Three Oaks Renewable Energy Park Haisthorpe, Driffield, Y025 4NW

CONSTRUCTION OF SOLAR FARM, ACCESS & MAINTENANCE TRACKS, SUBSTATIONS, TRANSFORMERS, BATTERY STORAGE CONTAINERS, SECURITY FENCE AND GATES

PRE-APPLICATION PLANNING REFS: 21/03784/EIASCR 21/10896/STPREP

Landscape and Visual Impact Assessment

Final - for Issue

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Commissioned by:

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Assessment Update 2018 (AECOM 2018)

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Introduction

Proposed Development and Site

- 1. The Three Oaks Renewable Energy Park (the proposed development) is a proposal for a solar farm consisting of arrays of ground-mounted solar PV panels plus a battery energy storage system (BESS) and ancillary infrastructure. It would have an installed capacity of up to 39 MW and an anticipated generating life of 40 years and would be located on a southeast facing slope above the hamlets of Thornholme and Haisthorpe, 4 km west of Bridlington. The local planning authority (LPA) is East Riding of Yorkshire Council (the Council).
- 2. In response to Ridge Clean Energy's *Screening Request* (RCE and Engena October 2021), the Council provided a *Screening Opinion* (ERYC 17 November 2021) which concluded that, although the development is a Schedule 2 development, the site does not lie within a sensitive area and the development could be undertaken without significant impacts on the environment. Therefore, in the Council's opinion, it would not comprise EIA development.

Purpose of Report

- 3. Consequently, this is a stand-alone report (not part of an Environmental Statement) that presents the findings of a landscape and visual impact assessment (LVIA) that has examined the effects of the proposed development on the landscape resources and visual receptors of the site and surrounding area. The LVIA has been undertaken in accordance with relevant legislation, policy and guidance, with the scope of the assessment being proportional to the scale, nature and location of the proposed development, and with the viewpoint locations agreed with the Council's Principal Planning Officer.
- 4. This LVIA has focussed on identifying all "likely significant landscape and visual effects" (ie effects that are material to the decision making process) (see para A2.14, Appendix 2). These are not the same as "likely significant effects" under the EIA Regulations. It has identified and taken into account the landscape and visual mitigation and enhancement measures that have been embedded into the siting, design, construction, operation and decommissioning of this proposed development and aims to provide the environmental information (on the landscape and visual amenity baseline and residual effects) needed by the decision maker to inform their planning decision.

Competent Experts

5. The LVIA has been undertaken by Kay Hawkins, Chartered Landscape Architect (CMLI) and Director of Hawkins Bell Associates Ltd (t/a H:B:A Environment), a landscape practice and environmental consultancy based in Shropshire. Kay has been undertaking LVIAs for a wide range of developments for over 30 years. Her relevant experience and expertise are provided in Appendix 1.

6. The graphics that have informed and illustrate the LVIA (Figures 3 - 7.7) have been produced by Mike Spence and his team at MSEnvironmental, based in Oxenhope, West Yorkshire. Mike is a Chartered Landscape Architect (CMLI), Registered EIA Practitioner (REIA) and Fellow of the Royal Geographical Society (FRGS). The relevant experience and expertise of Mike and his team are also provided in Appendix 1.

Scope of Assessment

- 7. This assessment is presented in the following sections:
 - Section 2: Method of Assessment with further detail in the Method of Assessment (Appendix 2) and Technical Appendix (Appendix 3).
 - Section 3: Pre-Application Consultations with the Council, Parish Councils and the public.
 - Section 4: Legislation, Policy and Guidance as relevant to the type, scale and location of the development and the scope and method of assessment.
 - Section 5: Landscape and Visual Baseline the landscape resources and visual receptor types and locations within the study area.
 - Section 6: Proposed Development, Mitigation and Enhancement those aspects of the proposed development and landscape and biodiversity mitigation and enhancement scheme that are relevant to the effects on the landscape resources and visual amenity of the site and study area.
 - Section 7: Visibility and Viewpoint Analysis the theoretical visibility of the proposed development and an analysis of the effects of the development at seven locations that represent the landscape character areas and visual receptors in the study area.
 - Section 8: Assessment of Effects on Landscape Resources and Visual Amenity - on the landscape fabric of the site, the landscape character of the site and study area, the purposes of landscape designations and the visual amenity of visual receptors in the study area.
 - Section 9: Conclusions on the effects of the proposed development on landscape resources and visual amenity.
 - Section 10: References the documents, data and other information that have informed the LVIA.
- 8. This assessment is illustrated by Figures 1 7.7 and is supported by information provided in Appendices 1 4.

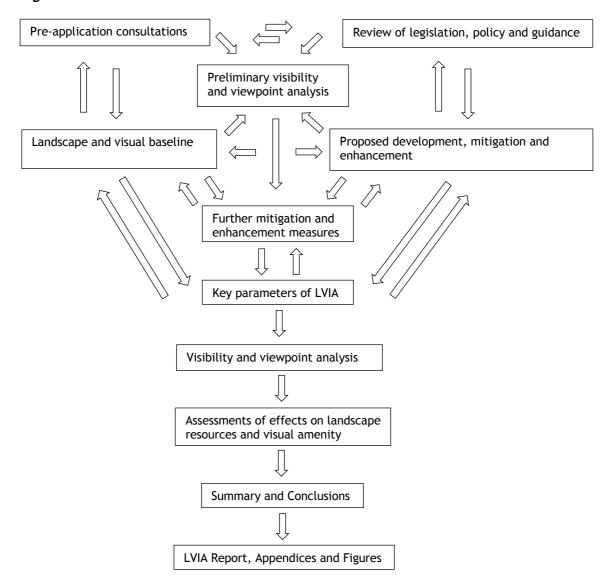
Method of Assessment

9. This LVIA has been undertaken in accordance with the method of assessment described in Appendix 2, with the assessment process and stages described below. The 3D model, zones of theoretical visibility (ZTVs), photography and visualisations that illustrate this LVIA have been produced in accordance with the Technical Appendix in Appendix 3.

Assessment Process

10. The assessment is an iterative process, undertaken in a series of stages, with each stage revisited during the assessment process so that the findings of each stage have been incorporated into the proposed development and have been taken into account in the assessments of residual effects (see Figure 1).

Figure 1: Assessment Process



11. The process has involved consultations, document and data review, fieldwork observations and photography, computer modelling, computer-generated visibility plans and visualisations, objective measurements and subjective professional judgement.

Assessment Stages

Pre-application Consultations

12. Pre-application consultation responses were sought and received from the Council and the Parish Councils, and feedback was provided by the public. These have helped to ensure that all important local landscape and visual issues have been taken into account in the LVIA. The pre-application consultations pertinent to the LVIA are discussed in Section 3.

Review of Legislation, Policy and Good Practice Guidance

13. Relevant legislation, national and local plan policies and good practice guidance have been reviewed to ensure that the LVIA addresses the legal and policy context for this development and follows the latest good practice guidance. The legislation, national and local policy framework and good practice guidance that apply to this type of development are described in Appendix 2 and the specific aspects of relevance to this development scale and location are discussed in Section 4.

Preliminary Visibility and Viewpoint Appraisal

- 14. A bare earth ZTV was generated and supplied as part of the screening request (Figure SC 3, RCE/Engena October 2021). This ZTV extended at least 5 km from the site, and was generated using OS terrain 5 data to create a digital terrain model (DTM), 4 target points across the site (at 3 mAGL to represent the maximum solar PV array height) and an observer eye height of 1.8 mAGL.
- 15. This ZTV indicated the locations in the study area where the terrain would screen the target points (no colour over the base map) and, therefore, was likely to screen solar PV panels on the site, and the locations where the terrain would permit views of 1, 2, 3 or 4 of the target points (and, therefore, was likely to permit views of solar PV panels on the site). This ZTV suggested that, based on screening by terrain only, visibility would be largely within an area that extended 700 m west, 800 m north, 2.5 km north-northeast and over 5 km east-southeast, southeast, south and southwest of the site centre.
- 16. In addition to the terrain, a further degree of screening is provided by surface features such as built development and vegetation and so a 6 km x 6 km study area, with the site off-centre towards the northwest, was selected for the more detailed assessments (see Figures 3 6a/b). This is the study area referred to throughout this assessment.

Landscape and Visual Baseline

17. The study area has been examined using Ordnance Survey maps, aerial photography, fieldwork observations, landscape character assessments and other publications and online data, to identify the landscape fabric of the site, the landscape character of the site and surrounding area, the special qualities and purposes of local landscape designations and the visual receptor types and locations within the study area. There are no national landscape designations in this study area. The landscape and visual baseline is described in Section 5.

Development, Mitigation and Enhancement

18. The construction, operational and decommissioning phases of the proposed development have been reviewed to identify those aspects with the potential to affect the landscape resources and/or visual amenity of the site and study area. These, together with the mitigation and enhancement measures that have been identified and incorporated into the proposed development are described in Section 6.

Further Mitigation and Enhancement

19. Measures to further mitigate effects on biodiversity, landscape and views and, where possible, enhance biodiversity, landscape fabric, landscape character and visual amenity have also been identified during the assessment process and are also described in Section 6.

Key Parameters of the LVIA

20. The above stages have informed the scope and key parameters of the LVIA (see Table A2.1 in Appendix 2). For this LVIA, the key parameters are:

Table 1: Key Parameters

LVIA Parameters	Description
Study area(s)	A 6 km x 6 km study area extending approximately 2.5 km west, 3.5 km east, 2 km north and 4 km south of the site centre.
Baseline	The current landscape resources and visual receptors in the study area, including all existing developments. There are no existing solar farms in the study area.
Landscape resources	Landscape fabric of the development site, the landscape character of the site and study area and the special qualities and purposes of local landscape designations. There are no national landscape designations in the study area.
Visual receptors	Residents in villages and individual properties, walkers, cyclists and equestrians on the public rights of way network, visitors to tourist attractions and motorists on the main and minor roads.
Viewpoints	Seven viewpoints selected to represent the landscape resources and visual receptor types and locations in the study area. In accordance with the GLVIA3 (para 6.19) these are representative viewpoints.

Aspects of proposed development	Those elements and activities of the construction, operational and decommissioning phases of the proposed development that could give rise to significant effects on landscape and/or visual amenity.
Temporal limits	The timescales taken into account in the assessments are the duration of the construction phase (6 - 9 months), operational phase (40 years) and decommissioning phase (6 - 9 months), and the timescale selected to illustrate the effectiveness of mitigation measures (5 - 40 years).
Nature of effects	Discrete effects - direct/indirect, short/medium/long-term, temporary/permanent, beneficial/adverse effects.
	The site is not near any country borders and there will not be any transboundary landscape or visual effects.
Cumulative effects	Inter-project (between project) cumulative effects - arising from the effects of the proposed development in the context of other development on landscape and visual amenity - these have not been assessed as there are no other solar farms (operational, permitted or in the planning system) in the study area.

Visibility Analysis

- 21. ZTVs have been generated using LIDAR 2 m digital terrain model (DTM) data, a 3D model of the proposed development and an eye height of 1.6 mAGL, overlaid onto the Ordnance Survey (OS) 1:25,000 Explorer map (see Appendix 3). Two ZTVs have been generated:
 - ZTV Solar PV Panels (Figure 6a) using 200 target points across the site located along the back edges of the PV panels (3 mAGL), to illustrate the theoretical visibility of the solar PV panels.
 - ZTV Substation and BESS Infrastructure (Figure 6b) using target points within the substation compound (max 52.5 mAOD), to illustrate the theoretical visibility of the substation and BESS infrastructure.
- 22. These ZTVs have identified the locations in the study area where the terrain would screen the solar panels and/or substation and BESS infrastructure (no colour over the base map), and the locations where the terrain would permit views of at least parts of the proposed development. These have informed the selection of viewpoints and enabled the fieldwork observations to concentrate on those locations where there could be views of the proposed development.
- 23. As these ZTVs are based on terrain data only and do not take into account screening by surface features, such as buildings, hedgerows and woodlands, they illustrate theoretical areas of visibility that are more extensive than the actual areas of visibility for the proposed development.
- 24. A Technical Appendix explaining how the 3D model and ZTVs were constructed is provided in Appendix 3. The visibility analysis is described in Section 7.

Viewpoint Analysis

- 25. Seven viewpoint locations have been selected to represent the more open views of the proposed development from the various landscape character areas and visual receptor locations in the study area. These viewpoint locations were agreed with the Council's Principal Development Management Officer (ERYC 1 February 2022).
- 26. A viewpoint analysis has been undertaken at each viewpoint to predict the likely changes in landscape character and views at these locations as a consequence of the construction, operational and decommissioning phases of the proposed development and to identify whether these changes would be significant. The viewpoint analysis has also considered the extent to which the changes in landscape character and views could be progressively mitigated during the operational phase as the proposed mitigation and enhancement measures establish. The viewpoint analysis has been undertaken in accordance with the method of assessment for the viewpoint analysis explained in Appendix 2 and is provided in Section 7.
- 27. The viewpoint analysis is illustrated by photo-panoramas and visualisations (wireframes and photomontages) for Viewpoints 1 7 (see Figures 7.1 7.7). The photographs were taken on 1 January 2022 and so the photomontages illustrate the worst case, ie the extent to which the proposed development would be visible in late autumn through to early spring when deciduous vegetation is not in leaf. Some additional screening would be provided by vegetation in late spring, summer and early autumn when deciduous trees and hedgerows are in leaf and hedgerows may be taller (prior to seasonal pruning) and further screening would be provided as the proposed mitigation and enhancement measures establish (not illustrated in the visualisations).
- 28. The Technical Appendix in Appendix 3 explains how the viewpoint photography was undertaken and how the photo-panoramas and visualisations have been constructed. The visualisations are Type 4, as defined in TGN 06/19 and each illustrates a horizontal field of view (HFoV) of 90°, displayed over one A1 sheet (841mm wide) to achieve a principal viewing distance of approximately 500mm.

Assessment of Effects on Landscape Resources and Visual Amenity

- 29. The viewpoint analysis is only a sample of locations in the study area, so a further assessment of effects has been undertaken to ensure that all likely significant effects on landscape resources and visual amenity have been identified.
- 30. This assessment has examined the effects of the proposed development, incorporating the embedded mitigation measures, on the landscape fabric of the site, the character of each landscape character area, the special qualities and purposes of landscape designations and a range of receptor types and locations. This assessment has also considered the extent to which these

- changes in landscape and visual amenity could be progressively mitigated during the operational phase as the proposed mitigation and enhancement measures establish.
- 31. This assessment has drawn on the visibility and viewpoint analyses and other observations and has been undertaken in accordance with the methods of assessment of effects on landscape fabric, character, designations and visual amenity, as described in Appendix 2.

Pre-Application Consultations

32. Some of the pre-application consultation responses sought from the Council, the Parish Councils and feedback provided by the public have influenced the design of the scheme, the mitigation and enhancement measures incorporated into the design and the selection of viewpoints to illustrate the LVIA.

Pre-Application Consultations with the Council

33. In response to RCE's *Pre-Application Advice Request* (RCE and Engena July 2021) the Council provided several consultation responses. None of these specifically requested an LVIA. However, three of these have informed the locations of viewpoints and the mitigation and enhancement measures incorporated into the design of the development.

Response from the Environmental Control Officer, Public Protection Team (ERYC 28 July 2021)

34. This noted that "The applicant should be mindful of the former landfill site located at the Old Chalk Pit adjacent to the eastern edge of the proposed site. Records held by the Council suggest that the waste used at this landfill was largely inert and comprised non-hazardous construction waste, demolition waste and soil. However, the applicant should consider the possibility that non-inert household and domestic waste may have been fly tipped at the site whilst the void was still there. It is likely that the Council will impose a watching brief condition at full application stage so that any contamination encountered during the development can be addressed".

Response from the Principal Conservation Officer, Building Conservation Team (ERYC 1 March 2022)

35. Amongst other matters, this identified the listed buildings and Scheduled Ancient Monuments in the locality, including Carnaby Temple and Burton Agnes Hall (both of which are accessible to the public), identified the two most important heritage assets (Haisthorpe Hall and Burton Agnes Hall) and stated that the "height of any equipment and the screening effect of any existing vegetation will be important. Height should be kept to a minimum and it is important [that] trees and hedges are retained and new planting used to screen the site".

Response from the Nature Conservation Team (ERYC undated)

- 36. Amongst other matters, this requested:
 - A Construction Environmental Management Plan (CEMP) to include full details of all ecological mitigation and management measures with a programme for implementation (during construction). The CEMP would also include landscape mitigation and management measures.

- A Biodiversity Enhancement and Management Plan (BEMP) with details of management, maintenance and long-term monitoring, landscape planting and compensatory planting to mitigate for loss of hedgerow, trees or shrubs within the site, which should be native species and species known to be of value for the attraction of wildlife.
- 37. It recommended the establishment of a diverse meadow on the site with a mosaic of habitats to benefit a range of flora and fauna, and recommended the following species mix for compensatory hedgerow planting, bespoke to the Yorkshire Wolds National Character Area (no 27), when gapping or creating additional hedgerow:

Hawthorn	Crataegus monogyna	30%
Blackthorn	Prunus spinosa	30%
Hazel	Corylus avellana	15%
Field Maple	Acer campestre	10%
Dogwood	Cornus sanguinea	5%
Crab Apple	Malus sylvestris	5%
Buckthorn	Rhamnus cathartica	5%

- 38. The response did not refer to the need for hedgerow trees or new woodland planting and does not recommend any tree species for these purposes.
- 39. Consequently, the development site and proposed planting excludes the old chalk pit and former landfill site, three of the viewpoints are located close to Carnaby Temple, Haisthorpe Hall and Burton Agnes Hall, the substation infrastructure has been re-designed to keep the height to a minimum (see Section 6), the recommendations regarding existing and proposed screening, planting and habitats have been incorporated into the design and all the above have been taken into account in the assessment of effects on landscape and visual amenity.

