

North Humber to High Marnham

# Preliminary Environmental Information Report

Volume 1: Chapter 10 Cultural Heritage

February 2025



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# North Humber High Marnham Document Control

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# 10. Cultural Heritage

# 10. Cultural Heritage

#### 10.1 Introduction

- This chapter of the Preliminary Environmental Information Report (PEIR) presents information about the preliminary environmental assessment of the likely significant Cultural Heritage effects identified to date, that could result from the Proposed Overhead Line between the proposed Birkhill Wood Substation and the proposed High Marnham Substation as described in **Chapter 4 Description of the Project.**
- Chapter 1 Introduction explains that the proposed Birkhill Wood Substation and proposed High Marnham Substation are proposed to be authorised through separate consenting procedures, however, they have also been included as part of the Project. As explained in Chapter 5 Approach to Preparing the PEIR, the environmental effects of these two substations including their associated overhead line reconfigurations, hereafter referred to as the Proposed Substation Works, have accordingly been considered within Chapter 20 Substations and Associated Works. For the purpose of this chapter the Proposed Overhead Line between the proposed Birkhill Wood Substation and the proposed High Marnham Substation is hereafter referred to as the Proposed Overhead Line.
- To ensure that the Project as a whole has been assessed a summary has been included within this preliminary assessment of the likely significant effects on Cultural Heritage which brings together the assessment of the Proposed Overhead Line and Proposed Substation Works for Cultural Heritage.
- This chapter describes the methodology used, the datasets that have informed the preliminary assessment, baseline conditions, mitigation and the preliminary cultural heritage residual significant effects that could result from the Proposed Overhead Line.
- The chapter covers effects on the following during construction, operation and maintenance, noting that decommissioning has been scoped out:
  - Archaeological remains designated and non-designated.
  - Historic buildings designated and non-designated.
  - Historic landscapes non-designated.
- 10.1.6 This chapter should be read in conjunction with:
  - Chapter 4 Description of the Project;
  - Chapter 5 Approach to Preparing the PEIR; and
  - Chapter 20 Substations and Associated Works
- There are interrelationships related to the potential effects on cultural heritage and other environmental topics. Therefore, please also refer to the following chapters:
  - Chapter 6 Landscape;
  - Chapter 7 Visual;
  - Chapter 11 Water Environment;

- Chapter 12 Geology and Hydrogeology;
- Chapter 14 Traffic and Transport;
- Chapter 16 Noise and Vibration;
- Chapter 20 Substations and Associated Works; and
- Chapter 21 Cumulative Effects.
- This chapter is supported by the following figures in Volume 2 and appendices in Volume 3:
  - Figure 10.1 Designated Heritage Assets Within Study Areas.
  - Figure 10.2 Non-Designated Heritage Assets Within 1 km Study Area.
  - Appendix 10.1 Gazetteer of Historic Environment Assets.
  - Appendix 4.1 Draft Outline Code of Construction Practice.

# **10.2 Regulatory and Planning Context**

- This section sets out the legislation and planning policy that is relevant to the preliminary cultural heritage assessment. A full review of compliance with relevant national and local planning policy will be provided within the Planning Statement that will be submitted as part of the application for Development Consent.
- Chapter 2 Regulatory and Planning Context describes the overall regulatory and planning policy context for the Project. Key legislation, policy and planning guidance relevant to the assessment of potential cultural heritage effects associated with the construction, operation and maintenance of the Project is presented below.

# Legislation

- The Ancient Monument and Archaeological Areas Act 1979 ('the Act') is the central piece of legislation for the protection of the archaeological resource considered of national importance (Ref 10.1). The first section of the Act requires the Secretary of State for National Heritage to maintain a schedule of nationally important sites. For the purpose of the Act, a monument is defined as:
  - 'a) any building, structure or work, whether above or below the surface of the land, and any cave or excavation;
  - b) any site comprising the remains of any such building, structure or work or of any cave or excavation; and
  - c) any site comprising, or comprising the remains of, any vehicle, vessel, aircraft or other moveable structure or part thereof which neither constitutes nor forms part of any work which is a monument as defined within paragraph a) above; d) and any machinery attached to a monument shall be regarded as part of the monument if it could not be detached without being dismantled' (Section 61 (7)).'
- The Act further defines an ancient monument as:
  - 'a) any Scheduled Monument;

- b) and any other monument which in the opinion of the Secretary of State is of public interest by reason of the historic, architectural, traditional, artistic or archaeological interest attaching to it' (Section 61 (12)).'
- A set of non-statutory criteria, defined as survival/condition, period, rarity, fragility/vulnerability, diversity, documentation, group value and potential, assist in the decision-making process as to whether an asset is deemed of national importance and best managed by scheduling.
- The Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Planning Act') sets out the principal statutory provisions which must be considered in the determination of any application affecting either listed buildings or conservation areas (Ref 10.2).
- Section 66 of the Planning Act states that 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 architectural or historic interest which it possesses.
- Section 72 of the Planning Act establishes that special attention should be paid to the desirability of preserving or enhancing the character or appearance of a Conservation Area.
- Regulation 3 (listed buildings, conservation areas and scheduled monuments) of The Infrastructure Planning (Decisions) Regulations 2010 (Ref 10.7) sets the following requirements on decision makers on Nationally Significant Infrastructure Projects (NSIPs):
  - '(1) When deciding an application which affects a listed building or its setting, the
    decision-maker must have regard to the desirability of preserving the listed building
    or its setting or any features of special architectural or historic interest which it
    possesses.
  - (2) When deciding an application relating to a conservation area, the decision-maker must have regard to the desirability of preserving or enhancing the character or appearance of that area.
  - (3) When deciding an application for development consent which affects or is likely to affect a scheduled monument or its setting, the decision-maker must have regard to the desirability of preserving the scheduled monument or its setting.'
- The Hedgerows Regulations 1997 (Ref 10.3), made under section 97 of the Environment Act 1995 (Ref 10.4), set out requirements for the protection of 'important' hedgerows through legislative mechanisms of the National Planning Policy Framework 2024 (NPPF) and local planning authorities.
- The Hedgerow Regulations prohibit the removal or partial removal of hedgerows of 20 metres or more growing on, inter alia, agricultural land without prior notice given to local planning authorities. The local planning authority is responsible for deciding whether a hedgerow is 'important' and therefore should not be removed.
- For the purposes of ascertaining the length of any hedgerow, Regulation 3, paragraph (5) asserts that any gap resulting from a contravention of the Hedgerow Regulations and any gap not exceeding 20 m shall be treated as part of the hedgerow.

- For a hedgerow to be important it must have existed for more than 30 years, and, for archaeological or historical reasons, it must satisfy at least one of the criteria summarised below in Part II of Schedule 1 of the Hedgerow Regulations:
  - The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township predating 1850.
  - The hedgerow incorporates an archaeological feature which is either under scheduled protection as per the Act (Ref 10.1) already discussed or which has been recorded as a historic monument prior to the Regulations taking effect on 27 March 1997.
  - The hedgerow is situated wholly or partly within an archaeological site, either scheduled or recorded on the Historic Environment Record (HER), or is on land adjacent to such a site *and* is associated with any monument or feature on that site;
  - The hedgerow marks the boundary of a pre-1600 AD estate or manor recorded prior to 27 March 1997 or is visibly related to any building or other feature of such an estate or manor.
  - The hedgerow is recorded as an integral part of a field system pre-dating the Enclosure Acts, or is part of, or visibly related to, any building or other feature associated with such a system, and that system is either substantially complete or recorded as being a key landscape characteristic by the local planning authority prior to 27 March 1997.

# National Policy Statements (NPSs)

- Chapter 2 Regulatory and Planning Context sets out the overarching policy context relevant to the Project, including the Overarching NPS for Energy (EN-1) (Ref 10.5). This is supported by the NPS for Electricity Networks Infrastructure (EN-5) (Ref 10.6).
- EN-1 contains the following paragraphs relating to the historic environment which have been considered within this chapter:
  - Paragraph 5.9.11 states, 'Where a site on which development is proposed includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate deskbased assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation. Where proposed development will affect the setting of a heritage asset, representative visualisations may be necessary to explain the impact.'
  - Paragraph 5.9.24 states, 'In considering the impact of a proposed development on any heritage assets, the Secretary of State should consider the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between their conservation and any aspects of the proposal.'
  - Paragraph 5.9.29 states, 'Substantial harm to or loss of significance of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional.'
  - Paragraph 5.9.30 states, 'Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; Protected Wreck Sites; Registered Battlefields; grade I and II\* Listed Buildings; grade I and II\* Registered Parks and Gardens; and World Heritage Sites, should be wholly exceptional.'

- Paragraph 5.9.32 states, 'Where the proposed development will lead to less than substantial harm to the significance of the designated heritage asset, this harm should be weighed against the public benefits of the proposal, including, where appropriate securing its optimum viable use.'
- Paragraph 5.9.33 states, 'In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.'
- EN-5 provides limited guidance in relation to heritage. The references to cultural heritage or the historic environment are in Paragraph 2.9.19, summarising the Horlock Rules, which states,
  - '... applicants should: ... seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections'.
- This is defined in footnote 21 of EN- 5 as;

'Internationally and nationally designated areas of highest amenity, cultural or scientific value are: National Parks; Areas of Outstanding Natural Beauty; Heritage Coasts; World Heritage Sites; Ramsar Sites; Sites of Special Scientific Interest; National Nature Reserves; Special Protection Areas; Special Areas of Conservation. Care should be taken in relation to all historic sites with statutory protection e.g., Ancient Monuments, Battlefields and Listed Buildings'.

# Other National Policy

Although the Project will be tested in line with National Policy as stated above, paragraph 5.9.3 of the NPS EN-1 refers to the definitions of heritage significance and setting set out in Annex 2 of the NPPF (Ref 10.8) and accompanying planning practice guidance (PPG) (Ref 10.9). The preliminary assessment has therefore been undertaken in accordance with the NPPF and PPG in accordance with the requirement set out in paragraph 4.1.17 of the NPS EN-1.

# Regional and Local Policy

- 10.2.19 **Chapter 2 Regulatory and Planning Context** lists relevant regional and local policy documents. Key local policies relevant to cultural heritage that have informed this preliminary assessment and will inform the assessment reported within the ES, comprise:
  - East Riding Local Plan 2012-2029, Adopted 2016 (Ref 10.10).
    - Policy ENV3: Valuing our heritage.
  - North Lincolnshire Local Development Framework Core Strategy 2006 2026, Adopted 2011 (Ref 10.11).
    - Policy CS6: Historic Environment.
  - Bassetlaw District Local Plan 2020-2038, Adopted 2024 (Ref 10.12).
    - Policy ST40: The Historic Environment.
    - Policy 41: Designated and Non-Designated Heritage Assets.
  - Central Lincolnshire Local Plan, 2023 (Ref 10.13).

- Policy S57: The Historic Environment.
- Newark and Sherwood Core Strategy DPD, Adopted March 2019 (Ref 10.14).
  - Core Policy 13: Landscape Character.
  - Core Policy 14: Historic Environment.
- East Riding Local Plan Update 2020 2039 (Ref 10.15).
- Rampton and Woodbeck Neighbourhood Plan 2019-2037, Adopted 2021 (Ref 10.17).
  - Policy 5: Development Principles.
- Misterton Neighbourhood Plan 2022 2028 (Ref 10.18).
  - Policy 8R Protecting and Enhancing Heritage Assets.

North Lincolnshire Council submitted the New Local Plan for Examination in November 2022. The Examination progressed however the authority took the decision to formally withdraw the New Local Plan from the Examination in September 2024. The Saved Policies in the Local Plan (2003) as updated in October 2024 (Ref 10.32), North Lincolnshire Local Development Framework Core Strategy (2011) (Ref 10.11) from the adopted Development Plan and have been considered in the PEIR where relevant.

# **10.3 Scoping Opinion and Consultation**

# **Scoping Opinion**

The scope of the assessment has been informed by the Scoping Opinion (Ref 10.28) provided by the Planning Inspectorate on behalf of the Secretary of State, following submission of the Environmental Impact Assessment (EIA) Scoping Report (Ref 10.29). The scope has also been informed through consultation and engagement with relevant stakeholders. A summary of the Scoping Opinion (Ref 10.28) together with a response from National Grid against each point of relevance to cultural heritage, is provided in Table 10.1.

Table 10.1- Comments raised in the Scoping Opinion

ID	Inspectorate's comments	Response
3.4.1	Impacts to the access of heritage assets – Operation; The Applicant proposes to scope out impacts of new infrastructure altering the access of heritage assets on the basis that due to the scale and size of the footprint of individual pylons, there is limited potential for significant effects to occur.	Impacts derived from changes to the access of heritage assets resulting from the Project have been scoped into the PEIR and ES.
	Considering the number of heritage assets present within the scoping boundary (displayed on Figure 9.1) and given the lack of detail regarding the confirmed siting of the operational infrastructure, the Inspectorate does not	

#### ID Inspectorate's comments

Response

consider that sufficient detail has been provided at this time to justify the scoping out of this matter. The Inspectorate would however agree to scope this matter out on the provision of more detailed design information being included with the application which demonstrates the absence of likely significant effects on the access of heritage assets. In the absence of such information the ES should provide an assessment of effects for this matter.

3.4.2 Physical impacts or impacts to heritage assets as a result of changes to setting from vehicular traffic and maintenance activities – Operation: The Applicant proposes to scope this matter out on the basis that the planned frequency of maintenance visits, one per year, would not constitute an impact of sufficient magnitude to cause significant effects to either designated or non-designated heritage assets.

The Inspectorate considers it unlikely that significant effects would arise but at this stage has insufficient information regarding the maintenance activities (referred to within paragraph 9.6.5) to scope the matter out. The Inspectorate advises that consideration should be given to the potential for physical impacts on cultural heritage assets from maintenance activities associated with the operational phase. Consideration should also be given to the potential for operational effects associated with

The Inspectorate does consider that the impact from vehicular traffic arising from maintenance activities on heritage assets arising during the operational phase can be scoped out of the ES.

The Inspectorate notes that impacts to heritage

maintenance activities on the setting of above

ground heritage assets.

Consideration is given in the preliminary assessment to impacts derived from physical impacts to cultural heritage assets from maintenance activities, as well as impact through change to setting during operation and maintenance. Impacts arising from vehicular traffic due to maintenance activities are scoped out of assessment.

3.4.3 Physical impacts on designated assets – Construction: The Applicant proposes to scope this matter out on the basis that there will be no physical impacts on designated assets within the scoping boundary as they will be avoided by the construction works. Paragraph 9.5.1, and Table 4.A.1 of Scoping Report further at Volume 2, state that embedded measures 'will endeavour to' include design intervention to avoid physical and indirect impacts on both designated and non-designated heritage assets.

Physical impacts on designated assets arising during construction are considered in this preliminary assessment section 10.7 and will be further assessed in the final assessment for all designated assets which could be subject to physical impacts.

#### ID Inspectorate's comments

assets as a result of changes to their setting have been scoped in for assessment. The Inspectorate does not consider that sufficient detail has been provided at this time to justify scoping this matter out. The Inspectorate would expect the ES to provide a suitable baseline which has been agreed with the relevant consultation bodies for designated cultural heritage assets to be included in the assessment. Further detail regarding the mitigation measures to avoid physical impacts on designated assets should be provided within the ES, noting the phrase 'will endeavour to' suggests there is a lack of certainty around this. The Applicant should seek to agree the suitability of mitigation measures with the relevant consultation bodies and provide evidence of this within the application documents.

#### Response

Suitable mitigation measures, where warranted, will be discussed and agreed with relevant stakeholders and evidenced in the final assessment.

3.4.4 **Temporary impacts to the historic landscape** This is noted and as a result on changes to setting construction: The Applicant proposes to scope out. this matter out on the basis that the Project's

temporary construction activities are unlikely to result in significant effects to the historic landscape. The Inspectorate notes that the Applicant proposes to scope in an assessment of physical impacts on the historic landscape for the construction phase. Given the temporary nature of the construction phase impacts, the Inspectorate considers that significant effects on the historic landscape as a result of changes to setting during the construction phase are unlikely to occur and agrees to scope this matter out from further assessment.

acknowledged and scoped

3.4.5 **Study area:** The Scoping Report proposes a 1 km study area for all designated and nondesignated cultural heritage assets with the study area being selectively extended for 'higher grade assets' to capture assets of the highest significance where the wider landscape forms a key contributing factor to that significance. This will be informed by the ZTV which will be developed in conjunction with the LVIA.

> The Applicant should agree the study areas and cultural heritage receptors for the assessment with the relevant consultation bodies, and justification for the use of the study areas

Justification for the study areas used is presented in section 10.4. The study area for non-designated assets has been agreed with the archaeological advisors to all three Local Planning Authorities both in the Scoping Report (Ref 10.29) and in meetings (section 10.3).

The study areas are shown on Figure 10.1 Designated **Heritage Assets within** 

#### ID Inspectorate's comments

proposed must be provided. Additionally, the Applicant should define what is classified as 'higher graded assets' for which the study area would be extended as well as agreeing the 'higher graded assets' for inclusion/exclusion with the relevant consultation bodies. The Applicant's attention is drawn to responses from Historic England, North Lincolnshire Council, Lincolnshire County Council and Nottinghamshire County Council. (Appendix 2 of this Opinion) with regard to heritage receptors to be included in the assessment. The Inspectorate considers that the study areas used for the assessment should be illustrated on an appropriate figure within the ES.

