Age and Roman Settlement and Early Medieval Inhumations at the Langeled Receiving Facilities*, Easington, East Riding of Yorkshire, *Yorkshire Archaeological Journal*, 83:1, 59-100
- Ref 10.32: Allison, K. J. (ed) (1984) *A History of the County of York East Riding*. Volume V Holderness.
- Ref 10.33: Heritage Gateway, (2022). *Burstwick Castle*. Available at: https://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=81692&resourceID=19191 (Accessed 14 September 2022)
- Ref 10.34: East Riding of Yorkshire Council (2006), *Conservation Area Appraisal Easington*.

National Grid plc,
1-3 Strand,
London.
WC2N 5EH United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com