Agreement to Proposed Viewpoints from the Principal Planning Officer, Strategic Team (ERYC 1 February 2022)

40. In response to RCE's request to agree viewpoint locations, which was accompanied by a bare earth ZTV and maps showing the suggested viewpoint locations (Engena 31 January 2022), the Council's Principal Planning Officer stated that they had "reviewed the suggested viewpoints and consider them to be entirely sensible for this assessment" (ERYC 1 February 2022).

Consultations with the Parish Councils

41. RCE has met with Carnaby and Burton Agnes Parish Councils to discuss the project and receive their feedback. The main landscape and visual issue raised by Parish Councillors was adequate screening around the battery storage and substation compound.

Consultations with the Public

- 42. RCE sought feedback from the public at public exhibitions held in Carnaby on 15 February 2022 and in Burton Agnes on 16 February 2022. RCE has also sought feedback via a Local Community Survey on its website¹.
- 43. Suggestions from the public have included:
 - Accessing the site via Thornholme rather than West Back Side, Haisthorpe.
 - A footpath/cycleway from Haisthorpe to Carnaby.
- 44. The site access is now off the A614 just east of Thornholme. It has not been possible to create a footpath/cycleway from Haisthorpe to Carnaby as part of the scheme as the land alongside the A614 between Haisthorpe and Carnaby is not within the control of the applicant or landowner. However, there will be a community benefit fund which may be able to support an investigation into and work on such a footpath/cycleway.

¹ https://ridgecleanenergy.com/threeoaks-community-engagement/

Legislation, Policy and Guidance

Introduction

45. The legislation, national and local policies and good practice guidance that require and guide LVIAs for EIA developments in general are discussed in Appendix 2. These provide some guidance for LVIAs for non-EIA developments and the legislation, national and local policies and guidance of particular relevance to this proposed development and location, to the scope of this LVIA and to the assessment process, are summarised below.

Legislation

- 46. This proposed development is an installation for the production of energy (electricity) with a development area exceeding 0.5 ha, and so comes under section 3 (a) of Schedule 2 of *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017* (as amended 2018) (the EIA Regulations 2017). However, as noted in para 2 above, in its *Screening Opinion* (ERYC 17 November 2021) the Council concluded that, although the development is a Schedule 2 development, the site does not lie within a sensitive area and could be undertaken without significant impacts on the environment.
- 47. However, the applicant is keen to ensure that all relevant landscape and visual issues are taken into account in the design and assessment of this proposed development, hence the provision of this LVIA, the scope of which has taken into account Schedule 4 of the EIA Regulations (Appendix 2, para A2.13).

National Policy

- 48. The National Planning Policy Framework (NPPF, MHCLG July 2021) sets out the Government's planning policies for England and how these should be applied. Various planning policies in the NPPF have influenced the scope and approach of this assessment, and the mitigation measures incorporated into the design of the proposed development.
- 49. For example, with regards to Achieving Sustainable Development (Section 2), the NPPF has a presumption in favour of sustainable development (paras 10 and 11) with the objective of sustainable development summarised as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (para 7, quoting Resolution 42/187 of the United Nations General Assembly).
- 50. With regards to Decision Making (section 4) and pre-application consultations, the NPPF encourages applicants to discuss what information is needed with the local planning authority (LPA) and expert bodies (para 43) and local planning authorities should only request supporting information that is relevant, necessary and material to the application (para 44).

- 51. With regards to Building a Strong, Competitive Economy (section 6) and supporting a prosperous rural economy, the NPPF states that planning policies and decisions should enable, amongst other matters (a) the sustainable growth and expansion of all types of businesses in rural areas, both through the conversion of existing buildings and well-designed new buildings; and (b) the development and diversification of agricultural and other land-based rural businesses (para 84). It notes that sites to meet local business in rural areas may have to be found adjacent or beyond existing settlements and, in these circumstances, it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (para 85).
- 52. With regards to Making Effective Use of Land (section 11), the NPPF states that planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions (para 119).
- 53. With regards to Achieving Well-designed Places (section 12), the NPPF states that planning policies and decisions should ensure that developments, amongst other matters, (a) function well and add to the overall quality of the area over the lifetime of the development; (b) are visually attractive, with appropriate and effective landscaping; (c) are sympathetic to the local character and history, surrounding built environment and landscape setting; (d) establish or maintain a strong sense of place; and e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (para 130). The NPPF notes that trees make an important contribution to the character and quality of urban environments, can also help mitigate and adapt to climate change, that existing trees are retained wherever possible and that appropriate measures are in place to secure the long-term maintenance of newly planted trees (para 131). Whilst this policy refers to trees in urban environments, trees also make an important contribution to the character and quality of rural environments, such as in this location.
- 54. With regards to Meeting the Challenge of Climate Change, Flooding and Coastal Change (section 14), the NPPF states that new development should be planned for in ways that (a) avoid increased vulnerability to the range of impacts arising from climate change and (b) can help reduce greenhouse gas emissions.
- 55. With regards to Conserving and Enhancing the Natural Environment (section 15), the NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by, amongst other matters, (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services, including the economic and other benefits of trees and woodland (para 174).
- 56. Based on the above policies in the NPPF, this LVIA has sought to:

- Agree the scope of the assessment in consultation with the LPA (see Section 3 above) in order to focus the assessment on "likely significant landscape and visual effects" and to provide the information necessary and material to the planning decision.
- Describe the intrinsic character of the countryside in this location and identify those valued aspects of the landscape and visual baseline that should be safeguarded (see Section 5).
- Examine the effects of the development on its location and identify the embedded and further mitigation that would help to assimilate the development into the local area for the benefit of current and future generations (see Sections 6 8).
- Identify ways in which this proposed development could protect and add
 to the overall quality of the area, with appropriate and effective
 landscaping, including hedgerow and tree planting, which will be visually
 attractive, optimise the site for its intended use, could reduce its
 vulnerability to climate change and offset its greenhouse gas emissions
 (see Section 6).

Local Policy and Guidance

East Riding Local Plan 2012 - 2029

- 57. Some of the policies in the East Riding Local Plan 2012 2029: Strategy Document Adopted April 2016 (ERYC April 2019) are relevant to the design and assessment of the effects of the proposed development on landscape and visual amenity in this locality, including:
 - Policy S4: Supporting development in Villages and the Countryside
 - Policy EC5: Supporting the energy sector
 - Policy ENV1: Integrating high quality design
 - Policy ENV2: Promoting a high quality landscape
 - Policy ENV5: Strengthening green infrastructure

Policy S4: Supporting development in Villages and the Countryside

- 58. Policy S4 states that development outside of settlements "will be supported to maintain the vibrancy of Villages (listed in Appendix B) and the Countryside where it:
 - 1. Is of an appropriate scale to its location taking into account the need to support sustainable patterns of development;
 - 2. Encourages the re-use of previously developed land where appropriate; and

- 3. Does not involve the significant loss of best and most versatile agricultural land."
- 59. Appendix B includes the villages of Burton Agnes and Carnaby but not the hamlets of Thornholme and Haisthorpe (the two closest settlements to the development site).
- 60. Policy S4 lists the forms of development that will be supported within the development limits of Villages and also states that "Outside of a development limit land will be regarded as the Countryside and the following forms of development supported, where proposals respect the intrinsic character of their surroundings", including (9) "energy development and associated infrastructure".

Policy EC5: Supporting the energy sector

- 61. Policy EC5 states that "Proposals for the development of the energy sector, excluding wind energy but including the other types of development listed in Table 7, will be supported where any significant adverse impacts are addressed satisfactorily and the residual harm is outweighed by the wider benefits of the proposal. Developments and their associated infrastructure should be acceptable in terms of (amongst other matters):
 - 1. The cumulative impact of the proposal with other existing and proposed energy sector developments;
 - 2. The character and sensitivity of the landscapes to accommodate energy development, with particular consideration to the identified Important Landscape Areas, as shown on Figure 11.
 - 3. The effects of the development on:
 - i. Local amenity, including visual impact;
- 62. Table 7 includes photovoltaics (PV). There are no other existing or proposed ground-mounted solar PV developments in the study area.
- 63. Policy EC5 goes on to state "Where appropriate, proposals should include provision for decommissioning at the end of their operational life. Where decommissioning is necessary, the site should be restored, with minimal adverse impact on amenity, landscape and biodiversity, and opportunities taken for the enhancement of these features."

Policy ENV1: Integrating high quality design

- 64. Policy ENV1 states that:
 - "A. All development proposals will:
 - Contribute to safeguarding and respecting the diverse character and appearance of the area through their design, layout, construction and use; and

- 2. Seek to reduce carbon emissions and make prudent and efficient use of natural resources particularly land, energy and water.
- B. Development will be supported where it achieves a high quality of design that optimises the potential of the site and contributes to a sense of place. This will be accomplished by (amongst other matters):
 - 1. Having regard to the specific characteristics of the site's wider context and the character of the surrounding area;
 - 3. Having an appropriate scale, density, massing, height and material;
 - 4. Having regard to the amenity of existing or proposed properties;
 - 8. Incorporating hard and/or soft landscaping, alongside boundary treatment of appropriate scale and size, to enhance the setting of buildings, public space and views;
 - 14. Paying attention to the use of local materials, architectural styles and features that have a strong association with the area's landscape, ...
 - 15. Safeguarding the views and setting of outstanding built and natural features and skylines within and adjoining the East Riding, including those features identified in Policies A1 A6."

Policy A2: Bridlington Coastal sub area

65. The site comes within Policy A2: Bridlington Coastal sub area which identifies "the distinctive character and landscape setting of the Wolds villages" as a feature to be retained.

Policy ENV2: Promoting a high quality landscape

- 66. Policy ENV2 states that:
 - "A. Development proposals should be sensitively integrated into the existing landscape, demonstrate an understanding of the intrinsic qualities of the landscape setting and, where possible, seek to make the most of the opportunities to protect and enhance the landscape characteristics and features. To achieve this, development should (amongst other matters):
 - 3. Ensure important hedgerows and trees are retained unless their removal can be justified in the wider public interest. Where important hedgerows and trees are lost replacements will usually be required.
 - B. Proposals should protect and enhance existing landscape character as described in the East Riding Landscape Character Assessment, in particular, within the following Important Landscape Areas as shown on the Policies Map:
 - 1. The Yorkshire Wolds, with special attention to ensuring developments are of an appropriately high quality and will not adversely affect the historic and special character, appearance or nature conservation value."

Policy ENV5: Strengthening green infrastructure

67. Policy ENV5 states that:

- "A. Development proposals should:
 - 1. Incorporate existing and/or new green infrastructure features within their design, and
 - 2. Capitalise on opportunities to enhance and/or create links between green infrastructure features such as those listed in Table 10. Links should be created both on-site and, where possible, with nearby green infrastructure features."
- 68. Some of the green infrastructure features in Table 10 occur in this study area including:
 - Yorkshire Wolds (its valuable landscapes, rich biodiversity, and recreational and cultural resources).
 - Individual trees and woodland.
 - Wildlife corridors, including hedgerows, ditches, ... and verges.
 - Public rights of way and cycle ways (eg ... other recreational routes of local/regional importance).
- 69. Hence this LVIA identifies the intrinsic character of the site and surrounding landscape and considers how the development would respect landscape character (Policy S4). It identifies the character and sensitivity of the landscapes to accommodate energy development, assesses the likely significant effects on landscape character, the Important Landscape Areas and visual amenity, explains how the mitigation and enhancement measures would limit these effects, and describes how the decommissioning, restoration and enhancement measures would bring about the long-term enhancement of the landscape fabric and character of the site (Policy EC5).
- 70. The proposed development has sought to safeguard and respect the diverse character and appearance of the area through its siting, design, layout, construction, operation and decommissioning, has had regard to the character of the surrounding area, the amenity of existing properties, views, outstanding built and natural features and skylines, and incorporates soft landscape boundary features (Policy ENV1).
- 71. The LVIA examines the effects on the landscape character and setting of Wolds villages in the study area (Policy S4), and the effects on the Yorkshire Wolds Important Landscape Area (Policy ENV2). It also explains how the mitigation and compensatory hedgerow planting proposed as part of the development will enhance the network of landscape features within the environment (Policy ENV5).

Supplementary Planning Documents

72. There are several Supplementary Planning Documents (SPDs) on the East Riding Local Plan website² but none are relevant to the design and assessment of the effects of the proposed development on the landscape and visual amenity in this locality.

Good Practice Guidance

- 73. There is currently no good practice guidance for LVIAs for solar farms specifically. However, there are several good practice guidance documents published by the Landscape Institute that have guided this LVIA:
 - Guidelines for Landscape and Visual Assessment 3rd edition (LI/IEMA 2013), known as GLVIA3 this provides guidance on landscape and visual impact assessment for all development types throughout the UK.
 - Landscape Character Assessment: Technical Information Note 08/2015 (LI 2015), known as TIN 08/15 this provides information on the process of landscape character assessment and the guidance documents and landscape character assessments provided in England, Scotland, Wales and Northern Ireland.
 - Assessing Landscape Value Outside National Designations: Technical Guidance Note 02/21 (LI 2021), known as TGN 02/21 - this provides information and guidance for those who need to make judgements about the value of a landscape outside of national landscape designations in the UK and for those who review those judgements.
 - Visual Representation of Development Proposals: Technical Guidance Note 06/19 (LI September 2019), known as TGN 06/19 - this aims to help landscape professionals, planning officers and stakeholders to select the types of visualisations that are appropriate to the circumstances in which they will be used.
- 74. Further information on these guidance documents that are of particular relevance to this LVIA are set out in Appendix 2. With regards to the recommendations in TGN 06/19, it has been decided to illustrate this LVIA with type 4 visualisations. The Technical Appendix in Appendix 3 explains how the photography has been undertaken and how the 3D model, ZTVs and visualisations have been constructed.

² https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/

Landscape and Visual Baseline

Site Location and Context

- 75. The proposed development site is located on Thornholme Field, a southeast facing slope above the hamlets of Thornholme and Haisthorpe, 4 km west of Bridlington, in the East Riding of Yorkshire.
- 76. The village of Burton Agnes is just under 2 km to the southwest and the village of Carnaby is just under 2 km to the east of the site boundary. Outside of the main settlements and mainly to the south of the site, there are a few scattered farmsteads, such as Brackendale Farm (2.5 km southeast), North Kingsfield, South Kingsfield and Demming Farm (2.8 km 3.2 km southeast) and Oakwood Farm (2.4 km south).
- 77. The A614 runs along the base of the slope (0.5 km south) and Woldgate runs along the top of the slope (0.6 km north). Two roads run down the slope, Rudston Lane (1.4 km west) and Church Lane (1.2 km east). These are connected by a network of public rights of way (bridleways, footpaths and farm tracks defined on the Ordnance Survey Explorer map sheet 295 as "other routes with public access").
- 78. The Bridlington to Driffield railway line is 1 km to the south and the Carnaby industrial estate is just beyond the railway line, 1.2 km to the south. The site is only 4.6 km from the coast and there are several indoor and outdoor visitor attractions in the area.
- 79. The surrounding slope rises to approximately 83 mAOD (on Woldgate to the north) and down to 17 mAOD (on the A614 to the south). This slope defines the southern edge of the Yorkshire Wolds and is open with very large fields bounded by tracks and intermittent hedgerows with few hedgerow trees and limited tree cover. The fields on the site and in the surrounding area are mainly in arable crop production and, from the air, the entire slope is a patchwork of fields defined by the different crops.
- 80. The main blocks of woodland in the study area are around Haisthorpe Hall (adjacent to the southeast corner of the site), Burton Agnes Hall (1.8 km southwest), North Kingsfield and Demming Farm (2.8 km 3.2 km southeast) and several mixed conifer and deciduous plantations on the flatter land to the south of the site. There are some more extensive woodlands on the north facing slope of Gypsey Race Valley to the north of the site.

Site Description

81. The development site, as defined by the red line boundary on Figure 2, is approximately 65 ha. It slopes from northwest to southeast and undulates from

- east to west, varying between approximately 65 mAOD in the northwest corner of the site and 30 mAOD on the southern boundary.
- 82. As shown on Figure 2 below, the site consists of four rectangular fields, two either side of a low intermittent hedgerow that defines the north/south parish boundary between Burton Agnes Parish (to the west) and Carnaby Parish (to the east). There are also low intermittent hedgerows along the southern and western boundaries of the site but no hedgerows along the northern or eastern boundaries of the site. The eastern site boundary loops around the Old Chalk Pit and former landfill site (excluded from the development area). There are no mature trees or ponds within the site.
- 83. Two 66kV overhead electricity distribution lines (double poles and three cables) run parallel with the slope, one runs along the northern boundary of the site, and one crosses the southern end of the site just north of the chalk pit.
- 84. A farm track (other route with public access) extends from the A614 up the western boundary of the site and continues on to Woldgate. This will provide the access to the site. A single-track lane (West Back Side) extends from the A614 to the southeastern corner of the site and then becomes a farm track (other route with public access) that extends along the eastern boundary of the site and on up to Woldgate.

Landscape Resources

85. The existing landscape resources of the development site and surrounding area are the existing landscape elements (landscape fabric), landscape character and the special qualities and purposes of the local landscape designations.

There are no national landscape designations in this study area.