#### Response

Study Areas and Figure 10.2 Non-Designated Heritage Assets within 1 km Study Area.

The value of assets (including the definition of 'assets of the highest value') and how these relate to the different study areas is presented in section 10.4. It is noted that the use of the ZTV in defining an appropriate study area for assets of the highest value is dependent upon how the ZTV is produced (see line 3.4.6 of this table) and this work to define the final study area for highly graded designated assets is still ongoing. A 3 km study area has been used for the purposes of the preliminary assessment. The final study area will be agreed with the relevant consultation bodies in the course of the environmental assessment.

3.4.6 **ZTV (Zone of Theoretical Visibility):** The Inspectorate notes that a ZTV will be developed in conjunction with the LVIA. The Inspectorate recommends the LVIA and heritage consultants liaise closely with regards to the ZTV to ensure heritage assets within the LVIA ZTV are appropriately identified, noting that impacts on setting are not limited to just visual. Impacts on setting relating to noise, dust and vibration, spatial associations and the historic relationship between places, as examples, should be considered. Should the use of a ZTV be considered ineffective for the cultural heritage assessment (the Scoping Report states the ZTV may not reflect what is visible on the ground nor can it be used to define the extent of setting of heritage assets) this should be explained and justified in the ES with agreement from the relevant consultation bodies.

Currently, the ZTV provided to support the PEIR (Figure **7.2**) shows any area where the top of a pylon may be visible as falling within the ZTV. This makes its utility for heritage purposes limited due to most areas falling within the ZTV, but potentially for very minor visibility of the Project that would not result in impacts through change to setting. For this reason, a 3 km study area has been used for assets of the highest value for the preliminary assessment.

In the drafting of the ES the use of different forms of ZTV

#### ID Inspectorate's comments

#### Response

will be explored, in consultation with heritage stakeholders. Any limitations of the utility of the ZTV will be stated within the ES and it will only be used where it is deemed to assist, in a robust way, with the setting assessment.

It is noted that setting is not only a visual consideration and that impacts arising from a wide range of sources, such as noise, lighting, traffic, severance etc. resulting from the Project will be considered.

#### 3.4.7 Archaeological baseline and surveys:

A desk-based assessment of the listed data sources at paragraph 9.7.5 and a walkover survey is proposed to inform the heritage aspect chapter. The Applicant should ensure that the information used to inform the assessment is robust and allows for suitable identification of assets likely to be impacted by the Project. The Applicant should agree the need and methodology for any intrusive investigations required such as trial trenching, geophysical surveys and deposit modelling with the relevant consultation bodies. Where surveys are required to adequately understand the archaeological potential to inform the assessment and design, and any mitigation requirements this should be undertaken prior to submission. Any uncertainties that remain should be clearly identified within the ES. The Applicant's attention is drawn to responses from Historic England and North Lincolnshire Council (Appendix 2 of this Opinion) in this regard.

Archaeological surveys have been discussed with the archaeological advisors for each Local Planning Authority (Table 10.2). The results of the surveys will inform the preparation of the final assessment and mitigation strategy and will be submitted at DCO.

3.4.8 Assessment methodology: The ES should clearly explain what aspect-specific criteria have been used to define receptor value/ sensitivity and magnitude of change for the archaeology and cultural heritage assessment. The approach to determining how these combine to inform the conclusions on the significance of effects should also be described. The ES The methodology assessing the value/sensitivi heritage, magning impact and resignificance of set out in the State of the methodology.

The methodology for assessing the value/sensitivity of cultural heritage, magnitude of impact and resulting significance of effect were set out in the Scoping Report (Ref 10.29) are presented in section 10.4 of

ID	Inspectorate's comments	Response
	should clearly set out where professional judgement has been utilised.	this preliminary assessment and any further refinement will be set out in the final assessment.  Instances where professional judgment is applied in the final assessment will be clearly set out.
3.4.9	Significance of effects: Historic England has raised concern (Appendix 2 of this Opinion) with the proposed approach to recording the impact magnitude and significance of effect on heritage assets (both designated and non-designated). The Applicant should make effort to agree the approach with Historic England and other relevant consultation bodies. In the event that the Applicant's approach to recording significance of an asset deviates from the advice it has received, the ES should explain why and provide justification based on relevant evidence, guidance and professional opinion.	Historic England suggest a change to the wording of the definition of a 'Large' impact for purposes of assessment, to include 'or that heritage value central to its significance is lost'. This amendment has been made.  It is also noted that a statement of 'harm' irrespective of 'significance of effect' will be required for all harm to heritage assets; this will be provided in the DCO documentation.
3.4.10	Receptors: The Scoping Report does not refer to the canal network as a cultural heritage receptor. Considering the proximity of the Proposed Development to the canal network, the ES should consider the potential for impacts on this receptor. The Inspectorate directs the Applicant to the Canal and River Trust's consultation response (Appendix 2 of this Opinion) and recommends that the further designated and non-designated heritage assets flagged within their response are considered within the ES.	The canal network has been included in this PEIR as non-designated assets and the potential for significance effects on these assets is presented in section 10.7. Further assessment of the significance of these assets will be set out in a desk-based assessment supporting the ES and potential impacts will be further considered in the ES.

# **Project Engagement and Consultation**

- National Grid has held several meetings with relevant consultees including Historic England and the archaeological advisors and conservation officers for relevant local planning authorities.
- A summary of discussions and how these have influenced the Project, scope and the approach to the assessment are provided in Table **10.2** below.

Table 10.2 - Stakeholder engagement

Organisation and Date	Summary of issues raised	Project response and consideration in PEIR
East Riding of Yorkshire Council 25/04/2023	Introduction to the Project was given by National Grid. The methodology for the EIA, as set out in the scoping report, was discussed. Other areas discussed included unregistered ornamental landscapes and historic hedgerows.	Methodology for the EIA was agreed.
Bassetlaw District Council and Nottinghamshire County Council 24/04/2023	Introduction to the Project was given by National Grid. The methodology for the EIA, as set out in the scoping report, was discussed. Other areas discussed included LVIA and setting assessment, cumulative impact assessment, pylon design, cropmarks and undergrounding.	Methodology for the EIA was agreed.
North Lincolnshire Council 15/05/2023	Introduction to the Project was given by National Grid. The methodology for the EIA, as set out in the scoping report, was discussed. Other areas discussed included the Isle of Axholme, archaeological evaluation and the possibility of close paralleling the existing line in certain areas (e.g. Isle of Axholme).	Methodology for the EIA was agreed.
Historic England 24/07/2023	Introduction to the Project was given by National Grid. The methodology for the EIA, as set out in the scoping report, was discussed. Other areas discussed included undergrounding, landscape (Yorkshire Wolds AoNB and the Isle of Axholme), the route corridor section by section, fieldwork and setting assessment and next steps.	Methodology for the EIA was agreed.
East Riding of Yorkshire Council Archaeological	Project overview, cultural heritage approach for the	Approach to the preliminary assessment agreed; study area confirmed; specific constraints

Organisation and Date	Summary of issues raised	Project response and consideration in PEIR
Advisor (Humber Archaeology) 30/09/2024	preliminary assessment, scope of archaeological surveys.	discussed; scope of documents and surveys required agreed.
North Lincolnshire Council Archaeological Advisor 16/10/2024	Project overview cultural heritage approach for the preliminary assessment, scope of archaeological surveys.	Appropriateness of study area for non-designated archaeological assets agreed. Approach to the preliminary assessment, specific constraints, and scope of documents and surveys required = discussed. Details to be further agreed for the ES.
Bassetlaw Archaeological Advisor (Nottinghamshire County Council) 01/10/2024	Project overview, cultural heritage approach for the preliminary assessment, scope of archaeological surveys.	Approach to the preliminary assessment agreed; study area confirmed; specific constraints discussed; scope of documents and surveys required agreed in principle but details to be further discussed.

# 10.4 Assessment Approach and Methods

10.4.1 Chapter 5 Approach to Preparing the PEIR sets out the overarching approach which has been used in developing the preliminary environmental information. This section describes the technical methods used to determine the baseline conditions, sensitivity of receptors and magnitude of impacts and sets out the criteria that have been used for the preliminary cultural heritage assessment. This section also identifies further assessment needed to be undertaken and reported in the ES.

# Guidance Specific to the Cultural Heritage Assessment

- In addition to the requirements set out in the NPS EN-1 (Ref 10.5), relevant guidance, specific to cultural heritage that has informed the approach to the preliminary assessment in this chapter and will inform the assessment within the ES, comprises:
  - Standard and guidance for historic environment desk-based assessment, updated 2020 (Ref 10.18);
  - Managing Significance in Decision-Taking in the Historic Environment. Historic Environment Good Practice Advice in Planning: 2, 2015 (Ref 10.19);
  - The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3, 2017 (Ref 10.20);
  - Statements of Heritage Significance: Analysing Significance in Heritage Assets.
     Historic England Advice Note 12, 2019 (Ref 10.21 and;
  - Principles of Cultural Heritage Impact Assessment in the UK, 2021 (Ref 10.22).

# Study Area

- The study area for the Cultural Heritage is presented on Figure 10.1 Designated Heritage Assets Within Study Areas and Figure 10.2 Non-Designated Heritage Assets Within 1 km Study Area. These study areas are presented for the Project inclusive of both the Proposed Overhead Line and Proposed Substation Works.
- The study area is the area within which cultural heritage assets may experience effects as a result of the Project. Effects to heritage assets may arise during construction or operation. Effects to heritage assets may arise as a result of physical impacts to their fabric or through changes to their setting, and the study areas have been defined according to the sensitivity of the receiving environment and the potential impacts of the Project.
- As a minimum, the study area for all designated and non-designated cultural heritage assets extends to 1 km from the draft Order Limits. This is considered sufficient to inform on the likelihood of encountering previously unknown archaeology within the draft Order Limits. It also considers the likelihood of changes to the setting of heritage assets, the character of the surrounding landscape and the asset type. While there may be a change within the visual influence of assets outside this area, it is considered unlikely that such changes would result in significant effects, except for on assets of the highest significance.
- For assets of the highest significance (i.e., World Heritage Sites, Grade I and II\* listed buildings, Registered Battlefields, Grade I and II\* Registered Parks and Gardens (RPG), scheduled monuments, and conservation areas containing a notable concentration of highly designated assets), there is a greater potential for their setting to extend over a larger area. The 1 km distance has therefore been extended up to 3 km from the draft Order Limits for the purposes of the preliminary assessment, to capture assets of the highest significance where the wider landscape forms a key contributing factor to that significance.
- For the ES the intention is to refine this wider study area partly in conjunction with the 10.4.7 Zone of Theoretical Visibility (ZTV) developed with the Landscape and Visual assessment (Figure 7.2), to allow for a more nuanced study area. Whilst significant effects beyond 3 km are considered highly unlikely, this will allow, for example, for assets beyond the 3 km study area to be included in the assessment where it is considered that there may be potential for significant effects. Likewise, it will assist in refining the list of assets scoped into assessment, within the 3 km study area, to those where there is the potential for significant effects. This will need to be undertaken in full cognisance of the limitations of the ZTV and how it has been developed. It will only be used for this purpose if its use is considered to assist the assessment in a robust manner. The ZTV defines the theoretical visibility of the Project and presents a theoretical zone of visual influence. This ZTV may not reflect what is visible on the ground, nor can it be used to define the extent of setting of heritage assets and assets which do not have intervisibility with the Project, but which could still be impacted. Nonvisual impacts are also considered as part of the setting assessment.
- Heritage assets within the extended 3 km study area have been assessed for their potential to be affected by the Proposed Overhead Line in this preliminary assessment chapter (sections 10.5 and 10.7) and, where relevant, impacts from the Project on these assets will be further assessed in the ES. The ES will consider the significance of the assets, their setting and sensitivity to change. Through such an assessment, assets having a greater influence over the wider landscape may be taken through to assessment, whilst those having a lesser influence may be scoped out. This staged

approach is consistent with current Historic England guidance (Ref 10.21). Consultation on the refinement of the study areas to be used in the ES will continue with relevant heritage stakeholders in the drafting of the ES.

# Baseline Data Gathering and Forecasting Methods

#### **Data sources**

- The baseline information presented in this preliminary assessment chapter has been informed by a desk study which has drawn on the following information sources:
  - Historic England's National Heritage List for England (NHLE);
  - The Humber, North Lincolnshire and Nottinghamshire HERs (referred to herein as the HHER, NLHER and NHER respectively);
  - Aerial photographs and interpretive layers obtained from Historic England (Aerial Photo Explorer), National Mapping Programme (NMP) and other Aerial Investigation and Mapping (AIM) projects;
  - Ordnance Survey (OS) 1:10,000, 1:25,000, 1:50,000 and 1:250,000 base mapping;
  - Historic maps available through the National Library of Scotland and other available online sources; and
  - Other readily available online sources.

#### Site visits

- The baseline within this preliminary assessment chapter has been supported by site walkovers and setting appraisal, where land access has been available.
- A large proportion of the site visits were undertaken in March 2024 to guide design evolution and inform the preparation of the preliminary assessment. The visits were not intended to survey the ground conditions or to identify or record previously unrecorded archaeological remains and was limited to publicly accessible areas and public rights of ways. They were conducted to gain an understanding of topography and to assess the setting of the most relevant designated and non-designated heritage assets which could be impacted by and/or constrain the Project's development. Assets of the highest significance (i.e., World Heritage Sites, Grade I and II\* listed buildings and RPGs, Registered Battlefields, and scheduled monuments) and those assets on prominent landforms or in close proximity to the draft Order Limits were prioritised for the walkover survey. Where relevant, the findings of the survey have been incorporated into the assessment in this preliminary assessment chapter.

#### Further data to be collected to inform the ES

- In addition to the data collected for this preliminary assessment chapter, the ES will be informed by the following reports:
  - Historic Environment Desk-based Assessment:
  - Aerial Photograph and LiDAR Assessment;
  - Geophysical Survey;
  - Geoarchaeological Assessment; and
  - Archaeological Trial Trench Evaluation.

#### Assessment Methods and Criteria

#### **Sensitivity**

- The full assessment of effects will be made in the ES. Section 10.7 of this preliminary assessment chapter provides an overview of potential significant effects only, and whilst that has been derived using the methodology referred to in the following paragraphs, the full working and defined significance of effect is not presented.
- The value of a heritage asset (its heritage significance) is guided by its designated status but is derived also from its heritage interest which may be archaeological, architectural, artistic, or historic (NPPF Annex 2, Glossary) (Ref 10.8). Each identified heritage asset can be assigned a value in accordance with the criteria set out in Table 10.3. The heritage value of each asset is presented in this preliminary assessment in section 10.7. The final assessment presented in the ES will include a baseline where the value of each asset, including any contribution from its setting, will be defined in greater depth.
- Using professional judgement and the results of consultation, heritage assets are also assessed on an individual basis and regional variations and individual qualities are considered where applicable. A measure of professional judgment has been applied to ascribing value to each non-designated asset, but any professional judgement applied resulting in the value of a designated asset to differ from that presented in Table 10.3 will explained in depth in the final assessment presented in the ES.

Table 10.3 - Criteria for assessing the value of heritage assets

Asset value	Asset categories
High	World Heritage Sites.
	Scheduled Monuments.
	Grade I and II* listed buildings.
	Registered battlefields.
	Grade I and II* registered parks and gardens.
	Conservation areas of demonstrable high value.
	Non-designated heritage assets (archaeological sites, historic buildings, monuments, parks, gardens, or landscapes) that can be shown to have demonstrable national or international importance. Well preserved historic landscape character areas, exhibiting considerable coherence, time-depth, or other critical factor(s).
Medium	Grade II listed buildings.
	Conservation areas.
	Grade II registered parks and gardens.
	Conservation areas.
	Non-designated heritage assets (archaeological sites, historic buildings, monuments, park, gardens, or landscapes) that can be shown to have demonstrable regional importance.

Asset value	Asset categories
	Averagely preserved historic landscape character areas, exhibiting reasonable coherence, time-depth, or other critical factor(s).
	Historic townscapes with historic integrity in that the assets that constitute their make-up are clearly legible.
Low	Locally listed buildings.
	Non-designated heritage assets (archaeological sites, historic buildings, monuments, park, gardens, or landscapes) that can be shown to have demonstrable local importance.
	Assets whose values are compromised by poor preservation or survival of contextual associations to justify inclusion into a higher grade.
	Historic landscape character areas whose value is limited by poor preservation and/or poor survival of contextual associations.
Negligible	Assets identified on national or regional databases, but which have no archaeological, architectural, artistic, or historic value.  Assets whose values are compromised by poor preservation or survival of contextual associations to justify inclusion into a higher grade.
	Landscape with no or little significant historical merit.

#### Magnitude

- Having identified the value of the heritage asset, the next stage in the assessment is to identify the level and degree of impact to an asset arising from the development. Impacts may arise during construction, operation and maintenance or decommissioning and can be temporary or permanent. Impacts can affect the physical fabric of the asset or affect its setting.
- The level and degree of impact (impact rating) is assigned with reference to a four-point scale as set out in Table 10.4. In respect of cultural heritage an assessment of the level and degree of impact is made in consideration of any design mitigation (embedded mitigation). If no impact on value is identified, no impact rating is given and no resulting effect reported.