Landscape Fabric

- 86. The landscape fabric of the development site consists of the existing field pattern, the vegetation within the fields, and the field boundary hedgerows, as described in para 82 above and illustrated on Figure 2 below. None of the hedgerows on the site are considered "important" for ecological or cultural heritage reasons (under The Hedgerows Regulations 1997).
- 87. The landscape fabric of the immediate surrounding area includes the existing field pattern, farm tracks, hedgerows and the mature tree belt around Haisthorpe Hall.
- 88. Further details are shown on the Phase I Habitat Map (Figure 2 in the Ecological Impact Assessment, Appendix 5).

Figure 2: Development Site



KEY:

	Proposed development site boundary
	Existing hedgerows within the development site
С	Old Chalk Pit
	Approximate routes of 66kV overhead electricity distribution lines on double poles

Landscape Character

89. The landscapes of East Riding are described and characterised in *The East Riding of Yorkshire Landscape Character Assessment Update 2018* (AECOM October 2018). This describes 5 landscape character areas (LCAs) (Vale of York, Humberhead Levels, Yorkshire Wolds, Holderness and Humber Estuary)

- each of which is sub-divided into between 3 and 6 landscape character types (LCTs), each of which is sub-divided into up to 8 sub-LCAs.
- 90. Each sub-LCA is a distinct landscape, relatively homogeneous in character, with a particular combination of geology, soils, topography, drainage, land use, vegetation, field, road and settlement patterns, and perceptual and aesthetic attributes.
- 91. The site is in sub-LCA 13D: North Wolds Plateau Farmland (within LCT 13: Open High Rolling Farmland) and the study area also extends northwards into sub-LCA 15A: Gypsy Race Corridor Rudston to Bridlington (within LCT 15: Wolds Valley Farmland), southwards into sub-LCA 18E: Kelk Beck Farmland (within LCT 18: Low Lying Drained Farmland) and sub-LCA 19C: North Holderness Open Farmland (within LCT 19: Open Farmland) and southeastward into sub-LCA 20C: Bridlington to Hornsea Coast (within LCT 20: Coastal Farmland). The locations of the sub-LCAs within the study area are illustrated on Figure 3.
- 92. The ZTVs (Figures 6a and 6b) suggest that there could be a small area of visibility (of up to 50% of the panels but none of the battery and substation infrastructure) within sub-LCA 15A close to Carnaby Tower. However, there is a tall line of mature deciduous trees running north-south from Woldgate to Church Lane across Carnaby Field and intervening hedgerows which would partially screen views of the proposed development from this zone within this LCA in winter and largely screen views of the development in summer. Most of sub-LCA 15A is a valley and the proposed development would not be visible from almost all this LCA, so effects on landscape character within sub-LCA 15A have not been considered in any further detail.
- 93. The ZTVs (Figures 6a and 6b) suggest that there could be areas of visibility (of up to 100% of the panels and the battery and substation infrastructure) within parts of sub-LCA 18E to the southwest of the site. However, the closest part of sub-LCA 18E is on low lying land over 3km from the development site and observations in the study area suggest that intervening vegetation, including blocks of woodland, largely screen views of Thornholme Field slope from this part of sub-LCA 18E, so effects on landscape character within this LCA have not been considered in any further detail.
- 94. The ZTVs (Figures 6a and 6b) suggest that there could be areas of visibility (of up to 100% of the panels and the battery and substation infrastructure) within sub-LCA 20C to the southeast of the site. However, the closest part of sub-LCA 20C is on low lying land over 3km from the development site and observations in the study area suggest that intervening vegetation, including blocks of woodland, largely screen views of Thornholme Field slope from this part of sub-LCA 20C, so effects on landscape character within this LCA have not been considered in any further detail.

95. Consequently, the baseline analysis and assessment of effects on landscape character have focussed on sub-LCAs 13D and 19C.

Landscape Designations

96. As shown on Figure 4, there is an Important Landscape Area (Yorkshire Wolds) that extends into the northern half of the study area as far south as the A614. This is designated in the Local Plan (ERYC April 2019) and shown on the Proposals Map³. It is primarily designated under Policy ENV2: *Promoting a high quality landscape* (see para 66 above) and is also mentioned in two other policies, Policy EC5: *Supporting the energy sector* (see paras 61 - 63 above) and Policy ENV5: *Strengthening green infrastructure* (see paras 67 - 68 above).

Recreational Opportunities

- 97. Recreational opportunities within the study area are illustrated on Figures 4 and 5 and include long distance cycle routes and paths, the local public right of way network, allocated open spaces and visitor attractions.
- 98. There are two long distance cycle routes (see Figure 5):
 - Sustrans National Cycle Route (NCR) 1 this is part of the UK-wide National Cycle Network. NCR 1 is a 2,034 km long cycle route that runs from Dover to the north of Scotland up the east side of the UK. It is also part of a longer route called EuroVelo 12 which connects to Norway and Holland. A short (11 km) section of this route crosses the study area, westwards along Woldgate, southwards down the slope on a minor road, through Burton Agnes village, southwards along Station Road and then exits the study area to the west along Out Gates.
 - Way of the Roses this is a cycle route that runs 274 km from the west coast at Morecambe to the east coast at Bridlington. It follows the same route as Sustrans NCR 1 through the study area.
- 99. There are three long distance paths (see Figure 5):
 - Beverley Minster to Bridlington Priory a long-distance footpath (60.3km) from the Minster in Beverley to the Priory Church of St Mary in Bridlington and was devised in celebration of 900 years of the Priory. A short (4 km) section of the route crosses the study area along Woldgate.
 - East Riding Heritage Way four linked walks totalling 136.6 km that go from the Humber Bridge Beverley Minster Driffield Bridlington. Two short sections are within the study area, a 2 km section along Woldgate and a bridleway in the northeast of the study area and a 9 km section from

³ https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/

Rudston in the northwest along bridleways, minor roads and footpaths, and exits westwards along Out Gates.

- Rudston Roam a 35.1 km walk from Bridlington to Driffield via Rudston, Burton Agnes and Nafferton. Two short sections are within the study area, a 6 km section along Woldgate and a bridleway in the north of the study area and a 2 km section in the west along a minor road and a footpath.
- 100. Local public rights of way (Figure 5) include:
 - Footpaths BRIDF02, BAGNF01, BAGNF02, BAGNF03 and BAGNF04.
 - Bridleways CARNB01, CARNB02, RUDSB02 and RUDSB03.
 - Other routes with public access (green dots along tracks on Figure 5).
- 101. The allocated open spaces identified in the *East Riding Local Plan 2012 2029*: Strategy Document Adopted April 2016 (ERYC April 2019) (shown in green on Figure 4) include a play area, a sports field and the grounds of Burton Agnes Church of England School in Burton Agnes, the Bridlington Model Boat Society lake just south of Carnaby Industrial Estate and the Churchyard of St John the Baptist Church in Carnaby.
- 102. There are several visitor attractions (Figure 5), including:
 - (a) Burton Agnes Hall, Elizabethan manor house, church and gardens.
 - (b) Park Rose Village/Bridlington Animal Park south of Carnaby Industrial Estate.
 - (c) John Bull World of Rock a confectionery manufacturer offering factory tours, on the Carnaby Industrial Estate.
 - (d) Woldgate Trekking and Livery Centre.
 - (e) Carnaby Temple not open to the public but a distinctive landmark in an elevated location alongside a public bridleway.

Baseline Landscape Character Analysis

103. As noted in para 95 above, the baseline landscape character analysis has focussed on sub-LCAs 13D and 19C. Tables 1 and 2 below summarise their locations, key characteristics, aesthetic and perceptual factors, other development, landscape designations (Figure 4), recreational opportunities (Figure 5), natural and cultural heritage, associations, functions, the nature of views and relevant landscape policies and strategies (see Appendix 2, para A2.35), focussing on the parts of these sub-LCAs that are within the study area.

- 104. This information is based on fieldwork observations, the Ordnance Survey Explorer sheet 295, aerial photography, *The East Riding of Yorkshire Landscape Character Assessment Update 2018* (AECOM October 2018) (see extracts in Appendix 4), the *East Riding Local Plan 2012 2029*: *Strategy Document Adopted April 2016* (ERYC April 2019) and other published information.
- 105. Each sub-LCA has then been evaluated to identify its value and susceptibility to the type of changes that could be brought about by a development of this nature, scale and location, in order to define its sensitivity to this type of development, using the criteria set out in Appendix 2 (paras A2.54 A2.59 and Tables A2.2 A2.4).

Table 1: Sub-LCA 13D: North Wolds Plateau Farmland

Location	Within LCT 13: Open High Rolling Farmland, sub-LCA 13D encompasses the northern extent of the Wolds dip slope and extends round the north side of Driffield to Bridlington.
Key characteristics	Geology and soils - solid geology of chalk formed during the Cretaceous period, overlain with wind-blown sand deposited during the Devensian period which contributed to the make-up of the soil. Soils are derived chiefly from the chalk bedrock and are a mix of thinner rendzinas on the steeper slopes and deeper brown earths.
	Topography and drainage - elevated rolling landform on the dip slope of the Yorkshire Wolds escarpment, between 17m and 90m AOD and falling to the south-southeast within the study area. The permeable bedrock results in dry valleys and no water courses or natural ponds.
	Land uses - intensely farmed arable with some pasture and pockets of parkland and estate land.
	Vegetation - intermittent thorn hedgerows that are severely clipped, shelterbelts around Haisthorpe Hall and Burton Agnes Hall but very few trees in the open landscape.
	Field patterns - parliamentary enclosure of common land in the 18 th and 19 th centuries has created a regular pattern of large and very large rectilinear fields running parallel with the slope.
	Road pattern - regular well-spaced pattern of roads that conform to the enclosure field pattern and have wide verges, with the A614 running along the base of the slope, Woldgate running across the top of the slope, and with tracks (other routes with public access) and occasional minor single-track lanes running down the slope (eg Rudston Road and Back Lane near Burton Agnes and Church Lane near Carnaby).
	 Settlement pattern - sparsely populated. Small villages of Burton Agnes and Carnaby and small hamlets of Thornholme and Haisthorpe are located at the base of the slope and straddle the boundary with sub-LCA 19C to the south. No farmsteads or other residential properties on the slope within study area.
Aesthetic and perceptual factors	This combination of characteristics has created a large scale, agricultural landscape, with a distinct and simple composition, open with pockets of localised enclosure created by shelterbelts, with regular rectilinear patterns. It is a managed and peaceful landscape in fair to good condition, with a pleasant scenic quality, a good sense of place, limited access via the road and PROW network, and is part of an extensive area (Yorkshire Wolds) within ERYC.
Other built development	Woldgate reservoir and a communication mast just north of Woldgate, slope crossed by two 66kV overhead electricity distribution lines on double poles.
Landscape designations	The Yorkshire Wolds Important Landscape Area (a local landscape designation)
Recreational opportunities	Numerous public rights of way including: two cycle routes (Sustrans NCR 1 and Way of the Roses) and three long distance paths (Beverley Minster to Bridlington Priory, East Riding Heritage Way and Rudston Roam), two bridleways (CARNB01 and CARNB02) and several tracks (other routes with public access). Part of Burton Agnes Hall, manor house, church and gardens.
Natural heritage	Habitat value in the intermittent hedgerows and species-rich calcareous grasslands along the wide road verges, and characteristic of the gently sloping landform of the Yorkshire Wolds dip slope.
Cultural heritage	Considerable evidence of early human activity dating back to the prehistoric times on the Wolds and in LCT 13 generally but little visible in this intensively farmed landscape. Part of Burton Agnes Hall, manor house, church and gardens.

Associations	The artist, David Hockney, has painted the landscapes of the Yorkshire Wolds and locations associated with him include Woldgate and Burton Agnes Hall ⁴ .
Function	This is a very functional landscape (agricultural, transport, residential) that may have a limited contribution to the healthy functioning of the wider landscape.
Views	Elevated and wide views southwards towards low lying landscapes to the south, particularly from the upper slopes and along Woldgate which contribute to landscape character.
Landscape policies and strategies	Policy S4: Supports developments outside settlements that are of an appropriate scale and respect the intrinsic character of their surroundings. Policy EC5: Supports energy sector developments (including solar PV) that are acceptable in terms of landscape character and sensitivity to energy development, with particular consideration to the Important Landscape Areas. Policy ENV1: Encourages developments that respect the diverse character and appearance of the area and achieve high quality design. Policy ENV2: Encourages developments that are sensitively integrated into the
	existing landscape, understand the intrinsic qualities of the landscape setting, seek to protect and enhance the landscape characteristics and features, including important hedgerows, and protect and enhance existing landscape character as described in the <i>East Riding Landscape Character Assessment</i> , in particular, within the Yorkshire Wolds Important Landscape Area where there is special attention to ensuring developments are of an appropriately high quality and will not adversely affect the historic and special character, appearance or nature conservation value of the landscape.
	Policy ENV5: Encourages developments to incorporate and create links between existing and/or new green infrastructure features within their design including the valuable landscapes, rich biodiversity, and recreational and cultural resources of the Yorkshire Wolds, individual trees and woodland, wildlife corridors and public rights of way. Strategy for LCT 13 is to conserve and enhance the characteristic open and rolling agricultural landscape and promote native woodland planting that retains the
	open character of the area (p 210, AECOM October 2018).
Landscape value	County value - a local landscape designation (Yorkshire Wolds Important Landscape Area) with natural and cultural heritage assets that form distinctive landscape features (hedgerows, verges), where the landscape is in fair to good physical condition, has strong associations with a famous artist, offers long distance, Borough-wide and local recreational opportunities, is distinctive with a good sense of place and a pleasant scenic quality (see Appendix 2, Table A2.2).
Susceptibility to this type of development	Moderate susceptibility - as the key characteristics are clearly expressed; their robustness to change is moderately strong; views make a contribution to landscape character; policies and strategies support developments that respect the intrinsic qualities of the landscape and seek to protect and enhance landscape characteristics and features; and the changes to landscape character that could be brought about by a development of this type and scale in this location could have a degree of compatibility with these factors (see Appendix 2, Table A2.3).
Sensitivity to this type of development	Medium sensitivity - a landscape with County value and a moderate susceptibility to the type, scale and location of development proposed (see Appendix 1, Table A2.4).

⁴ https://www.iknow-uk.com/articles/david-hockneys-yorkshire-wolds

Table 2: Sub-LCA 19C: North Holderness Open Farmland

Location	Within LCT 19: Open Farmland, sub-LCA 19C is on the east side of East Riding between the Drained Floodplain Farmland (LCT 18) to the west and the Coastal Farmland (LCT 20) to the east, it covers an area of farmland that extends from Bridlington in the north to Hornsea in the south.
Key characteristics	Geology and soils - solid geology of chalk formed during the Cretaceous period, overlain with glacial till (boulder clay) deposited during the Devensian period with sand and gravel deposits in places. Soils are a combination of surface water gleys and brown earths that have been drained.
	 Topography and drainage - low-lying and gently undulating topography, hummocky in places, typically 5 m - 22 m AOD within the study area, drained by widely spaced "improved" natural water courses and man-made drainage ditches.
	 Land uses - mainly intensely farmed arable with pockets of pasture and a few woodland blocks, but also industrial land uses (see Other Development below).
	Vegetation - intermittent and severely clipped thorn hedgerows along roadsides and some field boundaries, mixed deciduous and conifer woodland blocks but very few trees in the open landscape.
	Field patterns - pre-parliamentary enclosure (with the majority of the area enclosed by agreement) has created a random pattern of medium to large irregular fields with pockets of rectilinear enclosure fields and some very large fields (probably resulting from 20th century hedgerow removal).
	• Road pattern - only around the periphery of the sub-LCA in this study area and with wide verges. The A614 runs along the northern boundary, the A165 runs down the eastern boundary, Station Road is to the south of Burton Agnes in the west and Moor Lane and Bridlington Bay Road link the A165 to the A614 south of Carnaby in the east. There are also three single-track no through roads - Horse Carr Lane (from Station Road to Burtoncarr House), Moor Lane (from the A614 at Thornholme to the railway line at Thornholme Gate Houses) and Low Fields Lane (from the A614 at Haisthorpe to the railway line at Haisthorpe Gate Houses).
	Settlement pattern - sparsely populated. Small villages of Burton Agnes and Carnaby and small hamlets of Thornholme and Haisthorpe are located in the far north and straddle the boundary with sub-LCA 13D to the north. A few scattered large farmsteads and small residential properties within study area.
Aesthetic and perceptual factors	This combination of characteristics has created a very large scale, agricultural landscape, with a distinct and simple composition, open with pockets of localised enclosure created by the woodlands, with a mix of random and regular patterns. It is a managed and peaceful landscape in fair condition, with limited scenic quality, a weak sense of place, very limited access via the road and PROW network, and is part of an extensive area (Holderness) within ERYC.
Other built development	Bridlington to Driffield railway line (runs parallel to the A614), Carnaby Industrial Estate (located just south of the A614 and railway line), Lissett Airfield Wind Farm (south of but visible from the study area).
Landscape designations	None
Recreational opportunities	A few public rights of way including: two cycle routes (Sustrans NCR 1 and Way of the Roses) and two long distance paths (East Riding Heritage Way and Rudston Roam), three public footpaths (BAGNF02, BAGNF03 and BAGNF04) and two tracks (other routes with public access). Part of Burton Agnes Hall, manor house, church and gardens, the John Bull World of Rock and Bridlington Animal Park south of Carnaby.

Natural heritage	Habitat value in the intermittent hedgerows, ditches, species-rich calcareous grasslands along the wide road verges and small woodlands, and characteristic of the low-lying landform of the Holderness Plain.
Cultural heritage	Part of Burton Agnes Hall, manor house, church and gardens and several scheduled monuments dating back to medieval times. Considerable evidence of centuries of human activity dating back to the prehistoric times but little visible in this intensively farmed landscape.
Associations	None found.
Function	This is a very functional landscape (agricultural, transport, industrial, residential) that may have a very limited contribution to the healthy functioning of the wider landscape.
Views	Low-lying and wide views northwards towards the more elevated landscapes to the north, partially screened in places by the intervening vegetation.
Landscape policies and	Policy S4: Supports developments outside settlements that are of an appropriate scale and respect the intrinsic character of their surroundings.
strategies	Policy EC5: Supports energy sector developments (including solar PV) that are acceptable in terms of landscape character and sensitivity to energy development, with particular consideration to the Important Landscape Areas.
	Policy ENV1: Encourages developments that respect the diverse character and appearance of the area and achieve high quality design.
	Policy ENV2: Encourages developments that are sensitively integrated into the existing landscape, understand the intrinsic qualities of the landscape setting, seek to protect and enhance the landscape characteristics and features, including important hedgerows, and protect and enhance existing landscape character as described in the <i>East Riding Landscape Character Assessment</i> , in particular, within the Yorkshire Wolds Important Landscape Area where there is special attention to ensuring developments are of an appropriately high quality and will not adversely affect the historic and special character, appearance or nature conservation value of the landscape.
	Policy ENV5: Encourages developments to incorporate and create links between existing and/or new green infrastructure features within their design including the valuable landscapes, rich biodiversity, and recreational and cultural resources of the Yorkshire Wolds, individual trees and woodland, wildlife corridors and public rights of way.
	Strategy for LCT 19 is to maintain and enhance the characteristics that contribute to its distinctiveness, in particular, to maintain and reinforce the field pattern, avoiding further amalgamation of fields, to promote hedgerow replanting and gapping up and to plant native, locally characteristic woodland and trees to reinforce the landscape pattern and add diversity to the landscape (p 287, AECOM October 2018).
Landscape value	Local value - an undesignated landscape with a few natural and cultural heritage assets that form distinctive landscape features (hedgerows, verges), where the landscape is in fair physical condition, has no strong associations, offers long distance, Borough-wide and local recreational opportunities, is distinctive with a weak sense of place and limited scenic quality (see Appendix 2, Table A2.2).
Susceptibility to this type of development	Slight susceptibility (to development outside this sub-LCA) - as the key characteristics are clearly expressed; their robustness to change (outside the sub-LCA) is strong; views make only a slight contribution to landscape character; policies and strategies support developments that respect the intrinsic qualities of the landscape and seek to protect and enhance landscape characteristics and features; and the changes to landscape character that could be brought about by a development of this type and scale in this location could have a degree of compatibility with these factors (see Appendix 2, Table A2.3).
Sensitivity to this type of development	Medium/low sensitivity - a landscape with local value and a slight susceptibility to the type, scale and location of development proposed (see Appendix 1, Table A2.4).

Visual Receptor Groups and Locations

- 106. The visual baseline of the development site and study area is composed of the existing views and visual amenity enjoyed by visual receptors in the locality.
- 107. The main visual receptor groups and their locations in the study area are shown on Figure 5 and include:
 - Residents in properties in the villages of Burton Agnes and Carnaby and in the hamlets of Thornholme and Haisthorpe.
 - Residents in farmsteads on the North Holderness Open Farmland (sub-LCA 19C) in the south of the study area, including Sticks Farm, Brackendale Farm, North Kingsfield, South Kingsfield, Demming Farm, Oak Wood Farm and Burton Agnes Stud Farm.
 - Visitors to the visitor attractions including (a) Burton Agnes Hall, manor house, church and gardens, (b) Park Rose Village/Bridlington Animal Park, (c) John Bull World of Rock, (d) Woldgate Trekking and Livery Centre and (e) Carnaby Temple.
 - Open space users including a play area, a sports field and the grounds of Burton Agnes Church of England School in Burton Agnes, the Bridlington Model Boat Society lake just south of Carnaby Industrial Estate and the Churchyard of St John the Baptist Church in Carnaby.
 - Cyclists, equestrians and walkers on Sustrans NCR 1, the Way of the Roses, bridleways, other routes with public access and minor roads.
 - Walkers on the Beverley Minster to Bridlington Priory, East Riding Heritage Way and Rudston Roam long distance paths, and on local footpaths.
 - Motorists on A614, A165 and minor roads including Woldgate (north of the site), Church Lane (east of the site), Rudston Road (west of the site), and Station Road, Moor Lane and Horse Carr Lane (southwest of the site).
- 108. There is no open access land within the study area.

Other Development

109. All existing built developments in the study area form part of the existing landscape and visual baseline. There are no operational or permitted solar farms in the study area.

Proposed Development, Mitigation & Enhancement

Proposed Development

- 110. The proposed development is a solar farm with an installed capacity of up to 39MW and an anticipated generating life of 40 years. It would include arrays of ground-mounted solar PV panels and ancillary infrastructure enclosed within perimeter fencing and gates with CCTV.
- 111. The ancillary infrastructure would include inverters (mounted behind the panels), a customer cabin, five transformer stations, underground communication and transmission cables, access tracks, and a fenced compound housing the substation and switchgear within a control building and a Battery Energy Storage System (BESS) consisting of battery storage containers mounted on skids, power conversion and transformer units.
- 112. There would also be an underground connection to the national electricity grid and a temporary construction compound. The development would be accessed via an existing track off the A614 just east of Thornholme and west of Haisthorpe. The proposed development is described in detail in the Environmental Report and would consist of a construction phase, an operational phase and a decommissioning phase.

Construction Phase

- 113. The construction phase would be short-term and phased with the works completed within approximately 6 9 months. The aspects of the construction phase with the potential to affect landscape and/or visual amenity would be:
 - Installation of temporary protective fencing to protect hedgerows, hedgerow trees and any other features of ecological and/or landscape value that are to be retained.
 - Modifications to the existing site entrance and access track from the A614 to the site, including resurfacing and widening at the junction, and the construction of up to two temporary passing places along the track.
 - Construction of on-site access and maintenance tracks.
 - Construction of temporary construction compound (typically 1,200 m²) in the southwestern part of the site.
 - Hedgerow removal up to 60 m in total for the passing places and junction widening, all to be replaced after construction, and 5 m removed to facilitate access between the two sides of the site.

- Installation of the metal frames to support the PV arrays. These will have metal legs driven into the ground except for the arrays over archaeological finds which will be placed into pre-formed concrete footings placed on the ground surface.
- Installation of the solar PV panels and inverters.
- Ground modelling to create the three platform levels in the substation and BESS compound.
- Construction of the control building.
- Installation of the battery storage containers, transformer and other electrical infrastructure in the substation and BESS compound.
- Excavation of trenches and the laying of underground power and communication cables between the solar PV arrays and the substation and BESS compound and also from the substation to the point of connection to the grid at the adjacent 66kV pole.
- Construction of the security fencing and gates around the substation and BESS compound and internal compound fencing.
- Construction of the perimeter fencing and gates around the development site and the installation of the CCTV cameras on poles.
- Vehicle movements on the site, including earth moving equipment, concrete delivery lorries and HGVs delivering the building materials, transformers, battery storage containers, and other infrastructure.
- Site restoration, including the removal of the temporary protective fencing, the backfilling of all trenches and the reinstatement of all land disturbed by the construction works using retained topsoil and reseeding.
- Landscape and biodiversity mitigation, enhancement and management proposals (see paras 119 125 below).

Operational Phase

- 114. The operational phase would be long-term (40 years) and the aspects of the operational phase with the potential to affect landscape and/or visual amenity would be:
 - Perimeter fencing and gates (up to 2.15 m high stock/deer-proof mesh supported on wooden posts) and CCTV cameras on poles.
 - Ground-mounted solar PV arrays (max 3 m high) with inverters mounted behind the panels.

- Compound (121.5 m x 63 m) surfaced with crushed stone and with internal roads (4 m wide), surrounded by 2 m high palisade security fencing and a gated entrance containing:
 - Battery Energy Storage System (BESS) with batteries housed in 55 containers (max 3 m high), power conversion units and switchgear;
 - Substation compound with a control building (5 m wide x 20 m long x 5 m high) housing the switch gear, and an external transformer (max 4.5 m high); and
 - HV compound with electrical infrastructure (max 4.75 m high).
- Maintenance staff vehicles (up to 2, approximately once per month)
 arriving and leaving the site via the site entrance and access track off the
 A614.
- Occasional deliveries of components for repairs.
- Mitigation and enhancement measures (see below).
- 115. The control building is likely to be constructed from blockwork with rendered walls beneath a slate roof (to be agreed with the Council).

Decommissioning Phase

- 116. The aspects of the decommissioning phase with the potential to affect landscape and/or visual amenity would be:
 - Installation of temporary protective fencing to protect hedgerows, hedgerow trees and other features of ecological and/or landscape value.
 - Decommissioning and removal of the battery storage containers, transformer and other electrical infrastructure in the substation and BESS compound.
 - Demolition and removal of the control building.
 - Decommissioning and removal of the ground mounted PV arrays.
 - Removal of the perimeter fencing and gates around the development site, the CCTV cameras and poles and the security fencing in and around the substation and BESS compound.
 - Vehicle movements on the site, including HGVs transporting the demolition materials, transformers, battery storage containers, and other infrastructure off the site, and earth moving equipment restoring the site.

- Site restoration, including the removal of the temporary protective fencing, and the reinstatement of all land disturbed by the decommissioning works using locally sourced topsoil and reseeding.
- 117. The underground power and communication cables between the PV arrays and the substation and battery storage compounds are likely to be removed for reuse or recycling. The concrete foundations for the control building and solar panel supports would be removed and backfilled with locally sourced topsoil.

Mitigation and Enhancement

Embedded Siting and Design Mitigation

- 118. A number of mitigation measures have been incorporated into the site selection, design and construction of this proposed development which will limit the effects on landscape and visual amenity. These include:
 - Site location outside any national landscape designations, thereby avoiding the more sensitive and valued landscapes.
 - Site access utilising the existing vehicular access track off the A614 to
 the west of the site (rather than the lane through Haisthorpe), thereby
 avoiding the routing of construction vehicles close to residential properties
 and minimising the need to remove existing field boundary and roadside
 hedgerows and the consequential effects on landscape fabric.
 - Protection of existing features using temporary protective fencing to protect hedgerows, trees and other features of ecological, cultural heritage and/or landscape value on the site during the construction phase.
 - Internal access tracks crossing the Parish boundary where only 5 m of existing hedgerow will need to be removed.
 - Solar PV arrays locating these within the existing fields, thereby avoiding the need to remove any hedgerows or disrupt the field pattern.
 - Substation and BESS compound locating this adjacent to the existing 66kV overhead electricity line, within a valley in the centre of the site and away from public rights of way and residential properties, keeping the infrastructure to 5 m or below and setting these into the slope, thereby limiting the height and effects of these elements on landscape character and visual amenity.
 - Services laying all services underground.
 - Lighting no permanent external lighting is proposed, with safety lighting lit only as and when needed, such as to provide lighting for maintenance visits after dark (eg on winter afternoons).

- Site restoration at the end of the construction phase all areas disturbed by the works will be restored which will minimise the footprint of the development and the long-term effects on landscape and visual amenity.
- Decommissioning at the end of the operational phase which will restore the site to agricultural use.

Landscape and Biodiversity Mitigation, Enhancement and Management

119. The landscape and biodiversity mitigation, enhancement and management proposals appropriate for this site have been informed by the pre-application response from the ERYC Nature Conservation Team (undated), the *Ecological Impact Assessment* (Ecology Consulting August 2022, Appendix 5) and this LVIA.

120. These measures include:

- Shelterbelt of trees to the north of the site, alongside Woldgate and within the site alongside the substation compound to help screen the substation and BESS compound.
- New field boundary hedgerows with hedgerow trees around the northern, eastern and part of the southern boundary of the site.
- New hedgerow planting to replace the short lengths of hedgerow removed along the western boundary for the site entrance and passing places.
- New hedgerow planting with hedgerow trees to gap up the existing hedgerow along the Parish boundary through the centre of the site.
- New hedgerow planting around the substation and BESS compound.
- Species-rich meadow across the entire site within the perimeter fencing including beneath the solar PV arrays (but not within the substation and BESS compound).
- Adjusting the hedge cutting regime of the existing hedgerows along the
 western and part of the southern boundary. These are mainly hawthorn
 and species poor but, by adjusting the maintenance regime, they will grow
 taller and will be maintained at a height of approximately 3m for the
 lifetime of the proposed development to better screen the site.
- A maintenance regime for the new hedgerow planting that, once established, will be maintained at a height of approximately 3m for the lifetime of the proposed development.
- 121. In accordance with the ERYC Nature Conservation Team recommendations (see para 37 above), the new hedgerow planting would use the following mix of native species typical of the Yorkshire Wolds National Character Area (no 27):

Proposed Development, Mitigation & Enhancement

Hawthorn	Crataegus monogyna	30%
Blackthorn	Prunus spinosa	30%
Hazel	Corylus avellana	15%
Field Maple	Acer campestre	10%
Dogwood	Cornus sanguinea	5%
Crab Apple	Malus sylvestris	5%
Buckthorn	Rhamnus cathartica	5%

- 122. The ERYC Nature Conservation Team did not refer to the need for hedgerow trees and did not recommend any tree species for these purposes. However, some hedgerow trees will be incorporated into the new hedgerow planting. These will be native tree species commonly found in the field boundary hedgerows in the wider area, including Oak (*Quercus robur*), Beech (*Fagus sylvaticus*), Hawthorn (*Crataegus monogyna*), Hazel (*Corylus avellana*), Crab Apple (*Malus sylvestris*) and Field Maple (*Acer campestre*).
- 123. As recommended by the ERYC Nature Conservation Team, the aim would be to create a diverse meadow across the site, with a mosaic of habitats to benefit a range of flora and fauna. The approach would be to select a commercially available and locally grown meadow seed mix with a range of species that would suit the varying microclimates across the site (due to variations in shade, soils and soil moisture) and allow the meadow to evolve into a mosaic of habitats to suit the varying microclimates. The meadow would be grazed or cut twice a year, in late summer and autumn, after the flowers have set seed, to ensure the continuance of the component species.
- 124. This planting and seeding would be undertaken in the first available planting and seeding seasons following the end of the construction phase. Further to this, there would be long-term management of the shelterbelt, hedgerows, hedgerow trees and meadow on and around the site to maximise their wildlife value and also their amenity (screening) and aesthetic value.
- 125. These measures would be sympathetic to and would enhance the character, quality and biodiversity of the site and surrounding landscapes, would be visually attractive and would add to the overall quality of the area over the lifetime of the development (in accordance with the NPPF (MHCLG July 2021) (see para 53 above). They would enhance the ability of this landscape to accommodate the type and scale of energy development proposed (in accordance with Policy EC5, see para 61 (2) above).
- 126. They would have regard to the specific characteristics of the site's wider context and the character of the surrounding area, would provide soft landscaping and boundary treatment of appropriate scale and size and would help to protect the amenity of existing properties in the wider area (in accordance with Policy ENV1, see para 66 above).

127. Also, these measures both incorporate all the existing green infrastructure features on the site (hedgerows and hedgerow trees) and propose new green infrastructure, linking up the existing wildlife corridors and creating new ones across the site (in accordance with Policy ENV5, paras 67 - 68 above).

Visibility and Viewpoint Analysis

Visibility Analysis

128. The terrain-only zones of theoretical visibility (ZTVs) that have been generated are provided in Figures 6a and 6b. These suggest that, based on the screening effects of landform only, the solar PV arrays and the substation and BESS infrastructure could be visible as follows:

Solar PV Arrays

- 129. Figure 6a suggests that the solar PV arrays could be visible on the site and immediate environs from Woldgate to the north to the A614 to the south and from just beyond the track to the west of the site (approximately 100 m west) to Church Lane (approx. 1.2 km east of the site). Further afield, there could be views of the solar PV arrays from Burton Agnes and the slopes to the north of the village (1.6 2 km west) and from land between Church Lane and Carnaby Temple (1.2 2 km east).
- 130. Figure 6a suggests that the solar PV arrays could also be visible from a wide arc of land to the south of the A614, from Station Road to the south of Burton Agnes round to the eastern end of Carnaby Industrial estate and southwards beyond the edge of the study area.
- 131. However, these theoretical areas of visibility are more extensive than the actual areas of visibility for the proposed development would be, as views from much of these areas would be screened by intervening buildings, hedgerows and woodlands. Overtime, progressively more screening would be provided by the proposed new planting as this establishes and matures.

Substation and BESS Infrastructure

- 132. Figure 6b suggests that the substation and BESS infrastructure could be visible on parts of the site and immediate environs from Woldgate to the north to the A614 to the south and from just west of the site (approximately 50 m west) to part way across the site and from an area immediately east of the site.
- 133. Figure 6b suggests that the substation and BESS infrastructure could also be visible from a wide arc of land to the south of the A614, from Station Road to the south of Burton Agnes and across the western half of Carnaby Industrial estate and southwards beyond the edge of the study area.
- 134. As for the solar PV panels, these theoretical areas of visibility are more extensive than the actual areas of visibility for the proposed development would be, as views from much of these areas would be screened by the solar PV panels, intervening buildings, hedgerows and woodlands and, overtime,

- progressively more screening would be provided by the proposed new planting as this establishes and matures.
- 135. The screening effects of the existing and proposed new planting have been taken into account in the viewpoint analysis and in the assessments of effects on landscape character, designations and visual amenity.