Table 10.4 - Factors influencing the assessment of magnitude of impacts

Magnitude of impact rating	Description of impact
Large	Changes such that the heritage value of the asset is totally altered or destroyed, or that heritage value central to its significance is lost.
	Comprehensive change to elements of setting that would result in harm to the asset and our ability to understand and appreciate its heritage significance.

Magnitude of impact rating	Description of impact
Medium	Change such that the heritage value of the asset is significantly altered or modified.
	Changes such that the setting of the asset is noticeably different, affecting significance and resulting in changes in our ability to understand and appreciate the heritage value of the asset.
Small	Changes such that the heritage value of the asset is slightly affected.
	Changes to the setting that have a slight impact on significance resulting in changes in our ability to understand and appreciate the heritage value of the asset.
Negligible	Changes to the asset that hardly affect heritage value.
	Changes to the setting of an asset that have little effect on significance and no real change in our ability to understand and appreciate the heritage value of the asset.

#### Significance of effects

An assessment to classify the effect, having taken into consideration any embedded mitigation, will be determined using the matrix at Table **10.5**, which takes account of the value of the asset (Table 10.3) and the magnitude of impact (Table **10.4**). Effects can be neutral, adverse, or beneficial.

Table 10.5 - Assessment of Effect (Magnitude)

Heritage value		High	Medium	Low	Negligible
Impact magnitude	Large	Major	Major	Moderate	Minor
	Medium	Moderate	Moderate	Minor	Negligible
	Small	Moderate	Minor	Negligible	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

The ES will report on the significance of effect in accordance with EIA methodology set out in **Chapter 5 Approach to Preparing the PEIR**. Major and moderate effects are considered to be significant whilst minor and negligible effects are considered to be not significant.

Within the NPPF, impacts affecting the value of designated heritage assets (and non-designated assets demonstrably of national importance) are considered in terms of harm and there is a requirement for the decision maker to consider whether the level of harm amounts to 'substantial harm' or 'less than substantial harm' and whether such harm is outweighed by public benefits (Ref 10.8, paragraphs 212-216). This is also supported by the Overarching National Policy Statement for Energy (NPS EN-1) (Ref 10.5) which also notes that there should always be a presumption in favour of the conservation of an asset as, once lost, assets cannot be replaced. The NPS EN-1 further states that proposals that

preserve the elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

There is no direct correlation between the significance of effect as reported in the final ES and the level of harm caused to heritage significance. A statement of harm will be provided as part of the DCO documentation that assesses the degree of harm resulting from the Project on designated heritage assets (and non-designated archaeological assets of equivalent value to scheduled monuments), irrespective of the significance of effect identified.

#### Approach to defining significance in the PEIR.

- As set out in **Chapter 5 Approach to Preparing the PEIR**, the general approach taken to determining the significance of effect in this preliminary assessment is only to state whether effects are likely or unlikely to be significant, rather than assigning significance levels.
- Following on from the identification of whether an effect is considered likely to be significant or not significant, a confidence in the prediction is given a rating of high, moderate or low, in line with the confidence level definitions presented in **Chapter 5**Approach to Preparing the PEIR.

# **Preliminary Assessment Assumptions and Limitations**

- The assessment has been undertaken based on preliminary design information for the Project as described in **Chapter 4 Description of the Project**. This information is likely to develop further in response to ongoing design, assessment and stakeholder feedback, and will be updated for the ES as the design evolves.
- This PEIR chapter is limited to the impacts derived from works within the Proposed Overhead Line and does not include an assessment of impacts derived from the Proposed Substation Works, these are reposted separately in . **Chapter 20 Substations and Associated Works**. The study areas shown on figures 10.1 and 10.2 are from both the draft Order Limits and the proposed substations, and while significant effects of the Project have been considered for all designated assets within these study areas, only non-designated assets within the 1km study area from the Proposed Overhead Line are discussed in this chapter.
- A small number of access routes have been recently added the draft Order Limits which extend beyond the HER datasets obtained in August 2024. These are all situated along existing roads where works will be limited to road widening and/or the construction of passing spaces. The limited extent of associated intrusive works immediately adjacent to existing roads means that significant effects are unlikely to result from these activities. However, any gaps in the HER datasets will be rectified through revised searches of the HERs and the impacts to both known and potential non-designated assets will be fully considered in the ES.
- An initial assessment of the potential effects of the Project that derive from change to an asset's setting has been carried out on designated assets and non-designated heritage assets that are recorded in the relevant HER within the study areas for assessment. A further stage of investigation will be undertaken for the ES to identify potential non-designated built heritage assets that have the capacity to be significantly affected by the Project. Identification of such assets will be based on historic mapping evidence using Tithe maps, where these are available, and the first edition OS maps, combined with site visits. The focus will be on identifying potential assets which may be significantly

affected, rather than identifying all potential assets that may fall within the study areas for assessment. This is considered to be a proportionate approach to assessment. Further consultation on assets that have been identified as potential non-designated built heritage assets will be undertaken with relevant stakeholders in the process of the EIA.

#### Further Assessment within the ES

- The ES will present a detailed assessment in accordance with IEMA guidance (Ref 10.23) with the significance of the effect on a receptor presented, where relevant, during construction and operation (and maintenance), when considered in relation to the sensitivity or value of the receptor and the magnitude of the potential effect. 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. The assessment will utilise the assessment of significance assigned to heritage assets in the Desk-based Assessment which will form part of the ES and inform the cultural heritage assessment. The ES itself will ascribe a heritage value to that significance and assess the magnitude of impact to each asset, following the methodology presented in the Scoping Report (Ref 10.29) and in the above sections of this chapter.
- The ES will include the full results of the site surveys and will also consider any effects on the Historic Environment associated with mitigation proposals for other environmental receptors. This will, at a minimum, include the results of an Aerial Photograph and LiDAR Assessment, a Geophysical Survey Report, a Geoarchaeological Assessment, and an Archaeological Trial Trench Evaluation Report.
- The assessment of impact due to a change in the setting of an asset that affects its value would be informed by the most up to date Landscape and Visual Impact Assessment (LVIA), including ZTVs, wireframes and photomontages, as well as further on-site setting assessments, where required. Additional heritage-specific wireframes and photomontages will also be produced where deemed necessary for the assessment. The locations of any such viewpoints will form part of ongoing consultation with relevant stakeholders in the process of the EIA.

#### 10.5 Baseline Conditions

- This section describes the baseline Cultural Heritage environment in the study area where it relates to the Proposed Overhead Line. The baseline Cultural Heritage environment in the study area in relation to the Proposed Substation Works is presented in **Chapter 20 Substations and Associated Works**.
- Baseline conditions have been gathered from desk-based information and site surveys and are presented below. For more information on the Route Sections of the Project refer to **Chapter 4 Description of the Project**.

# **Designated Assets**

There is a single designated asset lying partially within the draft Order Limits, namely Hall Garth moated site, associated drainage channels and fishpond (NHLE 1013190). There are a further 12 scheduled monuments, one grade II Registered Park and Garden (RPG), seven conservation areas, and 226 listed buildings within the 1 km study area. Of the latter, seven are grade I, twelve are grade II\* and 207 are grade II.

- An extended study area for assets of the highest value (scheduled monuments, Grade I and II\* listed buildings, Grade I and II\* RPGs and conservation areas containing a notable concentration of highly designated assets) located up to 3 km from the draft Order Limits has been used for the preliminary assessment. This will be refined for the ES using the final ZTV to assist in identifying assets, either within the 3 km area or beyond, that may be impacted by the Project. The 3 km study area contains 84 additional assets considered in this assessment. These comprise 26 scheduled monuments, five conservation areas (meeting the criteria for inclusion), and 53 listed buildings, of which 20 are grade I and 33 are grade II\*.
- All designated assets within the study areas are cross referenced with their national designation (i.e., NHLE), listed in **Appendix 10.1** and shown on **Figure 10.1**.

# Non-designated Assets

- In total, 1,683 non-designated assets within 1 km of the draft Order Limits are reported across all three HERs or identified through studies for this preliminary assessment, 127 of which are either situated within the draft Order Limits or are in such close proximity that they are likely to extend into it.
- All non-designated assets within the study areas are either cross referenced by their HER preferred reference number or, where new assets have been identified (through further assessment), by a new unique identifier (i.e., A#). These assets are all listed in **Appendix 10.1** and shown on **Figure 10.2**. Known non-designated assets within or in close proximity to the draft Order Limits are highlighted in **bold** in the below text, and all assets within the 1 km study area are shown on Figure 10.2.

# Geology and Topography

- The northern part of the Project (Route Sections 1 and 2) is situated on a roughly north-south aligned chalk hill ridge that forms the southernmost section of the Yorkshire Wolds, descending gradually to the east towards the plain of Holderness, east of the Project and sharply to the south and west to the flat expanse of the Humberhead Levels. The Great Wolds are capped by thick deposits of Cretaceous chalk devoid of superficial deposits, while the lowlands are covered by sedimentary bedrock of Mercian mudstone of older Triassic date covered by complex Quaternary glacial, aeolian, alluvial, colluvial and anthropogenic superficial deposits. The western escarpment of the Wolds exposes bedrock strata spanning the intervening periods and includes several layers of chalk, sandstone, limestone, marl, ironstone, and mudstone.
- The Humberhead Levels are a wide expanse extending from South Cave in the north to Misterton in the south (Route Sections 3 to 8). This landscape occupies the former lakebed of Glacial Lake Humber, which was infilled during the last glacial period by clay sediments up to 20 m thick. To the south of Misterton (Route Sections 8 to 11), the Project is characterised by lightly undulating rural farmland forming small valleys known as the Trent and Belvoir Vales.
- The River Ouse and River Trent (Route Section 3 to 11) form the main drainage basins relevant to the Project, with their confluence with the Humber Estuary located approximately 3.5 km east of the crossing of the River Ouse. The Project itself largely parallels the course of the River Trent, although it remains approximately between 3-5 km west of the river's channel.

- Aside from the scattered till of limited extent and indeterminate date of little archaeological interest, the superficial glacial deposits of the study area are particularly complex. This is due to the formation of Glacial Lake Humber and a series of glacial flood events responsible for the sequential deposition of glaciofluvial and glaciolacustrine deposits, their erosion and the general flattening of the landscape (Burke et al 2017). The Early and Middle Devensian Glacial Stage witnessed the deep incision of river valleys draining through the Humber Gap and the formation of a low-lying basin. This basin was then infilled by thick laminated silt and clay known as the Hemingbrough Glaciolacustrine Formation after advancing ice of Late Devensian Stage resulted in the blocking of the Humber Gap and the formation of the Glacial Lake Humber c. 21,000-18,000 Before Present (BP) (Ref 10.24). The lacustrine basin gradually silted up and the lake finally disappeared around 13,000 BP (Ref 10.25), leaving behind a patchwork of swamps and mires.
- Terrace gravels predating the formation of the Glacial Lake Humber are exposed to the east and west Humberhead Levels but are deeply buried below glaciolacustrine silts and clays of the former glacial lake in the draft Order Limits. More recent terrace gravels aggraded in the Late Pleistocene along the River Trent, known as the Holme Pierrepont sand and gravels, are only present south of the maximum extent of the Devensian ice. They are not reportedly present in the draft Order Limits, although they may be present within the Trent valley, below later Holocene deposits (Route Sections 3 to 11).
- During the Late Devensian Stage and the early Holocene extensive wind-blown sand accumulated throughout the regions (Ref 10.26), highlighted on the British Geological Survey's (BGS) online viewer as glacial drift deposits of the Bielber Sand Member and Sutton Sand Formation. Such deposits are known to survive along the base of the Yorkshire Wolds (Route Sections 2 and 3), between South Cave and Brantingham, and throughout the Isle of Axholme (Route Sections 6 to 8).
- Peat deposits are known throughout the Humberhead Levels (Route Sections 3 to 8), 10.5.14 forming through several distinct phases of accumulation. The earliest peats are generally concentrated along the edges of the former glacial lake, several kilometres west of the draft Order Limits, having formed as the glacial lake gradually drained, leaving behind extensive wetland environments propitious to the formation of peat. These are known locally as raised mires, with the earliest evidence of peat accumulation dated to around 12,000 BP (Ref 10.27). Peat formation stalled following the breaching of the Humber Gap, but resumed once sea levels had stabilised, leading to several phases of peat accumulation in the Holocene. Peat deposits are reported in the River Trent and Ouse valleys (Route Sections 3 to 11), although it remains unclear whether localised peat deposits relate to the former glacial lake or to the peat accumulated during the Holocene. Peat deposits of either or both Pleistocene or Holocene date may therefore survive in the river floodplains but are likely to be relatively deeply buried below alluvium. There is, however, evidence of peat deposits located near the surface near the channel of the River Trent (Route Section 7).
- By around 3,500 BP, sea levels had reached their modern height and the river channels had been largely infilled, resulting in the extensive accumulation of alluvium across large swathes of the study area concentrated in the floodplains of the rivers Ouse, Idle and Trent, as well as the former floodplains of the now diverted River Don and canalised River Foulness (Route Sections 3 to 8).
- Efforts to drain and manage the flood-prone low-lying land culminated in the 17<sup>th</sup> century when the rivers Idle, Torne and Don were diverted to discharge directly into the River Trent and River Ouse and after Dutch River was cut. This did not fully stop

flooding, and by the mid-18<sup>th</sup> century the area began to be subject to 'warping' practices, namely the flooding of large tracts of land to deposit silt and improve agricultural yields. By the 19<sup>th</sup> century this practice was carried out on a large scale, resulting in the deposition of substantial warp deposits across the study area. These deposits are present across large areas of the draft Order Limits but are notably absent from the Isle of Axholme (Route Sections 6 to 8), which is a raised area of land between the former rivers that could not be easily flooded.

Colluvial and head deposits are found scattered sporadically throughout the study area. These are largely recorded at the base of steep valleys hills bisected by the draft Order Limits at several locations, notably at the foot of the Yorkshire Wolds (Route Sections 2 and 3), to the northwest of Sturton le Steeple (Route Section 10) and to the west of East Drayton (Route Section 10).

# Archaeological and Historical Background

This section presents a summary of the most relevant known archaeological assets in the vicinity of the draft Order Limits to provide an indication of the nature and extent of the archaeological resource which is likely to be impacted by the Project.

#### Palaeolithic (up to 10,000 BC)

There is little archaeological evidence dating to the palaeolithic period and few such remains are expected to be present in the 1 km study area due to the effects of the last glaciation. Although palaeoenvironmental evidence may survive, particularly relating to the former Glacial Lake Humber, it is unlikely that archaeological remains pre-dating the Holocene will be present within the draft Order Limits.

#### Mesolithic (c. 10,000 - 3,500 BC)

Although a number of lithic scatters of unknown prehistoric date are recorded throughout the 1 km study area, just seven such finds are securely dated to the Mesolithic within the 1 km study area, while none are situated within the draft Order Limits. A further 60 lithic scatters, tools and flints are dated to a range of possible Holocene periods, which include the Mesolithic period, but these are not securely dated and could be from any period of late prehistory. Mesolithic finds do not appear to be concentrated in any particular Route Section of the Project although, where present, they are likely to be sealed by aeolian and/or alluvial deposits and may be associated with periods of peat accumulation. Where they survive within peat deposits Mesolithic remains have a high potential to contain well preserved organic remains which could be of particularly high archaeological interest.

#### Neolithic (c. 3,500 - 2,000 BC)

The Neolithic period is better represented than its antecedents, with assets typically securely dated either to the Neolithic or to the Neolithic to the Bronze Age. The vast majority of these consist of isolated lithic finds or small scatters recovered from the ground surface or plough zone through fieldwalking surveys. The only evidence of permanent settlement consists of the site of possible Neolithic long barrows known as Giants Graves (NLHER 2480), a possible late Neolithic to Bronze Age henge and associated pits (NLHER 904), a second possible henge north-east of Birkhill Wood (HHER 6625), two possible barrows (HHER 18737) and a sub-rectangular enclosure (HHER 21757). A number of prominent cropmarks are noted in close proximity to the rectangular enclosure of possible Neolithic date (HHER 21757), including a defensive double dyke (HHER 12429, HHER 3178) and other linear cropmarks (HHER 6645,

HHER 6646), some of which are relatively close to the draft Order Limits and could extend into it. The potential remains of the Giants Graves long barrows (NLHER 2480) are recorded partly or wholly within the draft Order Limits, and several flint finds were also reportedly recovered from within the draft Order Limits (HHER 20109, NLHER 942, NLHER 19333, NLHER 19334). Broadly, the majority of Neolithic finds on the HER are recorded in North Lincolnshire, which, if not a consequence of a sampling and recording bias, may indicate a preference of early Neolithic settlers for the fertile region of the Trent valley and the Isle of Axholme.

#### Bronze Age (c. 2000 - 700 BC)

- The Bronze Age is similarly represented by lithic find spots and scatters across the 1 km study area, but fewer of these are recorded in the HER than from the earlier Neolithic. Features indicative of Bronze Age settlement or funerary monuments are, however, more common and have been typically identified as cropmarks and earthworks recorded in proximity to the draft Order Limits. These include 12 barrows (NHER M6220, NHER M18167, HHER 1377, HHER 1381, HHER 1382, HHER 3532, HHER 6593, HHER 6614, HHER 6645, HHER 14122, HHER MHU833), ten of which are located on the prominent escarpment of the Yorkshire Wolds in the northern portion of the Project. Two such monuments are located in the Humberhead Levels, around the town of Misterton (NHER M6220, NHER M18167).
- Given that Bronze Age funerary monuments are often used as markers of land ownership, their prevalence on high ground dominating the edge of an escarpment is not surprising but should not necessarily be taken to indicate a concentration of Bronze Age occupation along the same higher ground. Nevertheless, several settlement sites and defensive earthworks identified as cropmarks, also reportedly of Bronze Age date (HHER 2917, HHER 3178, HHER 6651, HHER 7521, HHER 18964, HHER 21884), are all situated north of the Ouse. It is therefore likely that there is indeed a higher concentration of Bronze Age remains in proximity and on the Wolds than in the low-lying Humberhead Levels over which much of the Project is situated. Two find locations of Neolithic to Bronze Age lithics are also reported in the draft Order Limits (NLHER 19333, NLHER 19334).

#### Iron Age period (700 BC – AD 43)

The Iron Age period is well attested throughout the 1 km study area, but considerably 10 5 24 fewer Iron Age funerary monuments are recorded (HHER 1497, HHER 22307, HHER 2915, HHER 2934) than from the earlier Bronze Age period. Conversely, there appears to be a proliferation of settlement sites throughout the 1 km study area. This is particularly evident near the north-east portion of the draft Order Limits, where settlements (HHER 164, HHER 21657, HHER 2930, HHER 2931, HHER 7587) and field systems and/or enclosures are widely reported (HHER 3531, HHER 21693, HHER 21700, HHER 21701, HHER 21757, HHER 22308, HHER 22616, NLHER 2531, HHER 6595, HHER 6628, HHER 6707, HHER 6710, HHER 6714, HHER MHU24397, HHER **7915**). Although this correlation does not necessarily suggest continuity from the Bronze Age, it does show an increase in population and intensification of agricultural activity in the area during the Iron Age. Several enclosures (NLHER 20177, NLHER 20218, NLHER 20220, NLHER 20929, NLHER 21027, NLHER 21518, NLHER 22719, NLHER 22720) and a trackway (HER MHU22613) are also reported within the remainder of the 1km study area, but in lesser concentrations. Of note is an Iron Age settlement or possible hillfort north of Gringley on the Hill (NHLE 15550; NHER 5110) 400 m west of the Site.

#### Roman (AD 43 - 410)

As is common for this period, many of the IroH 6595, HHER 6628, HHER 3531, HHER 6710, NLHER 20929, NLHER 21027, HHER 21657, NLHER 20220, HHER MHU22613) are either of uncertain date straddling either period or have a Roman component. This exemplifies the strong continuity between the periods, with increasing Roman influence reflected in the archaeological record. The draft Order Limits cross the Roman road between Brough and York (HHER 63). Other notable features of Roman date include the scheduled remains of Cockle Pits Roman villa (NHLE 1014736) situated in close proximity to the draft Order Limits, other smaller Roman settlements or enclosures (HHER 2913, NLHER 19899, NHER 18168, NHER 8172, NLHER 20919, HHER MHU22747), a marching camp at Misterton (NHER M18165, NHER M18166), a large Roman settlement complex at Walkeringham (NHER M18172) and a large number of Roman pottery and isolated finds.

#### **Early medieval (410-1066)**

There is little evidence of early medieval occupation in the 1 km study area, with a cluster of Anglo-Saxon pits recorded in Crowle (NLHER 21635) and the deserted medieval village of Waterton Hall (NLHER 1640) being the only clear evidence of early medieval activity. A further nine isolated finds or scatters of finds of early medieval date are also recorded but not associated with any features.

#### Medieval (1066 - 1540)

- The 1 km study area holds a rich medieval history highlighting the extensive agricultural use and settlement of the Humber, Trent, Don, Idle and Ouse river valleys.
- The draft Order Limits encompass the scheduled remains of the medieval moated manor of Hall Garth (NHLE 1013190) and its fishponds and come close to the scheduled deserted medieval village of Whimpton Moor (NHLE 1017567). Several other deserted medieval villages are situated in the 1 km study area, including those of Woodcotes (NHER M4652), South Wheatley (NHER M5167), Swainston (NHER M5699), West Burton (NHER M4946), Habblesthorpe (NHER M4985), Staddlethorpe (NHER 2937), Haldenby (NLHER 1636), Waterton (NLHER 1640), High Burnham (NLHER 2432), Tetley (NLHER 2489), Marae (NLHER 70), Ragnall (NHER M6210), Rampton (NHER M6168), Skegby (NHER M18130), Garhtorpe (NLHER 9596), Little Weighton (HHER 9667), Adlingfleet (HHER 10896), Benley (HHER MHU10058), Luddington (NLHER 7150), Riplingham (HHER 3522), Rowley (HHER 7569), and Skidby (HHER MHU9677).
- Numerous medieval moated manors or farmsteads are reported throughout the 1 km study area (HHER 4, NLHER 1348, NLHER 1349, HHER 2812, HHER 2923, HHER 2924, HHER 2927, HHER 2935, HHER 21637, HHER MHU3527, NLHER 20419, NLHER 21560, NHER MNT28258). The two small medieval hamlets of Oxmardyke (HHER 18089) and Provence (HHER 154) and a small cemetery associated with Whimpton Moor (HHER L5761) are recorded as partially extending into the draft Order Limits. Other features of medieval date include medieval flood banks and drainage (HHER 173, NLHER 19585) as well as the site of a camera of the Knights Templars noted at Temple Bel Wood (NLHER 906).
- The HERs report extensive medieval agricultural features which include field boundaries, ridge and furrow as well as lynchets, several of which extend over the draft Order Limits (HHER 6653, HHER MHU22605, HHER MHU22607, HHER MHU22608, HHER MHU25633, NLHER 11044, NLHER 10735), although a review of LiDAR imagery suggests that these have been largely truncated by later agricultural activity.

Although not recorded in the HER, other areas of well-preserved ridge and furrow were noted in the LiDAR imagery within the 1 km study area and could be present throughout the draft Order Limits. The 1 km study area contains a large number of non-designated medieval assets but there are no particular concentrations in any areas. It is likely that the whole region was settled by this time and largely rural and agricultural.

#### Post-medieval (1540 - 1900)

- There are over 31 post-medieval assets within the draft Order Limits and over 800 within 1 km study area. Approximately half of the assets are non-designated built heritage assets, while the remainder are archaeological. Assets in the 1 km study area reflect increasingly diverse land-uses proliferating throughout the post-medieval period. While much of the landscape remained agricultural and relatively rural, the period also witnessed the emergence of new industries that made extensive use of the transport benefits afforded by the Humber and its tributaries. Of the large number of farmhouses and related buildings recorded in the 1 km study area, only six are situated partially within the draft Order Limits (HHER 7845, HHER 12805, NLHER 25204, NLHER 25631, HHER 12532).
- The draft Order Limits cross two former 19<sup>th</sup> century parklands (**NLHER 21525**, **NLHER 21474**) and come very close to that of Yokefleet Hall (HHER 2924). The 1 km study area encompasses a number of industrial buildings that include mills (HHER 13927, HHER 14054, HHER 91, HHER 12898, NLHER 12743), brickworks (HHER 14501, HHER 14502, HHER 14503, HHER 4943), and railways (NLHER 22552, **NLHER 7910**, **NLHER 8828**, NHER L6807), as well as extensive water management features such as drains and canals, several of which are crossed by the draft Order Limits (**HHER 12805**, HHER 170, HHER 171, **NLHER 17470**, HHER 151, HHER 14500, **NLHER 15422**, **NLHER 15424**, **NLHER 15778**, **NLHER 15417**, **NLHER 19591**, **NLHER 19588**, **NLHER 21088**, **NLHER 21020**, **NLHER 27195**, NHER L5857, HER L5858, **NLHER 9485**, **NLHER 19587**, **HER 21639**, **NLHER 20222**, **NLHER 20886**, **NLHER 10730**, **NLHER 19589**, **NLHER 27195**, **NLHER 27202**).
- The sites other notable post-medieval assets within the 1 km study area include those of former public houses (HHER 13931, HHER 12618), former poor houses (HHER 12243, HHER 2916, HHER MHU12925, HHER 14486), former chapels (HHER 19639, HHER 156, HHER 12520, HHER 12481) and other rural village structures that are no longer extant (HHER 74, HHER 153, HHER 14499, HHER 14488, HHER 14487). Post-medieval assets of limited interest situated within the draft Order Limits include roads (HHER 9237, HHER 12530), evidence of agricultural use (HHER MHU25614, NLHER 27152) and an additional 12 features identified on 19th century historic maps (A8, A9, and A10 through A19) for the purpose of this assessment.
- Previously discussed in the geology section, it is worth noting the extensive post-medieval efforts to reclaim land from the low-lying marshes of the Humberhead Levels to increase the region's agricultural yield. In the 17<sup>th</sup> century, Dutch engineer Cornelius Vermuyden was commissioned by Charles I to drain the land around the Isle of Axholme, which he accomplished by digging an extensive network of ditches and dykes and the diversion of the River Don and River Idle. This had the added benefit of allowing the control of water which was used over the following centuries to periodically flood agricultural land and deposit fertile 'warp'. The depth of these deposits varies across the draft Order Limits but could mask earlier archaeological deposits in some areas. Evidence of the extensive network of warping drains and other water management earthworks are also reported throughout the 1 km study area, several of which lie within the draft Order Limits (listed above), as does the channel of the Old River Don (HHER 9488, NLHER 9488).

#### Modern (1900 - present)

- The draft Order Limits remain largely rural and agricultural today, and the only notable modern feature within the draft Order Limits is the location of the former Fockerby Branch Railway (**NLHER 22552**). Other modern non-designated assets recorded in the HERs in the 1 km study area are largely associated with modern farmsteads, the Second World War and those relating to 20<sup>th</sup> century railways. Second World War assets consist of the site of former defensive infrastructure such as batteries (HHER 195, NLHER 21391), a pillbox (NLHER 26595), a bombing decoy (NLHER 18437) and searchlights (NLHER 21392, NLHER 21388), as well as a single aeroplane crash site (HHER 20696), none of which are situated in the draft Order Limits.
- A preliminary review of aerial photographs digitised and available online from Historic England, but not yet integrated in the HER data, has identified a further seven areas of undated cropmarks, four of which are wholly or partially within the draft Order Limits (A1, A2, A3, A4, A5, A6, A7).

# Historic Landscapes

- The draft Order Limits cross a number of historic landscapes which are largely dictated by the topographic and geological context in which they lie. The draft Order Limits straddle five National Character Areas (NCA): the Yorkshire Wolds (NCA 27), the Humberhead Levels (NCA 39), the Trent and Belvoir Vales (NCA 48), Holderness (NCA 40), and the Humber Estuary (NCA 41), although it intersects the latter two of these only slightly.
- In broad terms, the Project can be best defined by the three principal NCA regions, the Yorkshire Wolds (NCA 27), the Humberhead Levels (NCA 39), and the Trent and Belvoir Vales (NCA 48), in which the draft Order Limits fall, each of which holds distinct historic environment features. These have overarching characteristics, but in some instances also contain specific and more narrowly defined historic landscapes which warrant further attention.
- Of particular importance in the 1 km study area is the historic landscape of medieval to post-medieval Risby Hall, in the Yorkshire Wolds NCA, which evolved from the 16<sup>th</sup> century onwards. It not only encapsulates two scheduled monuments (NHLE 1015312, NHLE 1018600), a grade II registered park and garden (NHLE 1001419) and a grade II listed building (NHLE 1161815), but also extends beyond the designated assets to encompass the vestigial remains of the former 16<sup>th</sup> century deer park and later pleasure gardens.
- The non-designated parkland estate of the grade II listed post-medieval Yokefleet Hall (NHLE 1352658) and its earlier medieval predecessor is also considered to be a landscape of historic interest. Although it has been degraded by recent developments and conversion to agricultural use, the estate retains many of the grand features typical of the medieval and post-medieval periods.
- The Isle of Axholme in North Lincolnshire is also considered of particularly high value and is explicitly protected by the adopted and emerging North Lincolnshire Local Plans (see section 10.2). Located in the flat marshlands of the Humberhead Levels, this island became elevated above the surrounding landscape through the erosion of the three rivers that formerly surrounded it. The old River Don (now diverted) flowed to the north and west, while the River Idle (now canalised) flowed to the west and south and the River Trent continues to flow to the east. This topographic situation meant the Isle of Axholme was both fertile and relatively well-drained from the late prehistoric onwards

and became particularly densely settled in the medieval period. Aside from the successful efforts to drain the surrounding marshlands in the 17<sup>th</sup> century, the Isle of Axholme has remained largely unchanged and retains many of the medieval settlement patterns, lanes, strip field systems, droveways and other features typical of the period. The local designation emphasises the regional and national interest of the Isle of Axholme as a well-preserved palimpsest of the medieval agricultural landscape.

#### **Future Baseline**

- Predicting future baseline requires projecting forward any trends in change and considering how they may affect the baseline conditions over time. The nature of future baseline is influenced by a combination of natural and human processes, including climate change.
- As detailed in **Chapter 5 Approach to the PEIR**, a review has been undertaken to determine whether the existing baseline conditions might change between the time of undertaking the assessment and the future years in which the Project is planned to be constructed and become operational, as a result of future planned development.
- Consideration was given to the following development-related changes that could potentially alter the historic environment in the future:
  - a) The partial or total loss of known or potential buried archaeological resources within the draft Order Limits or known above-ground assets within the 1 km study area as a consequence of land being disturbed or developed.
  - b) Changes to the sensitivity (value) and significance of assets within the 3 km study area through the introduction of new development or the removal of existing structures in their setting.
- The review evaluated the committed developments summarised in **Chapter 21 Cumulative Effects** of the PEIR and involved:
  - a) The identification of any permitted developments within the assessment cumulative study area that have yet to be implemented.
  - b) Analysis of the likely historic environmental effects and planned timescales for each identified development.
  - c) An assessment of the potential for each identified committed development to change the existing baseline conditions in the Construction Year (2028) and Opening Year (2032), in the manner described above.
- Although a small number of the committed developments are expected to form part of, and influence, the future baseline conditions of the study area (These are identified in Chapter 21 Cumulative Effects, at section 21.6). The review concluded that there would be no material change to the form, character and appearance of the historic environment in year 2028 or year 2032.
- Accordingly, the preliminary assessment does not consider future baseline conditions further.

# 10.6 Mitigation

# **Embedded Mitigation Measures**

- Environmental appraisal has been an integral part of the Project design from the outset, which has meant that the Project has been able to avoid environmentally sensitive features as far as reasonably practicable. National Grid has also embedded measures into the design of the Project to avoid or reduce significant effects that may otherwise be experienced during construction and operation (and maintenance) of the Project.
- Embedded measures are those that are intrinsic to and built into the design of the Project, which have been presented in Table 4.2 in **Chapter 4 Description of the Project**. Those Measures of relevance to the Cultural Heritage chapter include:
  - Sensitive Routeing and Siting to develop the draft overhead line alignment, siting of substations and draft Order Limits.
  - Close parallel sections
  - River Ouse crossing

# **Control and Management Measures**

- Control and management measures, comprising management activities and techniques, will be implemented during construction of the Project to limit effects through adherence to good site practices and achieving legal compliance.
- A Draft Outline Code of Construction Practice (CoCP) is provided in **Appendix 4.1 Draft Outline CoCP** in Volume 3. Measures contained in the Draft Outline CoCP that are relevant to the control and management of impacts that could affect the cultural heritage assessment are:
  - GG03 The following environmental management plans will be produced prior to construction.
    - Code of Construction Practice (CoCP)
    - Register of Environmental Actions and Commitments (REAC)
    - Construction Traffic Management Plan (CTMP)
    - Soil Management Plan (SMP)
    - Public Rights of Way Management Plan
    - Materials and Waste Management Plan (MWMP)
    - Noise and Vibration Management Plan
    - Landscape and Ecology Management Plan (LEMP) including an Outline Landscape Maintenance and Management Plan
    - Archaeological Written Scheme of Investigation (WSI)
  - GG05 A suitably experienced Environmental Manager will be appointed for the
    duration of the construction phase. In addition, a qualified and experienced EnvCoW
    will be available during the construction phase to advise, supervise and report on the
    delivery of the mitigation methods and controls outlined in the CoCP. The EnvCoW
    will monitor that the works proceed in accordance with relevant environmental DCO
    requirements and adhere to the required good practice and mitigation measures.