Viewpoint Analysis

- 136. Seven viewpoint locations (1 7) have been selected and agreed with the Council to illustrate typical views of the proposed development from the study area. The locations of these viewpoints are shown on Figures 3 6a/b and the existing and predicted views towards the proposed development from each of these viewpoints are illustrated in Figures 7.1 7.7.
- 137. This viewpoint analysis has been undertaken in accordance with the method of assessment in Appendix 2 (paras A2.48 A2.82). For each viewpoint, the overall effects of the construction, operational and decommissioning phases on landscape character and views has been assessed.
- 138. For the construction and early years of the operational phase, this analysis takes into account the current degree of screening provided by existing vegetation and buildings on and around the development site. For the operational phase beyond the early years and for the decommissioning phase, the additional screening effects of the proposed mitigation measures, in particular, allowing the existing hedgerows on and around the development site to grow taller and the implications of the proposed new hedgerow and hedgerow tree planting on and around the site are taken into account.
- 139. The viewpoint parameters are set out in Table 3 below and the viewpoint analysis findings are summarised in Tables 4 and 5 at the end of this section.

Table 3: Viewpoint Parameters

Vie	wpoint Data:				Landscape Unit:			Visual Receptors:		
No	Location	Easting Northing	Elevation (mAOD)	Distance/ direction from site	Sub-LCA	Landscape designation	Sensitivity	Receptor types	Location sensitivity	
1	West Back Side, Haisthorpe	512609 464914	32.30 m	90 m / SE	13D: North Wolds Plateau Farmland	Yorkshire Wolds Important Landscape Area	Medium	Residents Cyclists, equestrians, walkers Motorists	High High/medium Medium	
2	Public Right of Way between Woldgate and the site	512099 466072	70.97 m	330 m / N	13D: North Wolds Plateau Farmland	Yorkshire Wolds Important Landscape Area	Medium	Cyclists, equestrians, walkers	High/medium	
3	A614 between Thornholme and Haisthorpe	512376 464346	19.63 m	620 m/ S	13D: North Wolds Plateau Farmland / 19C: North Holderness Open Farmland	Boundary of Yorkshire Wolds Important Landscape Area	Medium (13D) Medium/low (19C)	Motorists	Medium	
4	Public Right of Way just off Woldgate	511268 466176	82.15 m	660 m/ N	13D: North Wolds Plateau Farmland	Yorkshire Wolds Important Landscape Area	Medium	Cyclists, equestrians, walkers Motorists	High/medium Medium	
5	Back Lane, Burton Agnes	510525 463651	35.05 m	1,720 m / SW	13D: North Wolds Plateau Farmland	Yorkshire Wolds Important Landscape Area	Medium	Cyclists, equestrians, walkers Motorists	High/medium Medium	
6	Bridleway near Carnaby Temple	514116 466648	73,44 m	2,020 m / ENE	15A: Gypsy Race Corridor Rudston to Bridlington	Yorkshire Wolds Important Landscape Area	Medium	Cyclists, equestrians, walkers	High/medium	
7	A165 near Fraisthorpe Wind Farm	515154 462854	10.08 m	3,340 m / SE	19C: North Holderness Open Farmland	None	Medium/low	Motorists	Medium	

Viewpoint 1: View from West Back Side, Haisthorpe

- 140. Location: this viewpoint is at a field gate on the west side of West Back Side, a single-track lane in the hamlet of Haisthorpe, near the junction with High Lane and just 90m southeast of the proposed development boundary (see Figures 6a and 6b). The outbuildings of Haisthorpe Hall and Home Farm and Home Farmhouse are to the rear of this view. Haisthorpe Hall is within trees to the right of this view.
- 141. Existing view: as illustrated in Figure 7.1, the foreground is an open field with pasture currently used for the grazing of horses, bounded by a mix of post and wire fencing and a tightly clipped hedgerow which forms the southern boundary of the site. The development site, the two overhead electricity lines that cross the site and the communications mast north of Woldgate are visible beyond the field/site boundary hedgerow.
- 142. Predicted view: as illustrated in Figure 7.1, the tops of the nearest solar PV panels would be visible just beyond and above the nearby site boundary hedgerow. As illustrated by the ZTV (Figure 6b) the substation and BESS infrastructure would be screened by the terrain from this location.

- 143. Landscape character area and landscape designation: in sub-LCA 13D: North Wolds Plateau Farmland and in the Yorkshire Wolds Important Landscape Area.
- 144. Landscape sensitivity: *Medium*. This is a landscape of County value and moderate susceptibility to this type of development (see Table 1 above).
- 145. Magnitude of change in landscape character that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: slight adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles and the erection of the solar PV panels, which would be partially screened by the intervening field/site boundary vegetation.
 - During operational phase (years 1 2): *slight adverse change* due to the addition of the solar PV panels into this view, which would be partially screened by the intervening field/site boundary vegetation.
 - After establishment of the mitigation measures (year 3 onwards):
 negligible adverse change as the field/site boundary hedgerow would grow
 taller and would largely screen the solar PV panels from this location and
 would also partially screen the overhead electricity lines and
 communications mast from this location.

- During decommissioning: *negligible adverse change* as the site and decommissioning activities would be largely screened by the field/site boundary hedgerow.
- 146. Overall effects on landscape character during construction: *Moderate/minor adverse effect* (medium sensitivity resource and a slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.
- 147. Overall effects on landscape character during operation (years 1 2):

 *Moderate/minor adverse effect (medium sensitivity resource and a slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary and not significant.
- 148. Overall effects on landscape character during operation (year 3 onwards): *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, long-term/temporary (if the hedgerow management reverts once the site is decommissioned) or permanent (if the hedgerow management regime is continued after decommissioning).
- 149. Overall effects on landscape character during decommissioning: *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.

- 150. Visual receptors: residents (Home Farm), equestrians, cyclists, walkers (as this lane links with the other route with public access to the north) and motorists (residents and visitors to properties in Haisthorpe).
- 151. Location value: *Private* (for residents in their properties) and *Community* (as this is a minor, single track lane used by local residents, cyclists, equestrians, walkers and motorists from the local community).
- 152. Receptor susceptibility:
 - Residents of Home Farm: Susceptible (as they would be stationary or moving slowly about their property, could be exposed to the change frequently and for sustained periods and the focus of their attention or interest could be towards the view of the proposed development).
 - Cyclists, equestrians and walkers: Susceptible (as they would be moving slowly, would be exposed to the change in the view for short periods when travelling along this short no-through lane but also as they continue along the route northwards, could experience the view frequently and where the focus of their view could be both in the direction of travel and also across the landscape towards the proposed development).

 Motorists: Moderate susceptibility (as they would be moving steadily, would be exposed to the change in the view for short periods when travelling along this short no-through lane and could experience the view frequently but where the focus of their view would be in the direction of travel and oblique to the proposed development).

153. Receptor sensitivity:

- Residents of Home Farm: *High sensitivity* (as they would be in a private location where they are likely to highly value the view and would be susceptible to change).
- Cyclists, equestrians and walkers: *High/medium sensitivity* (as they would be in a location with **local community value** and would be susceptible to change).
- Motorists: Medium sensitivity (as they would be in a location with local community value and would be moderately susceptible to change).
- 154. Magnitude of change in the view for receptors that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: *slight adverse change* due to the works being undertaken on the site, arising mainly from the movement of construction vehicles and the erection of the solar PV panels, which would be partially screened by the intervening field/site boundary vegetation.
 - During operational phase (years 1 2): *slight adverse change* due to the addition of the solar PV panels into this view, which would be partially screened by the intervening field/site boundary vegetation.
 - After establishment of the mitigation measures (year 3 onwards):
 negligible adverse change as the field/site boundary hedgerow would grow
 taller and would largely screen the solar PV panels from this location and
 would also partially screen the overhead electricity lines and
 communications mast from this location.
 - During decommissioning: *negligible adverse change* as the site and decommissioning activities would be largely screened by the field/site boundary hedgerow.
- 155. Overall effects on the view for receptors during construction:
 - Residents: *Moderate adverse effect* (high sensitivity receptors and a slight adverse magnitude of change).
 - Cyclists, equestrians and walkers: *Moderate/minor+ adverse effect* (high/medium sensitivity receptors and a slight adverse magnitude of change).

- Motorists: *Moderate/minor adverse effect* (medium sensitivity receptors and a slight adverse magnitude of change).
- 156. These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
- 157. Overall effects on the view for receptors during operation (years 1 2):
 - Residents: *Moderate adverse* effect (high sensitivity receptors and a slight adverse magnitude of change).
 - Cyclists, equestrians and walkers: Moderate/minor+ adverse effect (high/medium sensitivity receptors and a slight adverse magnitude of change).
 - Motorists: *Moderate/minor adverse* effect (medium sensitivity receptors and a slight adverse magnitude of change).
- 158. These adverse effects on the view would be direct, individual, short-term/temporary and not significant.
- 159. Overall effects on the view for receptors during operation (year 3 onwards):
 - Residents: *Moderate/minor adverse effect* (high sensitivity receptor and a negligible adverse magnitude of change).
 - Cyclists, equestrians and walkers: *Minor+ adverse effect* (high/medium sensitivity receptor and a negligible adverse magnitude of change).
 - Motorists: *Minor adverse effect* (medium sensitivity receptor and a negligible adverse magnitude of change).
- 160. These adverse effects on views would be direct, individual, long-term/temporary, reversible and not significant.
- 161. Overall effects on the view for receptors during decommissioning:
 - Residents: *Moderate/minor adverse effect* (high sensitivity receptor and a negligible adverse magnitude of change).
 - Cyclists, equestrians and walkers: *Minor+ adverse effect* (high/medium sensitivity receptor and a negligible adverse magnitude of change).
 - Motorists: Minor adverse effect (medium sensitivity receptor and a negligible adverse magnitude of change).
- 162. These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.

Viewpoint 2: View from Public Right of Way between Woldgate and the Site

- 163. Location: this viewpoint is on the other route with public access that links Woldgate with West Back Side in Haisthorpe. It is on the Wold dip slope 330 m north of the proposed development boundary (see Figures 6a and 6b).
- 164. Existing view: as illustrated in Figure 7.2, the foreground is open arable fields to either side of the track with no fencing or hedgerows between the track and the fields. The development site and the two overhead electricity lines that cross the site are on lower ground in the middle distance and there is a panoramic view of the North Holderness Open Farmland, including the Lissett Airfield Wind Farm, in the distance.
- 165. Predicted view: as illustrated in Figure 7.2, much of the site would be visible in the middle distance, following the rolling contours of the site, with the backs of the solar PV panel arrays visible. The substation and BESS infrastructure would also be visible from this location.

- 166. Landscape character area and landscape designation: in sub-LCA 13D: North Wolds Plateau Farmland and in the Yorkshire Wolds Important Landscape Area.
- 167. Landscape sensitivity: *Medium*. This is a landscape of County value and moderate susceptibility to this type of development (see Table 1 above).
- 168. Magnitude of change in landscape character that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: moderate adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles, the erection of the solar PV panels, and the construction of the substation and BESS infrastructure. There are no existing hedgerows to screen the site from this location.
 - During operational phase (years 1 ~10): moderate adverse change due to the addition of the solar PV panels and the substation and BESS infrastructure into this view. There are no existing hedgerows to screen the site from this location.
 - After establishment of the mitigation measures (year ~11 onwards): slight
 adverse change as the new hedgerow and shelterbelt along the north
 boundary of the site would progressively screen the substation and BESS
 infrastructure and partially screen the solar PV panels from this location
 and would also partially screen the overhead electricity lines from this
 location. There would still be a panoramic view of the North Holderness
 Open Farmland over the hedgerow.

- During decommissioning: *negligible adverse change* as the site and decommissioning activities would be largely screened by the proposed boundary hedgerow and shelterbelt.
- 169. Overall effects on landscape character during construction: *Moderate adverse effect* (medium sensitivity resource and a moderate adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.
- 170. Overall effects on landscape character during operation (years 1 ~10:

 **Moderate adverse effect* (medium sensitivity resource and a moderate adverse magnitude of change). These adverse effects on landscape character would be direct, individual, medium-term/temporary and not significant.
- 171. Overall effects on landscape character during operation (year ~11 onwards): Moderate/minor adverse effect (medium sensitivity resource and a slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, long-term/temporary and not significant.
- 172. Overall effects on landscape character during decommissioning: *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.

- 173. Visual receptors: equestrians, cyclists and walkers.
- 174. Location value: *Community* (as this is a public right of way used by local residents, cyclists, equestrians and walkers from the local community). It is not part of a long-distance route.
- 175. Receptor susceptibility: Cyclists, equestrians and walkers: Susceptible (as they would be moving slowly, would be exposed to the change in the view for short periods when travelling along this route, could experience the view frequently and where the focus of their view could be in the direction of travel towards the proposed development but also over the development site towards the more distant panoramic view).
- 176. Receptor sensitivity: Cyclists, equestrians and walkers: *High/medium* sensitivity (as they would be in a location with local community value and susceptible to change).
- 177. Magnitude of change in the view for receptors that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: moderate adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles, the erection of the solar PV panels, and the

construction of the substation and BESS infrastructure. There are no existing hedgerows to screen the site from this location.

- During operational phase (years 1 ~10): moderate adverse change due to the addition of the solar PV panels and the substation and BESS infrastructure into this view. There are no existing hedgerows to screen the site from this location but the new hedgerow and shelterbelt along the northern boundary would progressively screen the site from this location.
- After establishment of the mitigation measures (year ~11 onwards): slight
 adverse change as the proposed boundary hedgerow and shelterbelt would
 progressively screen the substation and BESS infrastructure and partially
 screen the solar PV panels from this location and would also partially
 screen the overhead electricity lines. There would still be a panoramic
 view of the North Holderness Open Farmland over the hedgerow.
- During decommissioning: *negligible adverse change* as the site and decommissioning activities would be largely screened by the proposed hedgerow and shelterbelt along the north boundary of the site.
- 178. Overall effects on the view for receptors during construction: Cyclists, equestrians and walkers: *Moderate+ adverse effect* (high/medium sensitivity receptors and a moderate adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
- 179. Overall effects on the view for receptors during operation (years 1 ~10): Cyclists, equestrians and walkers: *Moderate+ adverse* effect (high/medium sensitivity receptors and a moderate adverse magnitude of change). These adverse effects on the view would be direct, individual, medium-term/temporary and would contribute to significant effects on visual amenity if combined with closer views along this route.
- 180. Overall effects on the view for receptors during operation (year ~11 onwards): Cyclists, equestrians and walkers: *Moderate/minor+ adverse effect* (high/medium sensitivity receptor and a slight adverse magnitude of change). These adverse effects on views would be direct, individual, long-term/temporary and not significant.
- 181. During decommissioning: Cyclists, equestrians and walkers: *Minor+ adverse change* (high/medium sensitivity receptor and a negligible adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.

Viewpoint 3: View from A614 between Thornholme and Haisthorpe

- 182. Location: this viewpoint is at the entrance to a field and track on the north side of the A614, a busy two-lane main road that links Driffield and Bridlington and passes through Burton Agnes, Thornholme, Haisthorpe and Carnaby. The viewpoint is 620 m south of the proposed development (see Figures 6a and 6b).
- 183. Existing view: as illustrated in Figure 7.3, the foreground is the track and a large arable field with a hedgerow along the western and northern boundaries of the field but no hedgerow between the field and the A614. The development site and the two overhead electricity lines that cross the site are on higher ground in the middle distance and the communications mast north of Woldgate is visible on the skyline.
- 184. Predicted view: as illustrated in Figure 7.3, the front faces of the solar PV arrays would be visible rising up the slope beyond the northern field boundary hedgerow. The upper parts of the substation and BESS infrastructure would be discernible above the solar PV panels from this location.

Effects on Landscape Character

185. Landscape character area and landscape designation: the landscape illustrated in Figure 7.3 is in sub-LCA 13D: North Wolds Plateau Farmland and in the Yorkshire Wolds Important Landscape Area. The landscape to the immediate rear of this view is in sub-LCA 19C: North Holderness Open Farmland and not in any landscape designations.

186. Landscape sensitivity:

- Sub-LCA 13D: North Wolds Plateau Farmland: *Medium* as this is a landscape of County value and moderate susceptibility to this type of development (see Table 1 above).
- Sub-LCA 19C: North Holderness Open Farmland: Medium/low as this is a landscape of local value and slight susceptibility to this type of development (see Table 2 above).
- 187. Magnitude of change in landscape character that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: moderate/slight adverse change due to the
 works being undertaken on the site, arising mainly from the movement of
 construction vehicles, the erection of the solar PV panels, which would be
 partially screened by the intervening field boundary hedgerow and the
 construction of the substation and BESS infrastructure which would be
 beyond but taller than the panels.
 - During operational phase (years 1 2): moderate/slight adverse change due to the addition of the solar PV panels, which would be partially

screened by the intervening field boundary hedgerow and the addition of the substation and BESS infrastructure into this view which would be visible above and beyond the panels.