- The EnvCoW will be supported as necessary by appropriate technical specialist advisors, including archaeologists, ecologists, soil scientists, and arboriculturists.
- H01 Locations of known archaeological or heritage interest/value, or areas where archaeological work is planned, will be signposted/fenced off to avoid unintentional damage. Construction workers will be informed of relevant measures through toolbox talks.
- H02 Where a previously unknown heritage asset is discovered, or a known heritage
  asset proves to be more significant than foreseen at the time of application, the work
  will stop and the Project will consult an archaeologist and inform the local planning
  authority to agree a solution that protects the significance of the new discovery, so
  far as is practicable, within the Project parameters or provide appropriate
  archaeological mitigation measures.
- H03 Where practicable, maintain elements within the historic landscape such as vegetation and hedgerows (including re-instating hedgerow, fences and wells).
- H04 Archaeological mitigation in the form of excavation and recording. This will be specified through an Archaeological Written Scheme of Investigation.
- LV04 Construction lighting will be directional and minimised where possible.
- NV01 Construction working will be undertaken within the agreed working hours set out within the DCO. Best practicable means to reduce construction noise and limit effects on perceptual aspects of landscape, such as tranquillity, will be set out within the CoCP.

### **Additional Mitigation Measures**

Additional mitigation comprises measures over and above any embedded and standard mitigation measures, for which assessment within this PEIR has identified a requirement to further reduce significant environmental effects. The preliminary assessment reported in this PEIR has not identified any requirements for additional mitigation at this stage, over and above the embedded or control and management measures identified. This will continue to be reviewed as the assessment progresses and the preliminary design develops further.

# 10.7 Preliminary Assessment

- This section first identifies the potential effects that could occur as a result of the construction and operation of the Proposed Overhead Line. The preliminary assessment is then presented for the 11 Route Sections as described in **Chapter 4**Description of the Project. The preliminary assessment of the Proposed Substation Works is presented in **Chapter 20 Substations and Associated Works**.
- The preliminary assessment takes into account the embedded, control and management, and additional mitigation measures as set out in section 10.6.

#### **Potential Effects**

The potential for the Proposed Overhead Line to result in likely significant effects on cultural heritage receptors was determined through the EIA Scoping process. This section lists those potential effects that have been scoped into the assessment within the Scoping Report (Ref 10.29) taking into account the comments received within the

Scoping Opinion (Ref 10.28). Where the scope has been amended since the Scoping Report (Ref 10.29), explanatory text has been included to provide justification for this change.

- Significant permanent negative effects on known non-designated assets have been considered where the asset is located within the draft Order Limits and where the Proposed Overhead Line's construction and operation activities could result in direct impacts. These effects on remains would arise from physical impacts caused by removal of the whole or a large proportion of the recorded asset in construction working areas. A table of known non-designated assets is included below for each Route Section of the Project
- In addition to these assets, there is a potential for previously unrecorded archaeological assets to be present within the draft Order Limits which may also be subject to significant permanent negative effects. These will be further investigated through desk-based assessment and a programme of archaeological evaluation, but any archaeological assets identified through forthcoming assessments could be subject to significant effects.
- Mitigation in the form of archaeological investigations and recording may be proposed for both known and previously unrecorded archaeological assets, depending on their heritage value.
- Non-designated assets consisting of find spots within the draft Order Limits have been excluded from this assessment as, by their nature, they have already been removed from their archaeological context and can no longer be impacted. However, the evidential value of such find locations has been considered in determining the archaeological potential of specific fields within the Project and will be further investigated through proposed field surveys.
- Historic landscapes are composed of a number of above and below ground features which, together, form a legible landscape representative of a period, region, estate, or other landscape of historic interest. Historic landscapes have varying degrees of sensitivity to change based on their integrity, extent, legibility, and rarity both regionally and nationally. Historic landscapes can lose legibility from both the removal of relevant features of the landscape of through the introduction of infrastructures that degrade our ability to understand and appreciate the nature and historical aspects of the landscape. The effects can be temporary, such as from the removal and reinstatement of hedgerows, or permanent, such as from the introduction of new built environment. Mitigation, where possible, is embedded in the design.

#### Construction

- The potential effects that could result from the construction of the Proposed Overhead Line are:
  - Potential for permanent physical impacts to non-designated heritage assets.
  - Potential for permanent physical impacts to designated heritage assets.
  - Potential for permanent physical impacts on historic landscapes.
  - Potential for temporary impacts on designated heritage assets as a result of changes to their setting.
  - Potential for temporary impacts on non-designated heritage assets as a result of changes to their setting.

#### **Operation**

- The potential effects that could result from the operation of the Proposed Overhead Line are:
  - Potential for permanent impacts to designated heritage assets as a result of changes to their setting.
  - Potential for permanent impacts to non-designated heritage assets as a result of changes to their setting.
  - Potential for permanent impacts to historic landscapes as a result of changes to their setting.

#### Maintenance

In accordance with the PINS Scoping Response (Ref 10.28), the assessment of the maintenance of the Proposed Overhead Line includes consideration of impacts arising through physical impacts to heritage assets as a result of maintenance activities, and through change to the setting of heritage assets. The assessment of the impact of vehicular traffic arising from maintenance activities has been scoped out.

## **Nighttime lighting**

Since submission of the Scoping Report (Ref 10.29), potential cultural heritage effects of nighttime lighting have been scoped out of this assessment because there is no nighttime lighting associated with either the construction or operational phases of the Project (limited lighting may be used during periods of shorter days up to 8pm).

# Route Section 1: Creyke Beck to Skidby

This section provides a preliminary assessment of the Proposed Overhead Line. The preliminary assessment of the Proposed Substation Works at Birkhill Wood is presented in **Chapter 20 Substations and Associated Works**.

#### **Designated heritage assets**

- Route Section 1 runs approximately 600 m to the north of the existing 4ZQ 400 kV overhead line at a level of elevation approximately 8-10m higher than the existing route. It would therefore extend the visual effects of high-voltage infrastructure across a wider geographical area than the existing overhead line.
- There is potential for significant construction and, particularly, operational effects on the designated heritage assets listed below in this Route Section due to changes to their setting. This relates mainly to views of construction activities and associated infrastructure and views of the finished Proposed Overhead Line within the setting of heritage assets, where setting has been assessed as contributing to their heritage value. The confidence level for the following predictions is Moderate.
- Aside from those assets listed below, there is also the very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Low.

#### Scheduled monuments

- There are seventeen scheduled monuments within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which significant effects are predicted on one scheduled monument.
- The scheduled remains of high value of Risby Jacobean gardens, hall and medieval settlement (NHLE: 1018600), of high value, are situated approximately 100 m from the proposed maintenance track and 450 m north of the proposed overhead line. This scheduled monument would be directly affected by construction and operation of pylons 4AF9 to 4AF16 which would be located within views southward from the asset that were formerly part of the designed setting of the now demolished hall and gardens. Views in this direction would have terminated at the edge of the plateau to the south on which the pylons would be located. The existing 4ZQ overhead line is at a lower level of elevation than the Project, with only the upper portions of the existing pylons visible in this view. The Proposed Overhead Lines would introduce pylons closer to the asset and at a higher elevation where they will be a prominent feature of the view, with the existing overhead line sitting behind. This would detract from the appreciation of the intended views to and from the monument and degrade its setting.

#### Conservation areas

- There are five conservation areas within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which significant effects are predicted on one.
- Skidby Conservation Area, of medium value, would be directly affected by construction and operation of pylons 4AF9 to 4AF16, located approximately 900 m from the conservation area, on the ridge to the north that is identified as positively contributing to the setting of the conservation area in the Skidby Conservation Area Appraisal (Ref 10.30). The Proposed Overhead Line would be located at approximately 10 m higher elevation than the existing overhead line to the north of the conservation area and would be a prominent feature in views within the wider landscape around the conservation area and on its approaches. A cautious approach to assessment at this preliminary stage identifies a potential significant effect to the conservation area. No impacts are predicted on the individual listed buildings inside the conservation area due to the screening effects of intervening buildings.

#### Registered Parks and Gardens

There is one Registered Park and Garden within the study area in this Route Section (see Appendix 10.1 Gazetteers of Cultural Heritage Assets). Risby Hall Grade II Registered Park and Garden (NHLE: 1001419), of medium value, is located 20 m north of the draft Order Limits. It would be directly affected by construction and operation of pylons 4AF9 to 4AF16 within its setting, in designed views from within the park overlooking the plateau to the south. This includes views from the scheduled monument of Risby Jacobean Hall and Garden (NHLE: 1018600) discussed above. The Proposed Overhead Line will also be present in wider views, of lesser importance, of the park within the surrounding rural landscape and from its access routes. No impacts are predicted on the grade II listed Folly in Fishpond Wood (NHLE: 1161815), of medium value, within the parkland boundary due to its enclosed setting within the park with mature woodland planting screening any views towards the Proposed Overhead Line from within the asset's setting.

## Listed buildings

There are 30 listed buildings within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**) and no potential significant effects are predicted.

# Non-designated Heritage Assets and Historic Landscape

Five non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, none of which are likely to experience significant effects, as presented in Table 10.6.

Table 10.6 - Non-designated assets within Route Section 1

Reference	Description	Asset value	Impact	Significant effect	Confidence level
A2	Linear cropmarks in 'X' shape visible on Historic England aerial photographs 28191_044 - 047	Low	Limited impact from non-intrusive maintenance track	No	Low
HHER 7845	Post-medieval farmstead of Platwoods Farm, Beverley Road	Low	Non-intrusive maintenance track crossing through asset and setting change from pylons 4AF6 and 4AF7 and overhead lines	No	Low
HHER 9237	Post-medieval Beverley-Skidby- Hessle Ferry Turnpike	Low	No impact	No	Low
HHER 12805	Post-medieval site of Dunflat Gate	Low	Partial loss and truncation from groundworks for the construction of bellmouth and haul road	No	Low
HHER 12530	Post-medieval Oldgate Skidby to Bentley Road	Low	Partial loss and truncation from groundworks for the construction of haul road maintenance track	No	Low

- No potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER this Route Section. The confidence level in this prediction is Low.
- No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 2: Skidby to A63 Dual Carriageway

# **Designated heritage assets**

- Route Section 2 extends from the village of Skidby to the A63 dual carriageway on the western edge of the Yorkshire Wolds. From proposed pylon 4AF19 to the south of little Weighton the proposed line runs in close parallel with the existing. In this Route Section, there is a line swap as described in **Chapter 4 Description of the Project.**There is potential for significant construction and, particularly, operational effects on designated heritage assets listed in this Route Section due to changes to their setting. This relates mainly to views of construction activities and infrastructure and views of the finished Proposed Overhead Line within the setting of heritage assets where setting has been assessed as making a contribution to their heritage value.
- During construction of the proposed line swap, it would require two temporary pylons as explained in **Chapter 4 Description of Project** This would increase the temporary impacts of the Proposed Overhead Line during construction on the setting of heritage assets affected by views towards the Proposed Overhead Line. However, once constructed, the two lines would run broadly in close parallel alignment. This would concentrate changes to the setting of heritage assets within an already affected corridor, minimising the impact to heritage assets. The confidence level for the following predictions is Moderate.
- Aside from those assets listed below, there is also the very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Low.

#### Scheduled monuments

There are no scheduled monuments within the study area in this Route Section.

#### Conservation areas

There are four conservation areas within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), and no potential significant effects are predicted.

# Listed buildings

- There are fifteen listed buildings within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which significant effects are predicted three forming an asset grouping at Rowley Manor.
- An asset grouping at Rowley Manor comprising the Grade II\* listed Church of St Peter (NHLE: 1347015), of high value, the Grade II listed Rowley Manor (NLHE: 1161824), formerly its rectory, of medium value, and the associated grade II listed Ha-Ha at Rowley Manor Hotel (NHLE: 1103382), also of medium value, is located approximately

350 m north of the draft Order Limits. The assets would be directly affected by the construction and operation of pylons 4AF24 to 4AF27 within their setting. These are located within designed views from the Georgian former rectory building southward over its non-designated garden and park (A21), including the ha-ha. The Proposed Overhead Line would also be present in the landscape where there are wider views of the former rectory sitting within its grounds, next to the Church of St Peter, from the south, and from the historic and existing access route into the park, church and former rectory, from the west. These views already feature the existing 4ZQ 400 kV overhead line which will be closely paralleled by the Proposed Overhead Line in this location. Mitigation planting is proposed to the south of the existing 4ZQ 400 Kv occupying the extent of a former woodland shown on mid-19<sup>th</sup> century mapping as Socken Wood, and formerly located within the key views southward from Rowley Manor that are affected by the Proposed Overhead Line.

# Non-designated heritage assets and historic landscape

Nineteen non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, two of which are likely to be subject to significant effects as presented in Table 10.7.

Table 10.7 - Non-designated assets within Route Section 2

Reference	Description	Asset value	Impact	Significant effect	Confidence level
A8, A12, A14	Old chalk pits of unknown date shown on 1 <sup>st</sup> Edition OS map	Low	Partial loss and truncation from groundworks for the construction of the haul road and limited impacts from operation of the maintenance track	No	High
A10, A11, A13	Circular Earthworks of unknown date shown on 1 <sup>st</sup> Edition OS map	Low	Limited impacts from operation of the maintenance track	No	High
HHER 21701	Iron Age to Roman enclosures and boundary ditches	Medium	Limited impacts from installation of crossing protection scaffolding	No	Low
HHER 6594	Trackway and field ditches of unknown date	Medium	Partial loss and truncation from groundworks for the construction	No	Low

Reference	Description	Asset value	Impact	Significant effect	Confidence level
			of the haul road and limited impacts from operation of the maintenance track		
HHER 12532	Extant post- medieval Walk Farm	Low	Partial loss and truncation from groundworks for utility diversion and setting change from pylons 4AF18 and 4AF19 and overhead line	No	High
HHER 6595	Iron Age to Roman ditch system, track & enclosure	Medium	No impact	No	High
HHER 6593	Two Bronze Age round barrows	Medium	Limited impacts from operation of the maintenance track	No	Low
HHER 3531	Iron Age to Roman enclosures	Medium	Partial loss and truncation from groundworks for pylon 4AF24, haul road, limited impact from operation of the maintenance track	Yes	Low
HHER 6710	D-shaped enclosures and ditches of Iron Age to Roman date	Medium	Partial loss and truncation from groundworks for the construction of the haul road and limited impacts from operation of the maintenance track	No	Moderate
HHER MHU24397	Undated cropmarks of two possible	Low	Partial loss and truncation from groundworks for the construction	No	Moderate

Reference	Description	Asset value	Impact	Significant effect	Confidence level
	intersecting ditches		of Pylon 4AF27 and haul road		
HHER 7915	Undated ditches	Low	Partial loss or truncation from mitigation planting area	No	Low
HHER 12423	Site of undated building shown on historic maps	Low	Limited impacts from operation of the maintenance track	No	High
HHER 7515	Prehistoric trackways & enclosures northwest of Field House Farm	Medium	Partial loss and truncation from groundworks for the construction of pylon 4AF32 and haul road and limited impacts from operation of maintenance track	Yes	Low
HHER 6646	Undated linear ditches	Low	Partial loss and truncation from groundworks for the construction of the haul road and bellmouths. Limited impact from the installation of the construction road (panelled) and operation of the maintenance track	No	High
HHER 6653	Possible medieval lynchets	Low	Partial loss and truncation from groundworks for the construction of pylon 4ZQ77 and haul road. Limited impact from operation of the maintenance track	No	High

- No potential significant effects have been identified in relation to impacts arising from change to the setting of non-designated built heritage assets recorded in the HER in this Route Section. The confidence in this prediction is Low.
- No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 3: A63 Dual Carriageway to River Ouse Crossing

# **Designated heritage assets**

- The route runs broadly in close parallel alignment to the existing 400 kV overhead line through this Route Section and includes a line swap over. Whilst this would concentrate changes to the setting of heritage assets within an already affected corridor, minimising the impact to heritage assets, there is still potential for significant construction and, particularly, operational effects on a designated heritage asset in this Route Section due to change to its setting. This relates mainly to views of construction activities and associated infrastructure and views of the finished Proposed Overhead Line within the setting of heritage assets, where setting has been assessed as contributing to their heritage value. The confidence level for this the following predictions is Moderate.
- Aside from those assets listed below, there is also the very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Low.

#### Scheduled monuments

- There are four scheduled monuments within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**) and no potential significant effects are predicted.
- Romano-British villa at Cockle Pits, of high value, near Brantingham (NHLE: 1014736), is situated approximately 5 m from the draft Order Limits but approximately 50 m from the nearest intrusive groundworks (compound and utility diversion). Although partly excavated in the mid-20<sup>th</sup> century, the scheduled monument retains many of its internal structures and is of high value. The excavations revealed a very large central room with tessellated floor and a corridor leading to four other rooms, three of which also had tessellated floors. Excavations of cropmarks to the west of the villa in 1983 revealed Iron Age ditched enclosures and field systems overlain by 2<sup>nd</sup> and 4<sup>th</sup> century Roman remains, suggesting a long period of continuous occupation transitioning from the Iron Age to the Roman period. Prehistoric and Romano-British finds recorded throughout the surrounding fields may relate to this scheduled villa and indicate the presence of a wider archaeological landscape spanning several centuries.
- A number of nearby archaeological assets contribute to the asset's value by providing context, including cropmarks adjacent to the villa (A20), a possible Bronze Age to Iron Age settlement complex to the north of the villa (HER 6651), an inhumation burial (HER 2953), and the Brough to York Roman Road (HER 63), all of which form part of the asset's setting and lie partially or wholly within the draft Order Limits. While no impacts to the fabric of the scheduled monument are expected, remains relating to the scheduled monument could be truncated or removed by several construction activities, including the erection of a large main compound at the intersection of Cave Road and The Outang, southwest of Brantingham. These would not, however, reduce the asset's archaeological and historical interest, which is largely derived from the archaeological

remains preserved in the scheduled area itself. Therefore, while the Proposed Overhead Line could result in a loss of the associated archaeological context, the asset itself would not be subject to significant effects.