- After establishment of the mitigation measures (year 3 onwards): slight
 adverse change as the site boundary hedgerow to the north of this
 viewpoint would grow taller and screen the substation and BESS
 infrastructure and some of the solar PV panels and the proposed new
 hedgerow along the rest of the southern boundary of the site would
 progressively screen the remainder of the solar PV panels from this
 location.
- During decommissioning: *no change* as the site and decommissioning activities would be screened by the hedgerows along the southern boundary of the site.
- 188. Overall effects on landscape character during construction:
 - Sub-LCA 13D: North Wolds Plateau Farmland: Moderate/minor+ adverse
 effect (medium sensitivity resource and a moderate/slight adverse
 magnitude of change). These adverse effects on landscape character
 would be direct, individual, short-term/temporary, reversible and not
 significant.
 - Sub-LCA 19C: North Holderness Open Farmland: Moderate/minor adverse
 effect (medium/low sensitivity resource and a moderate/slight adverse
 magnitude of change). These adverse effects on landscape character
 would be direct, individual, short-term/temporary, reversible and not
 significant.
- 189. Overall effects on landscape character during operation (years 1 2):
 - Sub-LCA 13D: North Wolds Plateau Farmland: *Moderate/minor+ adverse effect* (medium sensitivity resource and a moderate/slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary and not significant.
 - Sub-LCA 19C: North Holderness Open Farmland: *Moderate/minor adverse effect* (medium/low sensitivity resource and a moderate/slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary and not significant.
- 190. Overall effects on landscape character during operation (year 3 onwards):
 - Sub-LCA 13D: North Wolds Plateau Farmland: *Moderate/minor adverse effect* (medium sensitivity resource and a slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, long-term/temporary and not significant.

- Sub-LCA 19C: North Holderness Open Farmland: *Minor+ adverse effect* (medium/low sensitivity resource and a slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, long-term/temporary and not significant.
- 191. Overall effects on landscape character during decommissioning: *No effect* (medium sensitivity resource and no change).

- 192. Visual receptors: motorists on the A614.
- 193. Location value: *Borough* (as this is a main road linking two towns and several villages along the edge of a local landscape designation).
- 194. Receptor susceptibility:
 - Motorists: Moderate susceptibility (as they would be moving steadily, would be exposed to the change in the view for short periods when travelling along this main road and could experience the view frequently but where the focus of their view would be in the direction of travel and oblique to the proposed development).
- 195. Receptor sensitivity:
 - Motorists: *Medium sensitivity* (as they would be in a location with Borough value and would be moderately susceptible to change).
- 196. Magnitude of change in the view for receptors that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: moderate/slight adverse change due to the
 works being undertaken on the site, arising mainly from the movement of
 construction vehicles, the erection of the solar PV panels, which would be
 partially screened by the intervening field boundary hedgerow and the
 construction of the substation and BESS compound infrastructure which
 would be beyond but taller than the panels.
 - During operational phase (years 1 2): moderate/slight adverse change due to the addition of the solar PV panels, which would be partially screened by the intervening field boundary hedgerow and the addition of the substation and BESS compound infrastructure into this view which would be visible above and beyond the panels.
 - After establishment of the mitigation measures (year 3 onwards): slight
 adverse change as the site boundary hedgerow to the north of this
 viewpoint would grow taller and screen the substation and BESS
 infrastructure and some of the solar PV panels and the proposed new
 hedgerow along the rest of the southern boundary of the site would

progressively screen the remainder of the solar PV panels from this location.

- During decommissioning: *no change* as the site and decommissioning activities would be screened by the hedgerows along the southern boundary of the site.
- 197. Overall effects on the view for receptors during construction: Motorists: Moderate/minor+ adverse effect (medium sensitivity receptors and a moderate/slight adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
- 198. Overall effects on the view for receptors during operation (years 1 2):

 Motorists: Moderate/minor+ adverse effect (medium sensitivity receptors and a moderate/slight adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary and not significant.
- 199. Overall effects on the view for receptors during operation (year 3 onwards):

 Motorists: Moderate/minor adverse effect (medium sensitivity receptor and a slight adverse magnitude of change). These adverse effects on views would be direct, individual, long-term/temporary and not significant.
- 200. Overall effects on the view for receptors during decommissioning: Motorists: *No effect* (medium sensitivity receptors and no change).

Viewpoint 4: View from Public Right of Way just off Woldgate

- 201. Location: this viewpoint is at the entrance to a field beside another route with public access that links Woldgate with the A614 at the site entrance. It is on the Wold dip slope above and 660 m north of the proposed development boundary (see Figures 6a and 6b).
- 202. Existing view: as illustrated in Figure 7.4, the foreground is a large arable field. The track/PRoW has hedgerows on both sides which limit views in this direction. The development site and the two overhead electricity lines that cross the site are on lower ground in the middle distance and there is a panoramic view of the North Holderness Open Farmland, including the Fraisthorpe Wind Farm, in the distance.
- 203. Predicted view: as illustrated in Figure 7.4, the proposed development would be partially screened by the intervening terrain, with the backs of the solar PV panel arrays and the upper parts of the substation and BESS infrastructure visible in the middle distance.

- 204. Landscape character area and landscape designation: in sub-LCA 13D: North Wolds Plateau Farmland and in the Yorkshire Wolds Important Landscape Area.
- 205. Landscape sensitivity: *Medium*. This is a landscape of County value and moderate susceptibility to this type of development (see Table 1 above).
- 206. Magnitude of change in landscape character that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: slight adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles, the erection of the solar PV panels, and the construction of the substation and BESS infrastructure.
 - During operational phase (years 1 ~10): slight adverse change due to the
 addition of the solar PV panels and the substation and BESS infrastructure
 into this view. There are no existing hedgerows to screen the site from
 this location.
 - After establishment of the mitigation measures (year ~11 onwards): slight/
 negligible adverse change as the new hedgerow and shelterbelt along the
 north boundary of the site would progressively screen the substation and
 BESS compound and partially screen the solar PV panels from this location
 and would also partially screen the overhead electricity lines from this
 location. There would still be a panoramic view of the North Holderness
 Open Farmland over the hedgerow, with the shelterbelt as a feature
 within this view.

- During decommissioning: *negligible adverse change* as the site and decommissioning activities would be largely screened by the site boundary hedgerow and shelterbelt.
- 207. Overall effects on landscape character during construction: *Moderate/minor adverse effect* (medium sensitivity resource and a slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.
- 208. Overall effects on landscape character during operation (years 1 ~10): Moderate/minor adverse effect (medium sensitivity resource and a slight adverse magnitude of change). These adverse effects on landscape character would be direct, individual, medium-term/temporary and not significant.
- 209. Overall effects on landscape character during operation (year ~11 onwards): Minor+ adverse effect (medium sensitivity resource and a slight/negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, long-term/temporary and not significant.
- 210. Overall effects on landscape character during decommissioning: *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.

- 211. Visual receptors: cyclists, equestrians, walkers and motorists.
- 212. Location value: *County* (as several long distance promoted routes follow this section of Woldgate and this location is in a local landscape designation).
- 213. Receptor susceptibility:
 - Cyclists, equestrians and walkers: Susceptible (as they would be moving slowly, would be exposed to the change in the view for short periods when travelling along this route, could experience the view frequently and where the focus of their view could be in the direction of travel towards the proposed development but also over the development site towards the more distant panoramic view).
 - Motorists: Moderate susceptibility (as they would be moving steadily, would be exposed to the change in the view for short periods when travelling along this main road and could experience the view frequently but where the focus of their view would be in the direction of travel and oblique to the proposed development).
- 214. Receptor sensitivity:

- Cyclists, equestrians and walkers: *High/medium sensitivity* (as they would be in a location with County value and susceptible to change).
- Motorists: *Medium sensitivity* (as they would be in a location with County value and would be moderately susceptible to change).
- 215. Magnitude of change in the view for receptors that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: *slight adverse change* due to the works being undertaken on the site, arising mainly from the movement of construction vehicles, the erection of the solar PV panels, and the construction of the substation and BESS infrastructure.
 - During operational phase (years 1 ~10): slight adverse change due to the addition of the solar PV panels and the substation and BESS infrastructure into this view. There are no existing hedgerows to screen the site from this location.
 - After establishment of the mitigation measures (year ~11 onwards):
 slight/negligible adverse change as the proposed hedgerow and shelterbelt
 along the north boundary of the site would screen the substation and BESS
 infrastructure and largely screen the solar PV panels from this location and
 would also partially screen the overhead electricity lines from this
 location. There would still be a panoramic view of the North Holderness
 Open Farmland over the hedgerow, with the shelterbelt as a feature
 within this view.
 - During decommissioning: *negligible adverse change* as the site and decommissioning activities would be largely screened by the site boundary hedgerow and shelterbelt.
- 216. Overall effects on the view for receptors during construction:
 - Cyclists, equestrians and walkers: Moderate/minor+ adverse effect
 (high/medium sensitivity receptors and a slight adverse magnitude of
 change). These adverse effects on the view would be direct, individual,
 short-term/temporary, reversible and not significant.
 - Motorists: Moderate/minor adverse effect (medium sensitivity receptors and a slight adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
- 217. Overall effects on the view for receptors during operation (years 1 ~10):
 - Cyclists, equestrians and walkers: Moderate/minor+ adverse effect (high/medium sensitivity receptors and a slight adverse magnitude of

- change). These adverse effects on the view would be direct, individual, medium-term/temporary and not significant.
- Motorists: Moderate/minor adverse effect (medium sensitivity receptor and a slight adverse magnitude of change). These adverse effects on views would be direct, individual, medium-term/temporary and not significant.
- 218. Overall effects on the view for receptors during operation (year ~11 onwards):
 - Cyclists, equestrians and walkers: Moderate/minor adverse effect
 (high/medium sensitivity receptor and a slight/negligible adverse
 magnitude of change). These adverse effects on views would be direct,
 individual, long-term/temporary and not significant.
 - Motorists: Minor+ adverse effect (medium sensitivity receptor and a slight/negligible adverse magnitude of change). These adverse effects on views would be direct, individual, long-term/temporary and not significant.
- 219. Overall effects on the view for receptors during decommissioning:
 - Cyclists, equestrians and walkers: Minor+ adverse effect (high/medium sensitivity receptor and a negligible adverse magnitude of change). These adverse effects on views would be direct, individual, short-term/ temporary and not significant.
 - Motorists: Minor adverse effect (medium sensitivity receptor and a negligible adverse magnitude of change). These adverse effects on views would be direct, individual, short-term/temporary and not significant.

Viewpoint 5: View from Back Lane, Burton Agnes

- 221. Location: this viewpoint is at the entrance to a field, on a minor lane, on the lower Wold slopes to the east of Burton Agnes. The viewpoint is 1,720 m southwest of the proposed development (see Figures 6a and 6b).
- 222. Existing view: as illustrated in Figure 7.5, the foreground is large open, rolling fields with an intermittent hedgerow along roadside and some field boundaries, hedgerow trees and small copses in the intervening landscape. The development site and the two overhead electricity lines that cross the site are on the rolling slopes in the middle distance. The communications mast north of Woldgate is visible on the skyline and to the right of the view is the North Holderness Open Farmland with the Fraisthorpe Wind Farm in the distance.
- 223. Predicted view: as illustrated in Figure 7.4, the site and solar PV arrays would be almost entirely screened by the rolling terrain and intervening hedgerows and, as illustrated by the ZTV in Figure 6b, the substation and BESS infrastructure would be screened by the terrain from this location.

- 224. Landscape character area and landscape designation: in sub-LCA 13D: North Wolds Plateau Farmland and in the Yorkshire Wolds Important Landscape Area.
- 225. Landscape sensitivity: *Medium*. This is a landscape of County value and moderate susceptibility to this type of development (see Table 1 above).
- 226. Magnitude of change in landscape character that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: negligible adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles and the erection of the solar PV panels, which would be largely screened by the intervening terrain and field boundary vegetation.
 - During operational phase (years 1 2): negligible adverse change due to the addition of the solar PV panels, which would be largely screened by the intervening terrain and field boundary vegetation.
 - After establishment of the mitigation measures (year 3 onwards): no change as the existing hedgerows along the west boundary of the site would grow taller and would screen the solar PV panels from this location.
 - During decommissioning: *no change* as the site and decommissioning activities would be screened by the site boundary hedgerows.
- 227. Overall effects on landscape character during construction: *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of

- change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.
- 228. Overall effects on landscape character during operation (years 1 2): *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary and not significant.
- 229. Overall effects on landscape character during operation (year 3 onwards): *No effect* (medium sensitivity resource and no change).
- 230. Overall effects on landscape character during decommissioning: *No effect* (medium sensitivity resource and no change).

- 231. Visual receptors: cyclists, equestrians, walkers and motorists.
- 232. Location value: *Community* (as this is a minor, single track lane used by local cyclists, equestrians, walkers and motorists from the local community).
- 233. Receptor susceptibility:
 - Cyclists, equestrians and walkers: Susceptible (as they would be moving slowly, would be exposed to the change in the view for short periods when travelling along this minor single-track lane, could experience the view frequently and where the focus of their view could be both in the direction of travel and also across the landscape towards the proposed development).
 - Motorists: Moderate susceptibility (as they would be moving steadily, would be exposed to the change in the view for short periods when travelling along this minor single-track lane and could experience the view frequently but where the focus of their view would be in the direction of travel and oblique to the proposed development).

234. Receptor sensitivity:

- Cyclists, equestrians and walkers: *High/medium sensitivity* (as they would be in a location with local community value and would be susceptible to change).
- Motorists: Medium sensitivity (as they would be in a location with local community value and would be moderately susceptible to change).
- 235. Magnitude of change in the view for receptors that would arise as a consequence of the proposed development would be as follows:

- During construction phase: negligible adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles and the erection of the solar PV panels, which would be largely screened by the intervening terrain and field boundary vegetation.
- During operational phase (years 1 2): negligible adverse change due to the addition of the solar PV panels, which would be largely screened by the intervening terrain and field boundary vegetation.
- After establishment of the mitigation measures (year 3 onwards): no change as the existing hedgerows along the west boundary of the site would grow taller and would screen the solar PV panels from this location.
- During decommissioning: *no change* as the site and decommissioning activities would be screened by the site boundary hedgerows.
- 236. Overall effects on the view for receptors during construction:
 - Cyclists, equestrians and walkers: Minor+ adverse effect (high/medium sensitivity receptors and a negligible adverse magnitude of change).
 These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
 - Motorists: Minor adverse effect (medium sensitivity receptors and a negligible adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
- 237. Overall effects on the view for receptors during operation (years 1 2):
 - Cyclists, equestrians and walkers: Minor+ adverse effect (high/medium sensitivity receptors and a negligible adverse magnitude of change).
 These adverse effects on the view would be direct, individual, short-term/temporary and not significant.
 - Motorists: Minor adverse effect (medium sensitivity receptors and a negligible adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary and not significant.
- 238. Overall effects on the view for receptors during operation (year 3 onwards): *No effect* (high/medium and medium sensitivity receptors and no change).
- 239. Overall effects on the view for receptors during decommissioning: *No effect* (high/medium and medium sensitivity receptors and no change).

Viewpoint 6: View from Bridleway near Carnaby Temple

- 240. Location: this viewpoint is on a bridleway that links Woldgate with the A614 at Carnaby. It is on the Wold dip slope 2,020 m east-northeast of the proposed development boundary (see Figures 6a and 6b).
- 241. Existing view: as illustrated in Figure 7.6, the foreground is a large arable field. The bridleway does not have hedgerows alongside but there is a shelterbelt of tall, mature trees which limit views in the direction of the site. There is a gap in the shelterbelt where the overhead electricity lines that crosses the northern part of the site run across the Wold slope and there is also another overhead electricity line running parallel with the bridleway and down the Wold slope at this point. The very large agricultural buildings at Temple Farm are to the left of this view.
- 242. Predicted view: as illustrated in Figure 7.6, the proposed development would be beyond the shelterbelt, largely screened by the intervening terrain and shelterbelt in winter, and entirely screened by the shelterbelt in summer. As illustrated by the ZTV (Figure 6b), the substation and BESS infrastructure would be entirely screened by terrain from this location.

- 243. Landscape character area and landscape designation: in sub-LCA 15A: Gypsy Race Corridor, close to the boundary with sub-LCA 13D: North Wolds Plateau Farmland and in the Yorkshire Wolds Important Landscape Area (see Figures 3 and 4). However, this location is on the south facing Wold slope and the landscape character is much more akin to sub-LCA 13D than sub-LCA 15A (which is characterised by the scarp slope and valley to the north of the site). Hence the landscape character at this location has been considered similar to sub-LCA 13D.
- 244. Landscape sensitivity: *Medium*. This is a landscape of County value and moderate susceptibility to this type of development (see Table 1 above).
- 245. Magnitude of change in landscape character that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: negligible adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles and the erection of the solar PV panels.
 - During operational phase (years 1 ~10): negligible adverse change due to the addition of the solar PV panels.
 - After establishment of the mitigation measures (year ~11 onwards): no change as the proposed hedgerow along the eastern boundary of the site would screen the solar PV panels from this location.

- During decommissioning: *no change* as the site and decommissioning activities would be screened by the proposed hedgerow along the eastern boundary of the site.
- 246. Overall effects on landscape character during construction: *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.
- 247. Overall effects on landscape character during operation (years 1 ~10): *Minor adverse effect* (medium sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, medium-term/temporary and not significant.
- 248. Overall effects on landscape character during operation (year ~11 onwards): *No effect* (medium sensitivity resource and no change).
- 249. Overall effects on landscape character during decommissioning: *No effect* (medium sensitivity resource and no change).

- 250. Visual receptors: cyclists, equestrians and walkers.
- 251. Location value: *County* (as the Rudston Roam promoted route follows this bridleway and this location is in a local landscape designation).
- 252. Receptor susceptibility:
 - Cyclists, equestrians and walkers: Susceptible (as they would be moving slowly, would be exposed to the change in the view for short periods when travelling along this route, could experience the view frequently, where the focus of their view would be in the direction of travel rather than towards the proposed development but where they are likely to stop to look at Carnaby Temple and so may look towards the site).
- 253. Receptor sensitivity:
 - Cyclists, equestrians and walkers: *High/medium sensitivity* (as they would be in a location with County value and susceptible to change).
- 254. Magnitude of change in the view for receptors that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: negligible adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles and the erection of the solar PV panels, largely screened by the terrain and intervening shelterbelt.

- During operational phase (years 1 ~10): negligible adverse change due to the addition of the solar PV panels into this view, largely screened by the terrain and intervening shelterbelt.
- After establishment of the mitigation measures (year ~11 onwards): no change as the proposed hedgerow along the eastern boundary of the site would screen the solar PV panels from this location.
- During decommissioning: *no change* as the site and decommissioning activities would be screened by the proposed hedgerow along the eastern boundary of the site.
- 255. Overall effects on the view for receptors during construction:
 - Cyclists, equestrians and walkers: Minor+ adverse effect (high/medium sensitivity receptors and a negligible adverse magnitude of change).
 These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
- 256. Overall effects on the view for receptors during operation (years 1 ~10):
 - Cyclists, equestrians and walkers: Minor+ adverse effect (high/medium sensitivity receptors and a negligible adverse magnitude of change).
 These adverse effects on the view would be direct, individual, medium-term/temporary and not significant.
- 257. Overall effects on the view for receptors during operation (year ~11 onwards):
 - Cyclists, equestrians and walkers: *No effect* (high/medium sensitivity receptor and no change).
- 258. Overall effects on the view for receptors during decommissioning:
 - Cyclists, equestrians and walkers: *No effect* (high/medium sensitivity receptor and no change).

Viewpoint 7: View from A165 near Fraisthorpe Wind Farm

- 260. Location: this viewpoint is close to the entrance to Fraisthorpe Wind Farm on the east side of the A165, a busy two-lane main road that links Lissett and Bridlington. The viewpoint is 3,340 m southeast of the proposed development (see Figures 6a and 6b).
- 261. Existing view: as illustrated in Figure 7.7, the foreground is the road and a large arable field with a roadside hedgerow and intermittent field boundary vegetation, with the rising slope of the Wold in the distance. The development site is on the slope in the distance and the communications mast north of Woldgate is visible on the skyline. A single wind turbine on Carnaby Industrial estate is visible beyond the intervening overhead electricity lines and the Fraisthorpe wind turbines are to the rear of this location.
- 262. Predicted view: as illustrated in Figure 7.7, the solar PV arrays would be part way up the slope in the distance. The upper parts of the substation and BESS infrastructure would be above the solar PV panels but barely discernible from this location.

- 263. Landscape character area and landscape designation: the landscape illustrated in Figure 7.7 is in sub-LCA 13D: North Wolds Plateau Farmland and in the Yorkshire Wolds Important Landscape Area. This viewpoint is in sub-LCA 19C: North Holderness Open Farmland, close to the boundary with sub-LCA 20C: Bridlington the Hornsea Coast, and not in any landscape designations.
- 264. Landscape sensitivity: *Medium/low* as this is a landscape of local value and slight susceptibility to this type of development (see Table 2 above).
- 265. Magnitude of change in landscape character that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: negligible adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles, the erection of the solar PV panels and the construction of the substation and BESS infrastructure which would be barely discernible from this distance.
 - During operational phase (years 1 40): negligible adverse change due to
 the addition of the solar PV panels, which would be partially screened by
 the intervening existing vegetation and the addition of the substation and
 BESS infrastructure into this view, all of which would be barely discernible
 from this distance. The proposed mitigation measures (allowing the
 existing hedgerows to grow taller, proposed new boundary hedgerows and
 shelterbelt to the north of the substation) would not provide much
 additional screening of the proposed development from this location.

- During decommissioning: negligible adverse change as the site and decommissioning activities would be largely screened and barely discernible from this location.
- 266. Overall effects on landscape character during construction: *Minor/negligible+ adverse effect* (medium/low sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.
- 267. Overall effects on landscape character during operation (year 1 40):

 Minor/negligible+ adverse effect (medium/low sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, long-term/temporary and not significant.
- 268. Overall effects on landscape character during decommissioning:

 Minor/negligible+ adverse effect (medium/low sensitivity resource and a negligible adverse magnitude of change). These adverse effects on landscape character would be direct, individual, short-term/temporary, reversible and not significant.

- 269. Visual receptors: motorists on the A165.
- 270. Location value: Borough (as this is a main road linking towns and villages).
- 271. Receptor susceptibility:
 - Motorists: Moderate susceptibility (as they would be moving steadily, would be exposed to the change in the view for short periods when travelling along this main road and could experience the view frequently but where the focus of their view would be in the direction of travel and oblique to the proposed development).
- 272. Receptor sensitivity:
 - Motorists: *Medium sensitivity* (as they would be in a location with Borough value and would be moderately susceptible to change).
- 273. Magnitude of change in the view for receptors that would arise as a consequence of the proposed development would be as follows:
 - During construction phase: negligible adverse change due to the works being undertaken on the site, arising mainly from the movement of construction vehicles, the erection of the solar PV panels and the construction of the substation and BESS infrastructure which would be barely discernible from this distance.

- During operational phase (years 1 40): negligible adverse change due to the addition of the solar PV panels, which would be partially screened by the intervening existing vegetation and the addition of the substation and BESS infrastructure into this view, all of which would be barely discernible from this distance. The proposed mitigation measures (allowing the existing hedgerows to grow taller, proposed new boundary hedgerows and shelterbelt to the north of the substation) would not provide much additional screening of the proposed development from this location.
- During decommissioning: negligible adverse change as the site and decommissioning activities would be largely screened and barely discernible from this location.
- 274. Overall effects on the view for receptors during construction: *Minor adverse effect* (medium sensitivity receptors and a negligible adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.
- 275. Overall effects on the view for receptors during operation (year 1 40): *Minor adverse effect* (medium sensitivity receptor and a negligible adverse magnitude of change). These adverse effects on views would be direct, individual, long-term/temporary and not significant.
- 276. Overall effects on the view for receptors during decommissioning: *Minor adverse effect* (medium sensitivity receptors and negligible adverse magnitude of change). These adverse effects on the view would be direct, individual, short-term/temporary, reversible and not significant.

Table 4: Summary of Viewpoint Analysis - Effects on Landscape Character

Viev	wpoint Data:			Landscape Unit:		Effects on Land	dscape Character:											
No	Location	Easting Northing	Distance/ direction from site	Sub-LCA	Sensitivity	Construction Phase	Operational Phase (early)	Operational Phase (later)	Decommissioning Phase									
1	West Back Side, Haisthorpe	512609 464914	90 m / SE	13D: North Wolds Plateau Farmland	Medium	Moderate/ minor adverse (short-term)	Moderate / minor adverse (short-term) (years 1 - 2)	Minor adverse (long-term) (years 3 - 40)	Minor adverse (short-term)									
2	Public Right of Way between Woldgate and the site	512099 466072	330 m / N	13D: North Wolds Plateau Farmland	Medium	Moderate adverse (short- term)	Moderate adverse (medium-term) (years 1 - ~10)	Moderate/minor adverse (long-term) (years ~11 - 40)	Minor adverse (short-term)									
3	A614 between Thornholme and Haisthorpe											620 m/ S	13D: North Wolds Plateau Farmland	Medium	Moderate/ minor+ adverse (short-term)	Moderate/ minor+ adverse (short-term) (years 1 - 2)	Moderate/minor adverse (long-term) (years 3 - 40)	Minor+ adverse (short-term)
				19C: North Holderness Open Farmland	Medium/ low	Moderate/ minor adverse (short-term)	Moderate/ minor adverse (short-term) (years 1 - 2)	Minor+ adverse (long-term) (years 3 - 40)	No effect									
4	Public Right of Way just off Woldgate	511268 466176	660 m/ N	13D: North Wolds Plateau Farmland	Medium	Moderate/ minor adverse (short-term)	Moderate/ minor adverse (medium-term) (years 1 - ~10)	Minor+ adverse (long-term) (years ~11 - 40)	Minor adverse (short-term)									
5	Back Lane, Burton Agnes	510525 463651	1,720 m / SW	13D: North Wolds Plateau Farmland	Medium	Minor adverse (short-term)	Minor adverse (short-term) (years 1 - 2)	No effect	No effect									
6	Bridleway near Carnaby Temple	514116 515154	2,020 m / ENE	15A: Gypsy Race Corridor Rudston to Bridlington	Medium	Minor adverse (short-term)	Minor adverse (medium-term) (years 1 - ~10)	No effect	No effect									

Viewpoint Data:			Landscape Unit: Effects on Landscape Character:						
No	Location	Easting Northing	Distance/ direction from site	Sub-LCA	Sensitivity	Construction Phase	Operational Phase (early)	Operational Phase (later)	Decommissioning Phase
7	A165 near Fraisthorpe Wind Farm	515154 462854	3,340 m / SE	19C: North Holderness Open Farmland	Medium/ low	Minor/ negligible+ adverse (short-term)	Minor/negligible+ adverse (long-term) (years 1 - 40)		Minor/negligible+ adverse (short-term)

Table 5: Summary of Viewpoint Analysis - Effects on Views

Viev	wpoint Data:			Visual Receptors:		Effects on Views	s:		
No	Location	Easting Northing	Distance/ direction from site	Receptor Types	Sensitivity	Construction Phase	Operational Phase (early)	Operational Phase (later)	Decommissioning Phase
1	West Back Side, Haisthorpe	side, 512609 464914	90 m / SE	Residents	High	Moderate adverse (short-term)	Moderate adverse (short-term) (years 1 - 2)	Moderate/minor adverse (long-term) (years 3 - 40)	Moderate/ minor adverse (short-term)
				Cyclists, equestrians, walkers	High/ medium	Moderate/ minor+ adverse (short-term)	Moderate/ minor+ adverse (short-term) (years 1 - 2)	Minor+ adverse (long-term) (years 3 - 40)	Minor+ adverse (short-term)
				Motorists	Medium	Moderate/ minor adverse (short-term)	Moderate/ minor adverse (short-term) (years 1 - 2)	Minor adverse (long-term) (years 3 - 40)	Minor adverse (short-term)
2	Public Right of Way between Woldgate and the site	512099 466072	330 m / N	Cyclists, equestrians, walkers	High/ medium	Moderate+ adverse (short-term)	Moderate+ adverse (medium-term) (years 1 - ~10)	Moderate/minor+ adverse (long-term) (years ~11 - 40)	Minor+ adverse (short-term)
3	A614 between Thornholme and Haisthorpe	512376 464346	620 m/ S	Motorists	Medium	Moderate/ minor+ adverse (short-term)	Moderate/ minor+ adverse (short-term) (years 1 - 2)	Moderate/minor adverse (long-term) (years 3 - 40)	No effect
4	Public Right of Way just off Woldgate	ast off 466176 e-w	660 m/ N	Cyclists, equestrians, walkers	High/ medium	Moderate/ minor+ adverse (short-term)	Moderate/ minor+ adverse (medium-term) (years 1 - ~10)	Moderate/minor adverse (long-term) (years ~11 - 40)	Minor+ adverse (short-term)
			Motorists	Medium	Moderate/ minor adverse (short-term)	Moderate/ minor adverse (medium-term) (years 1 - ~10)	Minor+ adverse (long-term) (years ~11 - 40)	Minor adverse (short-term)	

Viewpoint Data:				Visual Receptors:		Effects on Views:			
No	Location	Easting Northing	Distance/ direction from site	Receptor Types	Sensitivity	Construction Phase	Operational Phase (early)	Operational Phase (later)	Decommissioning Phase
5	Back Lane, Burton Agnes	510525 463651	1,720 m / SW	Cyclists, equestrians, walkers	High/ medium	Minor+ adverse (short-term)	Minor+ adverse (short-term) (years 1 - 2)	No effect	No effect
				Motorists	Medium	Minor adverse (short-term)	Minor adverse (short-term) (years 1 - 2)	No effect	No effect
6	Bridleway near Carnaby Temple	514116 515154	2,020 m / ENE	Cyclists, equestrians, walkers	High/ medium	Minor+ adverse (short-term)	Minor+ adverse (medium-term) (years 1 - ~10)	No effect	No effect
7	A165 near Fraisthorpe Wind Farm	515154 462854	3,340 m / SE	Motorists	Medium	Minor adverse (short-term)	Minor adverse (long-term) (years 1 - 40)		Minor adverse (short-term)

Assessment of Effects

Effects on Landscape Fabric

Construction Phase

277. The entire footprint of the construction phase would be on land currently used for arable production. Other than a short (5 m) length of hedgerow removed on the site and the temporary loss of hedgerows for the passing places, no ground vegetation, hedgerows or other important, mature, diverse or distinctive landscape components would be disturbed or lost and so there would not be any significant adverse effects on landscape fabric as a consequence of the construction phase.

Operational Phase

- 278. During the operational phase, there would not be any disturbance or loss of ground vegetation, hedgerows or other important, mature, diverse or distinctive landscape components and so there would not be any adverse effects on landscape fabric.
- 279. The proposed shelterbelt, hedgerows, hedgerow trees and species-rich meadow planted at the end of the construction phase, would establish and mature during the operational phase. These would reinstate the hedgerows which have previously been lost on the site as the result of agricultural operations and would result in a beneficial effect on the landscape fabric of the site.

Decommissioning Phase

280. There would be some disturbance of the species-rich meadow during the decommissioning phase but the site would be restored to agricultural use at the end of the works, and no disturbance to the shelterbelt, hedgerows and hedgerow trees which would be well established on the site. No important, mature, diverse or distinctive landscape components would be lost and there would not be any significant adverse effects on landscape fabric as a consequence of the decommissioning phase.

Effects on Landscape Character

Sub-LCA 13D: North Wolds Plateau Farmland

Construction Phase

281. The site is located within sub-LCA 13D and there would be some short-term significant adverse effects on the character of the site and immediate surrounding landscape within sub-LCA 13D during the construction phase due to works being undertaken on the site, arising mainly from the installation of the

- solar PV array supports and panels, substation and BESS infrastructure and construction vehicle movements on the site.
- 282. However, these significant adverse effects would be very localised and would apply to the site and up to approximately 300 m from the site to the north and east where there are not any existing boundary hedgerows to contain the views of the works. As illustrated by Viewpoint 2 (330 m north of the site boundary), beyond approximately 300 m, whilst the construction phase would be visible and would have an effect on landscape character (moderate adverse), these effects would be short-term, reversible and not significant.
- 283. As illustrated by Viewpoint 1 (90 m southeast of the site boundary), the existing hedgerows around the southern and western boundaries would partially screen the construction works, with only the upper parts of the solar panels, substation and BESS infrastructure visible above the hedgerows. If the existing boundary hedgerows were allowed to grow taller prior to the commencement of the construction phase, then even less of the construction works would be visible from the landscape to the south and west of the site during the construction phase.
- 284. Therefore, significant adverse effects on landscape character within sub-LCA 13D during the construction phase would not extend beyond the site boundary hedgerows to the west and south of the site or more than approximately 300 m to the north and east of the site.

Operational Phase

- 285. In the early part of the operational phase, before the proposed new hedgerows and shelterbelt are well established, there would be some significant adverse effects (medium-term and reversible) on the character of the site and immediate surrounding landscape within sub-LCA 13D, arising from the presence of the solar PV array supports and panels, substation and BESS infrastructure. As with the construction phase, these significant adverse effects would be very localised and would apply to the site and up to approximately 300 m from the site to the north and east (where there are not any existing boundary hedgerows to contain the views of the works) but would not extend beyond the site boundary hedgerows to the west and south of the site.
- 286. As the proposed new hedgerows and shelterbelt establish, these will reinstate landscape features which have previously been lost on the site and will progressively screen the proposed development such that, by year 10/11 of the operational phase, these are expected to largely screen the development from the landscape surrounding the site. Therefore, whilst there would be significant adverse, long-term effects on landscape character within the site, these significant adverse effects on landscape character would not extend beyond the site boundary during the operational phase.

Decommissioning Phase

287. The shelterbelt and boundary hedgerows would be very well established by the time the site is decommissioned and would largely screen the decommissioning works from the surrounding landscape. Any effects on the character of the site arising from the decommissioning works would be minor and short-term and there would not be any significant adverse effects on the character of the site and surrounding landscape within sub-LCA 13D during the decommissioning phase.

Sub-LCA 19C: North Holderness Open Farmland

- 288. As discussed in paras 130 131 above, the ZTV in Figure 6a suggests that the solar PV arrays could be visible from a wide arc of land to the south of the A614, within sub-LCA 19C, from Station Road to the south of Burton Agnes round to the eastern end of Carnaby Industrial estate and southwards beyond the edge of the study area. However, these theoretical areas of visibility are more extensive than the actual areas of visibility for the proposed development would be, as views from much of these areas would be screened by intervening buildings, hedgerows and woodlands.
- 289. Consequently, and as illustrated by the viewpoint analysis (Viewpoints 3 and 7), even where there are views towards the site, the development would be partially screened and/or distant and there would not be any significant adverse effects on landscape character within sub-LCA 19C during the construction, operational and decommissioning phases.