#### Conservation areas

There are three conservation areas within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), and no potential significant effects are predicted.

## Listed buildings

There are twelve listed buildings within the study in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**) and no potential significant effects are predicted.

## Non-designated heritage assets and historic landscape

Twenty-six non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, eight of which are likely to be subject to significant effects as presented in Table 10.8.

Table 10.8 - Non-designated assets within Route Section 3

Reference	Description	Asset value	Impact	Significant effect	Confidence level
HHER 63	Brough to York Roman Road	Medium	Partial loss and truncation from groundworks for the construction of pylon 4ZQ73, haul road, compound, and bellmouths. Limited impact from installation of crossing protection scaffolding and operation of maintenance track	Yes	Low
HHER 6651	Bronze Age to Iron Age settlement complex	Medium	Partial loss and truncation from groundworks for the construction of pylons 4ZQ73 and 4ZQ74, haul road. Limited impacts from operation of maintenance track and installation of construction track (panelled) and crossing protection scaffolding	Yes	High

Reference	Description	Asset value	Impact	Significant effect	Confidence level
A20	Cropmarks of ring ditches, field systems, trackways and other features	Medium	Partial loss and truncation from groundworks for the construction of compounds, haul road, and utility diversion	Yes	High
HHER 12236, A15	Limestone quarries, chalk pits and limekilns	Low	Limited impact from operation of maintenance track	No	High
HHER 2953	Undated burial	Medium	Removal (if still present) of asset from construction of compound	Yes	Low
HHER 23118	Possible historic hedgerow	Low	Partial loss and truncation from groundworks for utility diversion	No	High
HHER 21657	Iron Age and/or Romano- British trackways, boundary ditches and enclosures	Medium	No impact in field with recorded cropmarks but could extend beyond known extent. Located 60-100 m from pylons 4AF52 and 4AF53, haul roads, maintenance tracks which could result in localised removal	No	Low
HHER 6628	Ditches, enclosures and trackways	Medium	No impact in field with recorded cropmarks but could extend beyond known extent. Located 50m from pylon 4AF53, haul road, construction road (panelled), maintenance tracks which could result in localised removal	No	Low
HHER MHU22605, HHER MHU22607, HHER MHU22608	furrow	Low	Partial loss and truncation from groundworks for the construction of pylons, haul road and compounds as well as from utility diversion and	No	High

Reference	Description	Asset value	Impact	Significant effect	Confidence level
			road upgrades/widening. Limited impacts from installation of crossing protection scaffolding and construction track (panelled), and from operation of maintenance track		
HHER 154	Site of hamlet of Provence	Medium	No impact; asset is 30 m from pylon 4AF55	No	High
HHER 173	Medieval flood bank	Low	Partial loss and truncation from groundworks for road upgrades/widening	No	High
HHER MHU25614	Post- medieval field boundaries near Broomfleet	Low	Partial loss and truncation from groundworks for construction of pylon 4AF58 and haul road and for utility diversion	No	Low
HHER MHU25633	Medieval or post-medieval field boundaries near Blacktoft	Low	Partial loss and truncation from groundworks for construction of pylon 4AF63 and haul road	No	Low
HHER 18089	Site of Oxmardyke deserted medieval village	Medium	Partial loss and truncation from groundworks for road upgrades/widening	No	Low
HHER 21542	Prehistoric to Roman cropmark complex	Medium	Road upgrades/widening and construction of haul road, bellmouth and compound	Yes	Moderate
HHER MHU22613	Trackway near Blacktoft	Low	Partial loss and truncation from groundworks for construction of haul road	No	Moderate
HHER 2930	Iron Age settlement complex	Medium	Partial loss and truncation from groundworks for	Yes	Low

Reference	Description	Asset value	Impact	Significant effect	Confidence level
			construction of pylon 4AF67 and haul road		
HHER 2916	Site of post- medieval poor house	Medium	Partial loss and truncation from groundworks for construction of pylon 4AF67 and haul road	Yes	Low
HHER MHU12925	Site of post- medieval poor houses	Medium	Limited impact from operation of maintenance track	No	High
HHER 21637	Medieval moat and pond	Medium	No impact	No	Medium
HER 2913	Trackway and enclosures	Low	Partial loss and truncation from groundworks for construction of pylon 4AF69 and haul road	No	Low
HHER 2937, HHER 2933	deserted	Medium	Partial loss and truncation from groundworks for construction of pylons 4AF469 and 4AF470, haul road, bellmouths. Limited impact from installation of crossing protection scaffolding and construction track (panelled)	Yes	Low

- No potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Route Section. The confidence in this prediction is Low.
- No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 4: River Ouse Crossing

#### **Designated heritage assets**

The Proposed Overhead Line crosses the River Ouse to the west of the existing 4ZQ 400 kV overhead line, but it does closely parallel the existing overhead line through this Route Section. It would increase the influence of the existing infrastructure through this Route Section, making pylons a more prominent element in the landscape. This Route Section also includes two taller pylons required on either side of the River Ouse.

- There is potential for significant construction and particularly operational effects on designated heritage assets listed in this Route Section due to changes to their setting. This relates mainly to views of construction activities and associated infrastructure and views of the finished Proposed Overhead Line within the setting of heritage assets, where setting has been assessed as contributing to their heritage value. The confidence level for the following predictions is Moderate.
- Aside from those assets listed below, there is also the very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Low.

#### Scheduled monuments

- There are two scheduled monuments within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which significant effects are predicted on one.
- Hall Garth Moated Site, associated drainage channels and fishpond (NHLE 1013190) is 10.7.50 an asset of high value located adjacent to the proposed overhead line and pylons 4AF79 and 4AF80 and located partly within the draft Order Limits where a proposed access track and utility diversion bisect it. The scheduled monument is of high value due to the well-preserved earthworks comprising two enclosed, but linked islands raised above the surrounding Humberhead Levels. Stone foundations have been noted and it is possible that the hall's foundations and buildings survive below ground. Extensive and deeply incised drainage channels and an associated fishpond are visible in the immediate vicinity of the asset but, based on LiDAR imagery, do not appear to extend to the surrounding fields. These drainage channels likely contain well-preserved waterlogged organic remains which will be of both archaeological and environmental interest. Designed to dominate and control the surrounding agricultural land, the islands are raised approximately 1 m above the surrounding landscape, a feature which would have made the manor particularly visible from the River Ouse to the north of the monument.
- Such raised moated sites are demonstrably rare across Yorkshire and Lincolnshire where they tend to lie level with the surrounding countryside (Ref 10.31). The earthwork's prominence is visible today from the open fields to the west and south as well as from the road north of the scheduled monument. As such the upstanding earthworks, that are currently under pasture, still allow one to understand and experience the monument within its medieval to post-medieval agricultural landscape. The addition of post-medieval and more modern buildings in the village of Ousefleet to the northeast, post-medieval hedgerows and modern overhead to the east, detract from the monument's setting but do not wholly erode it. The Proposed Overhead Line would introduce prominent pylons and conductors immediately northwest, southwest and south of the monument, resulting in it being surrounded on all sides by the proposed and existing overhead lines.
- Associated intrusive construction activities have the potential to truncate or remove associated archaeological remains and possibly limited dewatering due to the proximity of excavations to the surviving drainage channels and pond. The Proposed Overhead Line proposes to divert and underground an existing 11 kV overhead line which currently oversails the scheduled monument, which would constitute a small beneficial impact. A single 11 kV overhead line pole would be removed from within the scheduled area, but this pole would be cut at ground level and left *in situ* to avoid causing any ground disturbance within the scheduled monument. Nevertheless, changes to the

asset's setting through the possible removal of associated archaeology and the introduction of new infrastructure in its immediate vicinity would constitute a significant effect.

#### Listed buildings

- There are thirteen listed buildings within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which significant effects are predicted on three assets / groups of assets.
- An asset grouping at Yokefleet Hall comprising the Grade II listed Yokefleet Hall (NHLE: 10.7.54 1352658) and its associated Grade II listed West Lodge and Gates, Gate Piers Connecting Wall, Railings and Outer Piers (NHLE: 1083334), of medium value, and its non-designated East Lodge (HER: MHU14481) and non-designated parkland garden (A22), is located immediately to the west of the draft Order Limits. The assets would be directly affected by construction and operation of pylons 4AF76 to 4AF80. The route lies within designed views from within the park, which provides the assets' setting, overlooking the river to the south. It would also lie within wider views of the park from within the surrounding landscape, notably from the opposite side of the river, from the east of the park on approach along the riverbank, and from the accesses into the park on its north side, each of which is marked with a lodge building reflecting the architectural detailing of the hall. Views westward from Yokefleet Hall (NHLE: 1352658), toward to the closest and largest pylons, are screened generally by mature vegetation. but views of the route across the river will be possible from the hall and these already feature the existing overhead line as a detracting aspect of its setting. The Proposed Overhead Line will introduce new infrastructure of the same type in closer proximity to the asset.
- Grade II listed Lighthouse on bank of River Ouse (NHLE: 1346751), of medium value, is located approximately 175 m west of the draft Order Limits. It would be directly affected by construction and operation of pylons 4AF76 to 4AF80. These are located within views of the lighthouse from the asset's surroundings, particularly on the river where the function and historic interest of the asset is best understood, but also from the land on both sides of the river where the prominence of the asset, a key component of its design and function, is currently compromised by the existing overhead line in this Route Section, and where it will be further compromised by the construction and operation of the Proposed Overhead Line. The Proposed Overhead Line introduces further detracting infrastructure into the asset's setting, which is closer to the asset and contains the two tallest pylons on the route to facilitate crossing the River Ouse.
- Grade II\* listed Whitgift Hall Including Attached Walls to the North, Outbuildings and Screen Wall to the Southeast (NHLE: 1083149), of high value, is located approximately 550 m west of the draft Order Limits. It would be directly affected by operation of pylons 4AF76 to 4AF80 to the east of the hall, where the Proposed Overhead Line is located in views from the later bow windows of the hall's east elevation. Whilst this is not the building's principal façade, and views already feature the existing overhead line, the Proposed Overhead Line would introduce further detracting infrastructure into the setting eastward of the hall, which would be closer to the asset and contain the two tallest pylons on the route to facilitate crossing the River Ouse. The construction of the Proposed Overhead Line will also have an impact upon this asset; however, it is not considered that this would result in a significant effect. Significant effects are also not predicted in relation to the construction and operation of the Proposed Overhead Line within the settings of the hall's associated Grade II listed buildings (NHLE: 1162208; 1083150; 1162178; 1346752), of medium value. This is due largely to their lower level

of sensitively to change, but it is also due to the historically more functional nature of these buildings. Views from these towards the Proposed Overhead Line are not as important an aspect of their setting as the views from the hall towards the Proposed Overhead Line.

# Non-designated heritage assets and historic landscape

Two non-designated assets have been identified as partially or wholly within the draft Order Limits, which is unlikely to be subject to significant effects as presented in Table 10.9.

Table 10.9 - Non-designated assets within Route Section 4

Reference	Description	Asset value	Impact	Significant effect	Confidence level
HHER MHU22605	Medieval ridge and furrow	Low	Partial loss and truncation from groundworks for construction of pylons, haul roads, compounds and utility diversion. Limited impact from installation of construction track (panelled) and operation of maintenance track	No	High
A22	Yokefleet Hall 19 <sup>th</sup> century garden	Low	No physical impact, asset is partially oversailed by the Proposed Overhead Line. Change to setting through presence of the Proposed Overhead Line.	No	Moderate

Aside from the effect noted above in relation to the non-designated East Lodge (HER MHU14481) to the Grade II listed Yokefleet Hall (NHLE 1352658), no other potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Route Section.

No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 5: River Ouse Crossing to Luddington

### **Designated heritage assets**

The route runs broadly in close parallel alignment to the existing 4ZQ 400 kV overhead line through this Route Section. This would concentrate the visual impact resulting from the changes to the setting of heritage assets within an already affected corridor, rather than introducing new detracting features into an area not currently affected by this type of infrastructure. This assists in limiting impacts to heritage assets to those already somewhat affected by this type of development within their setting. There is one scheduled monument, two conservation areas and 21 listed buildings within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**). No significant effects are predicted on designated heritage assets in this Route Section. The confidence level for this prediction is Moderate.

There is very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Moderate.

# Non-designated heritage assets and historic landscape

Eleven non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, none of which are likely to be subject to significant effects as presented in Table 10.10.

Table 10.10 - Non-designated assets within Route Section 5

Reference	Description	Asset value	Impact	Significant effect	Confidence level
A4	Linear cropmarks visible on Historic England aerial photographs 28148_001 - 006	Low	Partial loss and truncation from groundworks for construction of haul road and possibly of pylon 4AF85	No	Low
NLHER 15778	Post-medieval Adlingfleet Drain	Low	Limited impact from installation of temporary access bridge for haul road	No	High
NLHER 11038	Undated ditches and field boundaries	Low	Partial loss and truncation from groundworks for construction of haul road	No	Low

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NLHER 15417	Post-medieval warping drains along Haldenby Moor and Common	Low	No impact	No	High
NLHER 1348, NLHER 1349	Fockerby Mount medieval circular moated site	Medium	Limited impact from operation of maintenance track	No	High
NLHER 22552	Site of early 20 <sup>th</sup> century Fockerby Branch Railway	Low	Partial loss and truncation from groundworks for construction of haul road	No	High
NLHER 1348	Former course of the River Don	Low	Partial loss and truncation from groundworks for construction of haul road	No	High
NLHER 11044	Medieval open field system, ridge and furrow and ditches	Low	Partial loss and truncation from groundworks for construction of bellmouth and haul road as well as from road upgrades/widening	No	High
NLHER 22751	Palaeochannel of possible prehistoric date	Low	Partial loss and truncation from groundworks for road upgrades/widening	No	High
NLHER 19585	Medieval drain known as the Maredyke	Low	Partial loss and truncation from groundworks for construction of haul road and bellmouth. Limited impact from installation of crossing protection scaffolding and operation of the maintenance track	No	High

- No potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Route Section. The confidence in this prediction is Low.
- No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 6: Luddington to M180 Motorway

# **Designated heritage assets**

- In this section the route of the proposed 400 kV overhead line moves away from being in parallel or close parallel with the existing overhead line. It also crosses the existing ZDA 400 kV overhead line which runs east to west through Route Section 6. This crossing is explained in **Chapter 4 Description of the Project**.
- Whilst these construction works are extensive, they are sufficiently distant from heritage assets and will take place within a landscape already compromised by significant energy generation and transmission infrastructure, including the existing overhead line, Keadby Windfarm and Keadby Power Stations, which form parts of the baseline setting of heritage assets in this Route Section. There is one scheduled monument, one conservation area and 24 listed buildings areas within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**). No significant effects are predicted on designated heritage assets in this Route Section. The confidence level for this prediction is Moderate.
- There is very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Moderate.

#### Non-designated heritage assets and historic landscape

Twenty-one non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, one of which is likely to be subject to significant effects as presented in Table 10.11.

Table 10.11 - Non-designated assets within Route Section 6

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NLHER 25204	Site of unnamed outfarm near Luddington and Haldenby	Low	Limited impact from installation of crossing protection scaffolding	No	High
NLHER 15422, NLHER 15424	Linear soilmarks indicative of post-medieval land	Low	Partial loss and truncation from groundworks for construction of pylons 4AF112 and 4AF113, haul road. Limited	No	Low

Reference	Description	Asset value	Impact	Significant effect	Confidence level
	improvement drains		impact from operation of maintenance track		
NLHER 17470, NLHER 21020	Post-medieval warping drains	Low	Partial loss and truncation from groundworks for construction of haul road, pylons 4AF117 to 4AF120 and from road upgrades/widening and utility diversion. Limited impact from, non-intrusive works to existing pylons ZDA118, ZDA122 and installation of construction track (panelled)	No	Low
NLHER 20933	Linear cropmark	Low	No impact from non- intrusive works to existing pylon ZDA115	No	High
NLHER 21525	Post-medieval landscaped Crowle Park	Low	Limited impact from installation of construction track (panelled) and non- intrusive works to existing pylon ZDA114	No	High
NLHER 18344, NLHER 21066	Undated ditches in Crowle Park	Low	Limited impact from installation of construction track (panelled) and non-intrusive works to existing pylons ZDA113 and ZDA114	No	High
NLHER 9485	Stainforth and Keadby post- medieval canal	Low	No impact	No	High
NLHER 21639	Cropmarks northwest of Pilfrey Farm with possible undated enclosure	Medium	Partial loss and truncation from groundworks for construction of haul road	Yes	Low
NLHER 27195,	Geophysical anomalies marking	Low	Partial loss and truncation from groundworks for	No	Low

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NLHER 27202	possible warping drains		construction of haul Road		
NLHER 8828	Site of former post-medieval Barnsley to Barnetby Railway	Low	No impact	No	High
NLHER 22432	Peat deposit, south soak drain	Low	pw Partial loss and N truncation from groundworks for construction of haul road		High
NLHER 7910	Site of dismantled 20 <sup>th</sup> century Axholme Joint Railway line	Low	No impact	No	High
NLHER 19587	New River Torne 17 <sup>th</sup> century land improvement drain	Low	No impact	No	High
NLHER 19588	South Engine Drain 18 <sup>th</sup> century land improvement drain	Low	No impact	No	High
NLHER 19591	Folly Drain 18 <sup>th</sup> century land improvement drain	Low	Limited to no impact from upgrade road and bridges over and adjacent to drain	No	High
NLHER 21474	Former post- medieval parkland and possible animal cemetery of Temple Belwood Park	Medium	No impacts. Construction of pylons 4AF130 and 4AF131 located 100m from asset, haul road 50m north and east of asset. Overhead line oversails corner of former parkland	No	High
NLHER 906	Site of Temple Belwood Knights Templar camera	Medium	Partial loss and truncation from groundworks for construction of pylon 4AF132 and haul road	No	Low

- No potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Section. The confidence in this prediction is Low.
- With a high degree of confidence, the following historic landscape is likely to be subject to significant effects:
  - The Isle of Axholme is recognised as an area of Special Historic Landscape Interest and North Lincolnshire Council are considering applying for the Isle of Axholme to be granted National Landscape status/ Area of Outstanding Natural Beauty (AONB from Natural England. This includes areas from Crowle, through Belton and Epworth and the surrounding market towns and villages. Policies to ensure the preservation of its medieval landscapes are included in the North Lincolnshire Local Development Framework Core Strategy (Policy CS6). The landscape has changed little since the medieval period and retains several elements of medieval agricultural practices, such as strip fields and extensive surviving ridge and furrow. This has led to a unique landscape, largely devoid of the boundaries and enclosures seen in most of the country. The combination of these features on open ground raised above the surrounding marshland contrasts starkly with the surrounding areas of early and recent enclosed fields.
- The landscape is considered of high value, largely derived from the historic interest based on the survival of extensive medieval features.
- The preferred alignment of the route in this Route Section lies approximately 2.7 km west of the existing overhead line along the northern portion of the Isle of Axholme but approaches and closely parallels the existing alignment east of Belton, continuing south in close parallel to that line through much of the historic landscape before branching west again south of the Isle. The Proposed Overhead Line therefore crosses the breadth of the Isle of Axholme, from north to south, and would introduce substantial new infrastructure to the east of the core settlements of Crowle, Belton and Epworth. It would interrupt key visual connections between the core settlements and those lower down in the Trent valley, such as Beltoft, West Butterwick, and Owston Ferry, although these views have already been degraded by the presence of the existing overhead line.
- 10.7.73 Construction activities may locally truncate or remove areas of surviving ridge and furrow, but the layout of historic field boundaries would largely be retained. While any hedgerow removal within the Isle of Axholme would be temporary and limited to construction phase, it is unlikely that their localised removal would substantially degrade the value of the historic landscape, given that they have largely been introduced in the post-medieval and modern periods. Nevertheless, although individual features of the historic landscape would only be subject to minimal direct changes, the Proposed Overhead Line would result in the incremental industrialisation of the landscape, which would detract from the local rural agricultural and historical character.
- Given its high sensitivity to change, and with a high degree of confidence, the Proposed Overhead Line may result in a significant effect on the locally designated historic landscape of the Isle of Axholme.

# Route Section 7: M180 Motorway to Graizelound

# **Designated heritage assets**

- Route Section 7 runs broadly in close parallel alignment to the existing 400 kV overhead lines. This would concentrate the visual impact resulting from the changes to the setting of heritage assets within an already affected corridor, rather than introducing new detracting features into an area not currently affected by this type of infrastructure. This assists in limiting impacts to heritage assets.
- There are two scheduled monuments, one conservation area and 31 listed buildings within the study area in this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**). No significant effects are predicted on designated heritage assets in this Route Section. The confidence level for this prediction is Moderate.
- There is very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Moderate.

## Non-designated heritage assets and historic landscape

Fifteen non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, two of which are likely to be subject to significant effects as presented in Table 10.12.

Table 10.12 - Non-designated assets within Route Section

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NLHER 21303	Undated cropmarks east of Mill Hill Wood	Low	Limited impact from operation of maintenance track and from installation of construction track (panelled) and crossing protection scaffolding	No	Moderate
NLHER 10735	Medieval ridge and furrow	Low	Limited impact from operation of maintenance track, and from installation of construction track (panelled) and crossing protection scaffolding	No	Moderate
NLHER 20907	Undated cropmarks of enclosures near Cowsitt Hill	Medium	Partial loss and truncation from groundworks for construction of	Yes	Moderate

Reference	Description	Asset value	Impact	Significant effect	Confidence level
			pylon 4AF141 and haul road		
NLHER 25631	Site of post- medieval farmstead of Cowsitt Hill	Low	Partial loss and truncation from groundworks for construction of haul road	No	Low
A6	Linear cropmarks visible on Historic England aerial photographs 28443_010 - 014	Low	Partial loss and truncation from groundworks for construction of bellmouth and haul road. No impact from vegetation clearance	No	Low
NLHER 27152	Earthworks enclosures or field boundaries north of Station Road, east of Haxey	Low	No impact	No	Low
NLHER 20885	Linear cropmarks of unknown date	Low	Limited impact from operation of maintenance tracks	No	Moderate
NLHER 2480	Possible site of Neolithic barrows known as Giants Graves	Medium	No impact, but precise location of asset uncertain. Pylon 4AF146 and 4AF147 both 180 m distant and nearest haul road 150 m distant	No	Low
NLHER 20177	Large Iron Age circular enclosure at High Melwood	Medium	Partial loss and truncation from groundworks for construction of pylon 4AF148 and haul road	Yes	High
NLHER 20222, NLHER 20886, NLHER 10730,	Cropmarks indicative of post-medieval land improvement drains	Low	Partial loss and truncation from groundworks for construction of pylon 4AF158 and haul road as well as from utility	No	Low

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NLHER 2435			diversion. Limited impact from operation of maintenance track		
NLHER 10731	Ditches and field systems of unknown date	Medium	Limited impact from operation of maintenance tracks	No	Moderate
NLHER 19589	Post-medieval Snow Sewer warping drain	Low	No impact	No	High

- No potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Section. The confidence in this prediction is Low.
- An assessment of the potential impacts of Route Section 7 of the Project on the historic landscape of the Isle of Axholme is presented in paragraph 10.7.70.

# Route Section 8: Graizelound to Chesterfield Canal

# **Designated heritage assets**

- There is potential for a significant operational effect on a designated heritage asset in this Route Section due to change to its setting. This relates mainly to views of the finished Proposed Overhead Line within the setting of the heritage asset. The route runs approximately 3 km to the west of the two existing 400 kV overhead lines. It would therefore extend the visibility of high-voltage infrastructure across a wider geographical area than the existing overhead line. The confidence level in this prediction is Low.
- Aside from the asset listed below, there is also the very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Low.

#### Scheduled monuments

There are three scheduled monuments within the study area for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**) and no potential significant effects are predicted.

#### Conservation areas

There is one conservation area located within the study area for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**). No potential significant effects are predicted on conservation areas in this Route Section.

#### Listed buildings

- There are 25 listed buildings within the study area for this Route Section at (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which a potential significant effect is predicted on one.
- The Grade II listed Langholme Manor Farmhouse (NHLE: 1067741), of medium value, is located 90 m north of the draft Order Limits. It would be directly affected by the pylons 4AF168 to 4AF178. These are located within views from the building's principal southern façade. The route of pylons 4AF168 to 4AF172 crosses diagonally to the south of the asset, whilst pylons 4AF172 to 4AF178 run southward to the southwest of the asset, where they would form a stacked linear route in oblique views from the farmhouse's windows, over its formerly associated farmland. The farmhouse is derelict and in a poor state of repair. Although it is compromised by poor preservation, both of its fabric and its original farmstead setting, a cautious approach to assessment identifies a significant effect resulting from the operational presence of the Proposed Overhead Line within its setting.
- The confidence in this prediction is Low due to the current state of repair of the building and the likelihood that once a full assessment of its heritage value has been made in the ES, the heritage value reported here could reduce to low. This would mean that the significance of effect caused by the Proposed Overhead Line would reduce to a non-significant level. The construction of the Proposed Overhead Line would also impact upon the asset through temporary change to its setting, however this is not predicted to result in a significant effect.

# Non-designated heritage assets and historic landscape

Six non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, all of which are likely to be subject to significant effects as presented in Table 10.13.

Table 10.13 - Non-designated assets within Route Section 8

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NHER M18165, NHER L10254, NHER L10255	Roman marching camp and undated enclosures at Misterton	Medium	Partial loss and truncation from groundworks for construction of pylons 4AF175 and 4AF176, haul road, bellmouths, and road upgrades/widening. Limited impact from installation of crossing protection scaffolding and operation of maintenance tracks	Yes	High

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NHER M18172, NHER L10274	Roman settlement and cropmark complex at Walkeringham	Medium	Partial loss and truncation from groundworks for construction of pylons 4AF181 and 4AF182, haul road. Limited impact from operation of maintenance track	Yes	High
NHER M5131	Undated cropmarks complex at Gringley on the Hill	Medium	Partial loss and truncation from groundworks for construction of pylon 4AF183 and haul road and from utility diversion	Yes	High

- No potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Section. The confidence in this prediction is Low.
- No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 9: Chesterfield Canal to A620 east of North Wheatley

#### **Designated heritage assets**

- Route Section 9 runs approximately 2.8 km to the west of the two existing 400 kV overhead lines. It would therefore extend the visibility of high-voltage infrastructure across a wider geographical area than the existing overhead lines.
- There is potential for significant construction and particularly operational effects on designated heritage assets listed in this Route Section due to changes to their setting. This relates mainly to views of construction activities and associated infrastructure and views of the finished Proposed Overhead Line within the setting of heritage assets, where setting has been assessed as contributing to their heritage value. The confidence level for the following predictions is Moderate.
- Aside from those assets listed below, there is also the very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Low.

#### Scheduled monuments

- There are four scheduled monuments located within the study area for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which a potential significant effect is predicted on one.
- Beacon Hill Camp (NHLE 1003241) is a large hilltop monument of unknown date or 10.7.95 function situated at the eastern edge of the village of Gringley on the Hill, approximately 650 m southwest of the draft Order Limits. Possibly an Iron Age hillfort, the monument's prominent location on a natural hill overlooking the flat Humberhead Levels to the east would have made it an important strategic point to control the surrounding agricultural land. There is evidence of scarping along the northern edge of the monument and erratic curved ditches which would have enhanced the hilltop's defensiveness. The site may have been occupied by Prince Rupert in 1644, when he routed the Parliamentarian army and liberated Newark Castle. The monument may have been used as a beacon at some point, giving the hilltop its name. The Proposed Overhead Line would introduce several new pylons (4AF185 through 4AF191) within 2 km of the asset and the overhead line would interrupt the important long views from the monument extending into its setting towards the north and east. Given that the asset's location is in part derived from its visible dominance of the surrounding flat landscape, the Proposed Overhead Line infrastructure would detract from this dominance and alter the asset's setting. The asset, which is of high value, would therefore likely be subject to significant effects through changes to its setting.

#### Conservation areas

There is one conservation area within the study area for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), and no potential significant effects are predicted.

#### Listed buildings

- There are 26 listed buildings located within the study area for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which a potential significant effect is predicted on one.
- The Grade II listed Gringley Grange Farmhouse (NHLE: 1045102), of medium value, and its associated non-designated farmstead buildings (A23) are located approximately 75 m west of the draft Order Limits. It would be directly affected by construction and operation of pylons 4AF190 to 4AF195 and the presence during construction of a large temporary construction compound, all located to the east of the asset. These elements of the Proposed Overhead Line are located within views of the asset in its surrounding farmed landscape, and views of the asset from the southeast and west are most affected. In these key views the farmhouse sits on a low rise in the landscape that provides it with a degree of prominence that, combined with the quality of its associated farmstead ranges, contributes to appreciation of its architectural interest. The Proposed Overhead Line will also be present in oblique views from the asset's principal south elevation, although this is of lesser importance than the views of the asset in its setting.

#### Non-designated heritage assets and historic landscape

- There are no known non-designated archaeological assets lying partially or wholly within the draft Order Limits in this Route Section. While there remains a potential for significant effects on previously unrecorded archaeological assets, with a high level of confidence, no significant effects have been identified on known archaeological remains in this Route Section of the draft Order limits.
- Furthermore, no potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Route Section. The confidence in this prediction is Low.
- No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 10: A620 east of North Wheatley to Fledborough

This section provides a preliminary assessment of the Proposed Overhead Line. The preliminary assessment of the Proposed Substation Works at High Marnham is presented in **Chapter 20 Substations and Associated Works**.

## **Designated heritage assets**

- The Proposed Overhead Line would introduce a new 400 kV overhead line into views that are currently unaffected by high-voltage electricity infrastructure, except at the northern and southernmost extents of this Route Section. This would therefore introduce pylons and lines into the settings of heritage assets that currently do not have this type of infrastructure within their settings.
- There is potential for significant construction and particularly operational effects on designated heritage assets listed in this Route Section due to changes to their setting. This relates mainly to views of construction activities and associated infrastructure and views of the finished Proposed Overhead Line within the setting of heritage assets, where setting has been assessed as contributing to their heritage value. The confidence level for the following predictions is Moderate.
- Aside from those assets listed below, there is also the very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Low.

#### Scheduled monuments

- There are five scheduled monuments located within the study area for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which a potential significant effect is predicted on one.
- St Helen's Church scheduled monument (NHLE 1006391) and Grade I listed building (NHLE: 1216694), of high value, would be directly affected by construction and operation of pylons 4AF206 to 4AF211, located within views from the asset and its immediate surroundings. The route would fall within a key view through the standing remains of the church's chancel arch looking eastward, which although a fortuitous view, forms a key part of how the asset is now experienced and appreciated. It also features farmland that contributes to understanding of the placement of the asset at the east end of the non-designated medieval settlement (HER: MNT15582) and modern settlement, and conservation area, of South Wheatley. This view currently features

West Burton Power Station. The Proposed Overhead Line would therefore perpetuate the presence of a detracting form of infrastructure within a key view from this asset. Views of the asset from the surrounding area are largely screened by vegetation and make a lesser contribution to the asset's heritage value.

The scheduled remains of Whimpton Moor medieval village and moated site (NHLE 10.7.108 1017567) consist of an extensive network of visible and surviving earthworks clearly defining the central avenue, housing plots and field systems of the medieval settlement of Whimpton. The road, located on the ridge, clearly joins with the alignment of the modern A57 and connects the remains of the village to the manor of Dunham, which is known to have controlled Whimpton from at least the time of the Domesday Book of 1086. Several other medieval villages (Darlton, Ragnall, Laneham, and Dunham), although related, have limited intervisibility with the monument due to the undulating landscape. As such, wider views to and from the asset provide limited contributions to the asset's significance. The Proposed Overhead Line is situated 450 m west of the monument and, with the existing overhead line 1.2 km east of the asset converging with the Proposed Overhead Line at High Marnham, would result in overhead lines surrounding the scheduled earthworks, albeit distantly, on three sides. The significance of the monument is, however, largely derived from the archaeological interest of the earthwork remains within the scheduled area. Overall, with Moderate confidence, the Proposed Overhead Line would not result in a significant effect on the scheduled remains of Whimpton Moor.

The Ringwork at Kingshaugh Farm (NHLE 1017619) consists of a series of earthworks 10.7.109 marking the location a 12<sup>th</sup> century fortified settlement. The scheduling includes a partly surviving moat and several defensive ditches and banks. The small fort is thought to have had contained a small stone-built chapel which survives as a wall foundation within the extant Kingshaugh House. Small excavations within the scheduled area have revealed good survival of the various elements of the medieval settlement as well as artefacts relating to possible earlier occupation dating to the Iron Age and Roman periods. The monument is situated on the north facing slope of a low southwest to north-east aligned ridge on the western edge of the Trent valley. Although the monument would historically have had sweeping views of the valley, it is today surrounded by mature woodland along its northern, eastern, and southeastern boundaries which screen views to and from the monument. The monument is not visible or recognisable from this surrounding countryside. Therefore, while the setting incorporates the surrounding farmland that it historically controlled, it contributes little to the asset's significance today. The Proposed Overhead Line would introduce new pylons and overhead lines which would be situated approximately 1.3 km north-east and 2 km east of the scheduled monument. While this would introduce new infrastructure in the asset's setting, it would not result in a significant effect on the asset through changes to that setting.

#### Conservation areas

There is one conservation area within the study are for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), and no potential significant effects are predicted.

#### Listed buildings

- There are 77 listed buildings within the study are for this Route Section ((see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**), of which potential significant effects are predicted on four.
- The effects of the Proposed Overhead Line on the Grade I listed Remains of Church of St Helen (NHLE: 1216694) are discussed above with regard to the associated scheduled monument.
- The Grade II\* listed Church of St Peter and St Paul (NHLE: 1275773), of high value, is 10.7.113 located in Sturton le Steeple approximately 560 m east of the draft Order Limits. It will be directly affected by the operation of pylons 4AF208 to 4AF216 located to west of the asset, within its setting. The church tower of St Peter and Paul is a prominent feature in the surrounding landscape and features in long distance of the settlement of Sturton le Steeple from the east, west and south. All of these views currently feature West Burton Power Station as a detracting feature competing with the prominence of the spire, however, the power station is consented for partial demolition. The prominence of the church tower with its twelve pinnacles is a key aspect of its design, providing the asset with a landmark quality that is quite unlike other churches in the study area. The 'le Steeple' portion of the placename, first recorded in the early 18th century, likely refers to this asset. The Proposed Overhead Line would be within wider landscape views of the church tower on approach to Sturton le Steeple from the northwest on Wheatley Road, where the pylons will be in the forefront of views towards the village, on the opposite side of the railway line, dominating views of the church in combination with other overhead lines in the area. They would also be visible as a linear route to the west side of views when travelling northward toward the village on Leverton Road. The level of impact to these views is lower, but the Proposed Overhead Line would still represent a distracting feature in the view, which would otherwise showcase the church tower once West Burton Power Station is demolished. The construction of the Proposed Overhead Line would also impact upon the asset through temporary change to its setting, however this is not predicted to give rise to a significant effect.
- The Grade II\* listed North Leverton Windmill (NHLE: 1234469), of high value, is located 10.7.114 approximately 20 m east of the draft Order Limits where an operational and maintenance access is located along on an existing farm track. The next area of the draft Order Limits is located over 500 m from the windmill, where there will be a temporary construction compound, and the closest permanent infrastructure will be approximately 750 m away. The windmill will be directly affected by the construction and operation of pylons 4AF214 to 4AF225 located to north, west, and south of the asset, within its setting. The Proposed Overhead Line would be within views of the asset within its rural setting and in views, generally of lesser importance, from the asset of the surrounding farmed landscape. These pylons would be experienced in views of the windmill looking westward on approach to it from North Leverton, where they would introduce competing tall features into the landscape behind and around the asset, diminishing its prominence in this view. This prominence is largely fortuitous, but these views of the windmill set within the relatively flat, rural, farmed landscape, assist in appreciating its architectural interest and its function as part of the rural economy.
- The Grade II\* listed Church of St Giles (NHLE: 1212465), of high value, is located approximately 120 m west of the draft Order Limits in Darlton. It will be directly affected by the construction and operation of pylons 4AF247 to 4AF251 located to the east of Darlton. These pylons would be experienced in views of the church spire looking eastward on approach to it from the west, where they would introduce competing tall

features into the landscape behind the asset, diminishing its prominence on the edge of the settlement in this view.

# Non-designated heritage assets and historic landscape

Eight non-designated archaeological assets have been identified as partially or wholly within the draft Order Limits, none of which are likely to be subject to significant effects as presented in Table 10.14.

Table 10.14 - Non-designated assets within Route Section 10

Reference	Description	Asset value	Impact	Significant effect	Confidence level
NHER L6917, NHER L10194	Undated cropmarks of ridge and furrow, a trackway and boundaries north of Sturton le Steeple	Low	Partial loss and truncation from groundworks for construction of pylons 4AF208, 4AF209 4AF212 and haul road and from utility diversion. Limited impact from operation of maintenance track	No	Moderate
A16	Site of three rectilinear post- medieval buildings surrounding a pond	Low	No impact – 50 m from installation of construction track (panelled)	No	High
A7	Linear cropmarks visible on Historic England aerial photographs 28189_040 - 044	Low	Limited impact from operation of maintenance track	No	High
A17	Site of post-medieval rectilinear building, possible outfarm	Low	No impact – located 20 m from haul road and pylon 4AF223	No	High
NHER L10021	Bank at East Drayton	Low	Partial loss and truncation from groundworks for construction of haul road	No	High

Reference	Description	Asset value	Impact	Significant effect	Confidence level
A18	Site of post-medieval outfarm	Low	No impact – located 20 m southwest of haul road	No	High
A19	Site of a post- medieval building pump house	Low	Partial loss and truncation from groundworks for the construction of a compound	No	Low

- No potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Section. The confidence level in this prediction is Low.
- No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Route Section 11: Fledborough to High Marnham

This section provides a preliminary assessment of the Proposed Overhead Line. The preliminary assessment of the Proposed Substation Works at High Marnham is presented in **Chapter 20 Substations and Associated Works**.

## **Designated heritage assets**

- Route Section 11 is situated in an area already affected by high-voltage electricity infrastructure, including several overhead lines that converge on High Marnham Substation. By concentrating the impact within an already affected corridor, the overall change to the setting is reduced, minimising impacts to heritage assets. There is one conservation area and five listed buildings within the study area for this Route Section (see **Appendix 10.1 Gazetteers of Cultural Heritage Assets**). No significant effects are predicted on designated heritage assets in Route Section 11. The confidence level for this prediction is Moderate.
- There is very low potential for significant effects to designated heritage assets located outside the 3 km study area due to changes to their setting. The confidence level for the following predictions is Moderate.

## Non-designated heritage assets and historic landscape

- There are no known non-designated archaeological assets lying partially or wholly within the draft Order Limits within this Route Section. While there remains a potential for significant effects on previously unrecorded archaeological assets, with a high level of confidence, no significant effects have been identified on known archaeological remains in this Route Section of the draft Order limits.
- Furthermore, no potential significant effects have been identified in relation to impacts resulting from change to the setting of non-designated built heritage assets recorded in the HER in this Route Section. The confidence in this prediction is Low.

No potential significant effects have been identified in relation to impacts on historic landscapes. The confidence in this prediction is medium.

# Summary of the Preliminary Assessment of the Proposed Overhead Line with the Proposed Substation Works

- The preliminary assessment of the Proposed Substation Works is presented in **Chapter 20 Substations and Associated Works**.
- Shared receptors between the Proposed Overhead Line and Proposed Substation Works at Birkhill Wood include:
  - A total of 17 scheduled monuments and associated National Heritage List for England Number (NHLE N°);
  - Skidby, Cottingham, Walkington, Beverley and Grosvenor Place and Beverley conservation areas:
  - 371 listed buildings;
  - 52 non-designated assets recorded on the Historic Environment Record (HER)
  - NCA 40: Holderness; and
  - NCA 27: Yorkshire Wolds.
- Shared receptors between the Proposed Overhead Line and Proposed Substation Works at High Marnham include:
  - A total of 3 scheduled monuments and associated National Heritage List for England Number;
  - South Clifton conservation area;
  - 78 listed buildings; and
  - NCA 48: Trent and Belvoir Vales.
- Taking account of the embedded measures set out in **Chapter 4 Description of the Project** and the control and management measures as set out in **Appendix 4.1 Draft Outline Code of Construction Practice** any potential effects from the Proposed Substation Works are not likely to be significant, and, when considered together are unlikely to change the preliminary significance that is presented in this Chapter.

# 10.8 References

- Ref 10.1 H.M. Government Ancient Monuments and Archaeological Areas Act 1979, c.46. [Online]. Available at: <a href="https://www.legislation.gov.uk/ukpga/1979/46">https://www.legislation.gov.uk/ukpga/1979/46</a> [Accessed: September 2024].
- Ref 10.2 H.M. Government Planning (Listed Buildings and Conservation Areas) Act 1990, c.9. [Online]. Available at: <a href="https://www.legislation.gov.uk/upga/1990/9">https://www.legislation.gov.uk/upga/1990/9</a> [Accessed: September 2024].
- Ref 10.3 H.M. Government The Hedgerows Regulations 1997 [Online]. Available at: <a href="https://www.legislation.gov.uk/uksi/1997/1160/">https://www.legislation.gov.uk/uksi/1997/1160/</a> [Accessed: September 2024
- Ref 10.4 H.M. Government The Environment Act 1995 [Online]. Available at: <a href="https://www.legislation.gov.uk/ukpga/1995/25/contents">https://www.legislation.gov.uk/ukpga/1995/25/contents</a> [Accessed: September 2024].
- Ref 10.5 Department for Energy Security and Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). [Online]. Available at: <a href="https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf">https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf</a> [Accessed: September 2024].
- Ref 10.6 Department for Energy Security and Net Zero (2023). National Policy Statement for Electricity Networks Infrastructure (EN-5). [Online]. Available at: <a href="https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5">https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5</a> [Accessed: September 2024].
- Ref 10.7 H.M. Government The Infrastructure (Planning) Decisions Regulations 2010. [Online]. Available at: <a href="https://www.legislation.gov.uk/uksi/2010/305/">https://www.legislation.gov.uk/uksi/2010/305/</a> [Accessed: September 2024].
- Ref 10.8 Department for Levelling Up, Housing and Communities (2024). National Planning Policy Framework. [Online]. Available at:

  <a href="https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf">https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf</a> [Accessed: December 2024].
- Ref 10.9 Department for Levelling Up, Housing and Communities and Ministry for Housing Communities and Local Government (2019). Planning Practice Guidance: Historic Environment. [Online]. Available at: <a href="https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment">https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment</a> [Accessed: September 2024].
- Ref 10.10 East Riding of Yorkshire Council (2016). East Riding Local Plan 2012-2029 Strategy Document. [Online]. Available at:

  <a href="https://downloads.eastriding.org.uk/corporate/pages/east-riding-local-plan/Strategy%20Document%20-%20Adopted%20April%202016%20lo.pdf">https://downloads.eastriding.org.uk/corporate/pages/east-riding-local-plan/Strategy%20Document%20-%20Adopted%20April%202016%20lo.pdf</a>
  [Accessed: September 2024].
- Ref 10.11 North Lincolnshire Council (2011). North Lincolnshire Local Development Framework Core Strategy. [Online]. Available at:

  <a href="https://www.northlincs.gov.uk/planning-and-environment/planning-policy-local-development-framework/#1591178700859-b856fc83-069c">https://www.northlincs.gov.uk/planning-and-environment/planning-policy-local-development-framework/#1591178700859-b856fc83-069c</a> [Accessed: September 2024].
- Ref 10.12 Bassetlaw District Council (2024). Bassetlaw District Local Plan 2020-2038. [Online]. Available at: <a href="https://www.bassetlaw.gov.uk/media/gn1kjm1b/adopted-bassetlaw-local-plan-2020-2038.pdf">https://www.bassetlaw.gov.uk/media/gn1kjm1b/adopted-bassetlaw-local-plan-2020-2038.pdf</a> [Accessed: September 2024].

- Ref 10.13 Central Lincolnshire (2023). Central Lincolnshire Local Plan Adopted April 2023. [Online]. Available at: Local Plan for adoption Approved by Committee.pdf (n-kesteven.gov.uk) [Accessed: September 2024].
- Ref 10.14 Newark and Sherwood District Council (2019). Newark and Sherwood Amended Core Strategy Adopted March 2019. [Online]. Available at: <a href="Markage English: Amended corestrategy">Amended corestrategy</a> DPD | Newark & Sherwood District Council (newark-sherwooddc.gov.uk) [Accessed: September 2024].
- Ref 10.15 East Riding of Yorkshire Council (2021). Local Plan Update 2020-2039. [Online]. Available at: <a href="https://downloads.eastriding.org.uk/corporate/planning/proposed-submission-local-plan-update/PS-LP01%20Strategy%20Document%20Update.pdf">https://downloads.eastriding.org.uk/corporate/planning/proposed-submission-local-plan-update/PS-LP01%20Strategy%20Document%20Update.pdf</a> [Accessed: September 2024].
- Ref 10.16 North Lincolnshire Council (2022). North Lincolnshire Local Plan Publication Draft Addendum Plan. [Online]. Available at:

  <a href="https://m.northlincs.gov.uk/public/localplan/examination/Draft%20Local%20Plan%20and%20Supporting%20Information/Publication%20Draft%20Addendum%20May%202022.pdf">https://m.northlincs.gov.uk/public/localplan/examination/Draft%20Local%20Plan%20and%20Supporting%20Information/Publication%20Draft%20Addendum%20May%202022.pdf</a> [Accessed: September 2024].
- Ref 10.17 Rampton and Woodbeck Parish Council (2021). Rampton and Woodbeck Neighbourhood Plan 2019-2037. [Online]. Available at: <a href="https://www.bassetlaw.gov.uk/media/6194/rampton-woodbeck-02-neighbourhood-plan-final.pdf">https://www.bassetlaw.gov.uk/media/6194/rampton-woodbeck-02-neighbourhood-plan-final.pdf</a> [Accessed: September 2024].
- Ref 10.18 Misterton Parish Council (2024). Misterton Neighbourhood Plan 2022-2038. [Online]. Available at: <a href="https://www.bassetlaw.gov.uk/media/8678/misterton-neighbourhood-plan-review-final.pdf">https://www.bassetlaw.gov.uk/media/8678/misterton-neighbourhood-plan-review-final.pdf</a> [Accessed: September 2024].
- Ref 10.19 Chartered Institute for Archaeologists (2020). Standard and guidance for historic environment desk-based assessment. [Online]. Available at: <a href="https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA\_4.pdf">https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA\_4.pdf</a> [Accessed: September 2024].
- Ref 10.20 Historic England (2015). Managing Significance in Decision-Taking in the Historic Environment: Historic Environment Good Practice Advice in Planning: 2. [Online]. Available at: <a href="https://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/gpa2/">https://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/gpa2/</a> [Accessed: September 2024].
- Ref 10.21 Historic England (2017). The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition) [Online]. Available at: <a href="https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/heag180-gpa3-setting-heritage-assets/faccessed">https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/faccessed</a>: September 2024].
- Ref 10.22 Historic England (2019) Statements of Heritage Significance: Analysing Significance in Heritage Assets: Historic England Advice Note 12 [Online]. Available at: <a href="https://historicengland.org.uk/images-books/publications/statements-heritage-significance-advice-note-12/heag279-statements-heritage-significance/">https://historicengland.org.uk/images-books/publications/statements-heritage-significance/</a> [Accessed: September 2024].
- Ref 10.23 Institute of Environmental Management and Assessment, Chartered Institute for Archaeologists, Institute of Historic Buildings Conservation (2021) Principles of Cultural Heritage Impact Assessment in the UK. [Online]. Available at:

  <a href="https://www.archaeologists.net/sites/default/files/j30361\_iema\_principlesofchia\_v8\_npdf">https://www.archaeologists.net/sites/default/files/j30361\_iema\_principlesofchia\_v8\_npdf</a>
  <a href="mailto:Institute">Institute for Archaeologists, Institute of Historic Buildings Conservation (2021)</a> Principles of Cultural Heritage Impact Assessment in the UK. [Online]. Available at:

  <a href="mailto:https://www.archaeologists.net/sites/default/files/j30361\_iema\_principlesofchia\_v8\_npdf">https://www.archaeologists.net/sites/default/files/j30361\_iema\_principlesofchia\_v8\_npdf</a>

  [Accessed: September 2024].

- Ref 10.24 Gaunt, G. D., Bartley, D. D., and Harland, R. (1974). Two interglacial deposits proved in boreholes in the southern part of the Vale of York and their bearing on contemporaneous sea levels. Bull. Geol. Surv. GB, No. 48, 1–23.
- Ref 10.25 Bateman, M. D. (1995). Thermoluminescence dating of the British coversand deposits. Quaternary Science Reviews 14,791-798.
- Ref 10.26 Gaunt, G.D. (1994). Geology of the Country Around Goole, Doncaster and the Isle of Axholme: Memoir for One-inch Sheets 79 and 88. British Geological Survey.
- Ref 10.27 Whitehouse, N.J. (1998). The evolution of the Holocene wetland landscape of the Humberhead Levels from a fossil insect perspective. Unpublished PhD Thesis, University of Sheffield.
- Ref 10.28 The Planning Inspectorate (2023). Scoping Opinion: Proposed North Humber to High Marnham. Case Reference EN020034. [Online]. Available at: <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020034/EN020034-000009-EN020034%20North%20Humber%20to%20High%20Marnham%20-%20Scoping%20Opinion.pdf">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020034/EN020034-000009-EN020034%20North%20Humber%20to%20High%20Marnham%20-%20Scoping%20Opinion.pdf</a> [Accessed: September 2024].
- Ref 10.29 National Grid (2023). North Humber to High Marnham Volume 1: Environmental Impact Assessment Scoping Report. Document Reference CGNC-NG-CNS-REP-0002. [Online]. Available at: <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020034/EN020034-000010-EN020034%20-%20Scoping%20Report%20-%20Volume%201%20-%20Main%20Report.pdf">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020034/EN020034-000010-EN020034%20-%20Scoping%20Report%20-%20Volume%201%20-%20Main%20Report.pdf</a> [Accessed: September 2024].
- Ref 10.30 East Riding of Yorkshire Council (2007). Conservation Area Appraisal: Skidby.
- Ref 10.31 Le Patourel, H.E.J. (1973). The moated sites of Yorkshire. Society for Medieval Archaeology Monograph Series Volume 5.
- Ref 10.32 North Lincolnshire Council (2024). Saved 2003 Local Plan Policies. [Online]. Available at: <a href="https://www.northlincs.gov.uk/planning-and-environment/planning-policy-the-north-lincolnshire-local-plan/#1593095254001-ec189f5a-67c8">https://www.northlincs.gov.uk/planning-and-environment/planning-policy-the-north-lincolnshire-local-plan/#1593095254001-ec189f5a-67c8</a> [Accessed: December 2024].

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