Effects on Landscape Designations

Yorkshire Wolds Important Landscape Area

- 290. As noted in para 96 above, the Yorkshire Wolds Important Landscape Area is primarily designated under Policy ENV2: *Promoting a high quality landscape* (see para 66 above) and is also mentioned in two other policies, Policy EC5: Supporting the energy sector (see para 61 63 above) and Policy ENV5: Strengthening green infrastructure (see para 67 68 above).
- 291. Within this designation, Policy ENV2 provides for "special attention to ensuring developments are of an appropriately high quality and will not adversely affect the historic and special character, appearance or nature conservation value." With regards to energy sector developments, Policy EC5 states that, "Developments and their associated infrastructure should be acceptable in terms of (amongst other matters) ... (2) The character and sensitivity of the landscapes to accommodate energy development, with particular consideration to the identified Important Landscape Areas, ...".
- 292. Therefore, with regards to landscape, the purpose of the Important Landscape Area designation is to ensure that developments within the designated area are of an appropriately high quality and will not adversely affect the special

character and appearance of the landscape. However, with regards to energy sector development, Policy EC5 requires energy sector developments and their associated infrastructure in Important Landscape Areas to be acceptable in terms of the character and sensitivity of the landscapes to accommodate energy development, which suggests that some adverse effects on landscape character could occur as long as these effects are acceptable (when weighed in the planning balance).

- 293. The special characteristics of the Yorkshire Wolds Important Landscape Area can be deduced from the characteristics of its component LCTs and sub-LCAs. In this study area, these are LCTs 13 and 15 and sub-LCAs 13D and 15A.
- 294. With regards to the proposed development, effects on the designation could occur only within sub-LCA 13D, in which the site is located and within which there would be views of the development which could affect landscape character within the designation.
- 295. As discussed in paras 281 287 above, significant adverse effects on landscape character within sub-LCA 13D would occur on the site and up to approximately 300 m from the site to the north and east (where there are not any existing boundary hedgerows to contain the views of the works) during the construction and early operational phase (medium-term and reversible). There would also be significant adverse long-term effects on landscape character within the site during the remainder of the operational phase, which would be reversed once the site is decommissioned.
- 296. Therefore, significant effects on landscape character within the Yorkshire Wolds Important Landscape Area would be very localised, medium-term and reversible and the proposed new hedgerows and shelterbelt would reinstate landscape features which have previously been lost on the site within this designation and result in medium to long-term beneficial effects on landscape fabric and character. The acceptability of these effects, when weighed in the planning balance, are discussed in the Planning Statement.

Effects on Visual Amenity

Visual Receptor Groups and Locations

- 297. As described in para 107, the main visual receptor groups and their locations in the study area are shown on Figure 5 and include:
 - Residents in properties in the villages of Burton Agnes and Carnaby and in the hamlets of Thornholme and Haisthorpe.
 - Residents in farmsteads on the North Holderness Open Farmland (sub-LCA 19C) in the south of the study area, including Sticks Farm, Brackendale Farm, North Kingsfield, South Kingsfield, Demming Farm, Oak Wood Farm and Burton Agnes Stud Farm.

- Visitors to the visitor attractions including (a) Burton Agnes Hall, manor house, church and gardens, (b) Park Rose Village/Bridlington Animal Park, (c) John Bull World of Rock, (d) Woldgate Trekking and Livery Centre and (e) Carnaby Temple.
- Open space users including a play area, a sports field and the grounds of Burton Agnes Church of England School in Burton Agnes, the Bridlington Model Boat Society lake just south of Carnaby Industrial Estate and the Churchyard of St John the Baptist Church in Carnaby.
- Cyclists, equestrians and walkers on Sustrans NCR 1, the Way of the Roses, bridleways, other routes with public access and minor roads.
- Walkers on the Beverley Minster to Bridlington Priory, East Riding Heritage Way and Rudston Roam long distance paths, and on local footpaths.
- Motorists on A614, A165 and minor roads including Woldgate (north of the site), Church Lane (east of the site), Rudston Road (west of the site), and Station Road, Moor Lane and Horse Carr Lane (southwest of the site).

Residents

- 298. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels but not the substation and BESS infrastructure from properties in and around the village of Burton Agnes. However, as illustrated by Viewpoint 5 (Figure 7.5) which is located on the eastern side of the village, intervening topography and vegetation would largely screen the solar PV panels from this location. There is further screening by vegetation and properties in the village and there would not be any effects on the visual amenity of residents in Burton Agnes.
- 299. The ZTVs (Figures 6a and 6b) illustrate that intervening topography would screen views of the solar PV panels, substation and BESS infrastructure from properties in and around the village of Carnaby and most of the properties in Thornholme. Properties on the eastern edge of Thornholme, to the north of the A614, are just within zones of theoretical visibility for the solar PV panels (Figure 6a) but intervening vegetation around the gardens and on the slope would almost entirely screen views of the solar PV panels from the rear of these properties. Therefore, there would not be any effects on the visual amenity of residents in Carnaby and Thornholme.
- 300. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels but not the substation and BESS infrastructure from properties along West Back Lane, High Lane and East Back Side, Haisthorpe, to the north of the A614. However, vegetation and intervening buildings would screen views from Haisthorpe Hall and properties along High Lane and East Back Side. The front façade of Home Farm, the two-storey property on West Back Side, faces west-

southwest and the site is to the northwest, so there would be views of the proposed development from the front door (similar to the view from nearby Viewpoint 1, as illustrated in Figure 7.1). The two downstairs and three upstairs windows in this front façade are narrow and do not face towards the site so residents are unlikely to gain a clear view of the site from inside the property, and views to the rear of this property would not be affected. Consequently, there are unlikely to be any significant adverse effects on the visual amenity of residents in this property.

- 301. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels, substation and BESS infrastructure from properties along Lowfield Lane, Haisthorpe, to the south of the A614. However, these properties are over 500m south of the site and the front and rear façades face east/west, not northwards towards the site and there is intervening vegetation that would provide a degree of screening. Consequently, whilst there would be views of parts of the proposed development from upstairs windows in some of these properties, these views would be oblique and there would not be a significant adverse effect on the visual amenity of residents in properties along Lowfield Lane, Haisthorpe.
- 302. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels, substation and BESS infrastructure from farmsteads on the lower lying farmland in the south of the study area, including Sticks Farm, Brackendale Farm, North Kingsfield, South Kingsfield, Demming Farm, Oak Wood Farm and Burton Agnes Stud Farm. However, all these farmsteads have farm buildings and/or shelterbelts to the north of the farmhouse and views of the proposed development from these properties would be entirely screened by the intervening buildings and vegetation.

Visitors

- 303. Burton Agnes Hall, manor house, church and gardens form part of the village of Burton Agnes, and the ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels but not the substation and BESS infrastructure from these locations. Much of Burton Agnes Hall and gardens are enclosed by woodlands and mature garden vegetation but there are views eastwards from the east façade of the Hall and from the ha-ha⁵ at the eastern end of the gardens.
- 304. There are elevated views from windows in the east façade of the Hall, particularly from the second-floor bay windows and visitors are likely to have oblique views of the solar PV panels at the southern end of the site. However, the nearby woodland screens the upper slopes of the Wolds and would screen the majority of the site. As illustrated by Viewpoint 5 (Figure 7.5), the undulating terrain and intervening vegetation would largely screen views from

⁵ A sunken ditch along a garden boundary, designed to prevent grazing livestock from accessing the garden but giving the viewer in the garden the impression that the garden extends, without a barrier, into the landscape beyond.

- ground level and visitors to the garden are unlikely to have any views of the proposed development. The manor house and church are to the west of Burton Agnes Hall and visitors to these properties would not have any views of the proposed development.
- 305. Therefore, whilst parts of the proposed development may be visible from windows on the east façade of the Hall, most views from this visitor attraction would remain unchanged and there would not be any significant effects on the visual amenity of visitors to this visitor attraction.
- 306. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels, substation and BESS infrastructure from Park Rose Village and Bridlington Animal Park. However, these are located within woodland on lowlying land to the immediate south of Carnaby Industrial Estate and visitors would not have any views of the proposed development from these visitor attractions.
- 307. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels but not the substation and BESS infrastructure from John Bull World of Rock. This is an indoor attraction at the eastern end of the Carnaby Industrial Estate and large industrial buildings on the estate will screen views northwards towards the proposed development.
- 308. Woldgate Trekking and Livery Centre is located in a corner of Hallowkiln Wood adjacent to Woldgate and the ZTVs (Figures 6a and 6b) illustrate that intervening terrain would screen views of the solar PV panels, substation and BESS infrastructure from this location.
- 309. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels but not the substation and BESS infrastructure from Carnaby Temple. However, Figure 6a suggests that much of the development would be screened by intervening terrain and, as illustrated by Viewpoint 6 (Figure 7.6), there is a substantial shelterbelt of mature trees between this location and the site which would largely screen views of the proposed development in winter and entirely screen the proposed development in summer. Therefore, there would not be a significant effect on the visual amenity of visitors to Carnaby Temple.

Open Space Users

- 310. As shown on Figure 4, Open Spaces in the study area designated under Policy C3 of the East Riding Local Plan 2012 2029: Strategy Document Adopted April 2016 (ERYC April 2019) include a play area, a sports field and the grounds of Burton Agnes Church of England School in Burton Agnes, the Bridlington Model Boat Society lake and the Churchyard of St John the Baptist Church in Carnaby.
- 311. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels but not the substation and BESS infrastructure from the three open spaces in Burton Agnes and from the Bridlington Model Boat Society lake.

- However, the three open spaces in Burton Agnes are all on the west side of the village and there would not be any views of the development from these locations and the lake is immediately south of Carnaby Industrial Estate and views northwards towards the development would be screened by industrial buildings on the estate. Therefore, there would not be any effects on the visual amenity of users of the open spaces in Burton Agnes or the lake.
- 312. The ZTVs (Figures 6a and 6b) illustrate that intervening terrain would screen views of the solar PV panels, substation and BESS infrastructure from the Churchyard of St John the Baptist Church in Carnaby.
- 313. Therefore, there would not be any effects on the visual amenity of users of the open spaces in the study area.

Cyclists, Equestrians and Walkers

- 314. As shown by the blue line on Figure 5, Sustrans NCR 1 and the Way of the Roses cycle routes follow Woldgate to the north of the site through the study area. The ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels, substation and BESS infrastructure from a short section of Woldgate, around Viewpoint 4. However, there are roadside hedgerows along this part of Woldgate and only occasional views southwards, such as at Viewpoint 4 (Figure 7.4), and the convex nature of the Wold slope means that the proposed development would be partially screened by the terrain and further screened by vegetation from Woldgate and these routes. Consequently, there would not be any significant adverse effects on the visual amenity of cyclists, equestrians and walkers on Sustrans NCR 1 and the Way of the Roses cycle routes.
- 315. As shown on Figure 5, there are two bridleways to the north of Woldgate, RUDSB02 and RUDSB03 but these are on the scarp slope to the north and, as illustrated by the ZTVs (Figures 6a and 6b), the intervening terrain would screen views of the proposed development from these routes.
- 316. As shown on Figure 5, there are two bridleways on the dip slope to the east of the site, CARNB01 and CARNB02 and the ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels but not the substation and BESS infrastructure from short sections of both of these routes. However, these routes are to the east of the mature shelterbelt that is visible from Viewpoint 6 (Figure 7.6) and views westwards towards the site from both of these bridleways would be largely screened by the shelterbelt.
- 317. As shown on Figure 5, there are several other routes with public access and minor roads running down the Wold dip slope between Woldgate and the A614 and the ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels and, in some places, the substation and BESS infrastructure from short sections of some of these routes. To the west of the site, this includes sections of Rudston Road and the other route with public access that runs down the western boundary of the site. To the north and east of the site, this

- includes sections of the other route with public access that extends from Woldgate to Viewpoint 2 and around the eastern boundary of the site to Viewpoint 1, from the other route with public access called "Hunger Hills Balk" and from Church Lane.
- 318. Rudston Road and the route that runs down the western boundary of the site are bounded by hedgerows and views of the proposed development from these routes would be intermittent.
- 319. The hedgerows have been removed along the other routes with public access to the north and east of the site and there would be sustained views of the proposed development from these routes. As illustrated by the viewpoint analysis for Viewpoint 2, there would be a significant change in the view for users on this route during the construction and early operational phase which would result in significant adverse effects on visual amenity (medium-term, reversible) but the effects would be at the lower limit of significance (moderate+) and there are unlikely to be significant changes in views and visual amenity from routes further afield. Also, by year 5 when the proposed hedgerows have established, the proposed development would be partially screened from most of these routes.
- 320. Therefore, there would be significant adverse effects on the visual amenity of cyclists, equestrians and walkers on the other route with public access that extends from Viewpoint 2 around the eastern boundary of the site to the Old Chalk Pit just north of Viewpoint 1 during the construction and early operational phase (medium-term and reversible) but not during the remainder of the operational phase and not on users of the minor roads and other routes with public access in the study area.

Walkers

- 321. As shown by the green line on Figure 5, the Beverley Minster to Bridlington Priory long distance path runs east/west along Woldgate through the study area and, as illustrated by the ZTVs (Figures 6a and 6b), other than at Viewpoint 4 (Figure 7.4), the proposed development would be screened by the topography from this route.
- 322. As shown by the orange line on Figure 5, the East Riding Heritage Way long distance path runs north/south through the study area, up the scarp slope along a bridleway (RUDSB03), down the dip slope along the other route with public access to the west of the site to Thornholme, southwards along a footpath (BAGNF04) to Oak Wood Farm, then westwards via Horse Carr Lane, Station Road and Out Gates. The ZTVs (Figures 6a and 6b) illustrate that the solar PV panels, substation and BESS infrastructure would be largely screened from the section of the route over the Wolds but suggest that there could be views of the solar PV panels and, in some places, the substation and BESS infrastructure, from short sections of route on the lower lying farm to the south of Thornholme. However, the proposed development would be between 1 3.5

- km from the route and views would be distant, partial and intermittent due to screening by intervening buildings and vegetation.
- 323. As shown by the yellow line on Figure 5, the Rudston Roam long distance path loops around the study area, from Bridlington to Carnaby via a footpath (BRIDF02) and the A614, then northwards up Temple Lane and a bridleway (CARNB02) past Carnaby Temple, then along Woldgate to just before Viewpoint 2. It then drops down the scarp slope via a bridleway (RUDSB02), coming back into the study area along Rudston Road through Burton Agnes. The ZTVs (Figures 6a and 6b) illustrate that the proposed development would be screened by intervening terrain from much of this route and where there could be views of the solar PV panels, such as at Viewpoint 6 (Figure 7.6), the proposed development would be largely screened by intervening vegetation.
- 324. The ZTVs (Figures 6a and 6b) illustrate that the proposed development would be screened by intervening terrain from three of the public footpaths in the study area (BRIDF02, BAGNF01 and BAGNF02) but that there could be views of the solar PV panels and, in some places, the substation and BESS infrastructure, from two other public footpaths (BAGNF03 and BAGNF04). However, these are on the lower lying land to the south of the A614, 1.2 2.7 km southwest of the proposed development and views would be distant, partial and intermittent due to screening by intervening buildings and vegetation.
- 325. Therefore, there would not be any significant adverse effects on the visual amenity of walkers on the long-distance paths and public paths in the study area.

Motorists

- 326. The A614 runs along the base of the Wold dip slope to the south of the site and the ZTVs (Figures 6a and 6b) suggest that there could be views of the solar PV panels, substation and BESS infrastructure from the A614 between Haisthorpe and Thornholme. However, as illustrated by Viewpoint 3 (Figure 7.3), the solar PV panels would be largely screened by the intervening hedgerow and would, in turn, largely screen the substation and BESS infrastructure. The ZTV (Figure 6a) also suggests that there could be views of the solar PV panels from the A614 between Burton Agnes and Thornholme and to the west of Haisthorpe, but the solar PV panels would be largely screened by intervening buildings and vegetation. Therefore, there would not be a significant adverse effect on the visual amenity of motorists on the A614.
- 327. The A165 runs north/south over 3 km southeast of the site and, as illustrated by Viewpoint 7 (Figure 7.7), the proposed development would be barely perceptible from this distance and there would not be a significant adverse effect on the visual amenity of motorists on the A165.
- Woldgate runs east/west through the study area to the north of the site and the ZTVs (Figures 6a and 6b) illustrate that the solar PV panels could be visible

- from a 2 km section of this minor road to the north and northwest of the site and the substation and BESS infrastructure could be visible from a very short (200 m) section, around Viewpoint 4. However, there are roadside hedgerows along most of this section of Woldgate, views southwards are generally limited to field entrances and, as illustrated by Viewpoint 4 (Figure 7.4), motorists would not experience a significant change in the view at this location.
- 329. Church Lane runs down the Wold dip slope to the east of the site and the ZTVs (Figure 6a and 6b) suggest that there would be intermittent views of the solar PV panels but not the substation and BESS infrastructure from this single-track lane. The hedgerows on the west side of this lane have been removed allowing open views across the slopes to the west and the construction and early operational phases would be noticeable from this lane. However, the proposed development would be 1.2 1.8 km away and partially screened by the undulating terrain, and would be progressively screened by the proposed hedgerows along the northern and eastern site boundaries.
- 330. Rudston Road runs down the Wold dip slope to the west of the site, and the ZTVs (Figure 6a and 6b) suggest that there would be views of up to 25% of the solar PV panels but not the substation and BESS infrastructure from this single track lane. However, this lane is bounded by hedgerows and there are hedgerows along the western boundary of the site which will be allowed to grow taller, progressively screening the solar PV panels.
- 331. Station Road, Moor Lane and Horse Carr Lane are located on the lower lying land 2.5 4 km southwest of the site. The ZTVs (Figure 6a and 6b) suggest that there would be views of the solar PV panels, substation and BESS infrastructure from Moor Lane and Horse Carr Lane and part of Station Road. However, views of the Wolds slopes are largely screened by intervening vegetation from Station Road and intermittently screened from Moor Lane and Horse Carr Lane and, at these distances, the proposed development would be distant and barely perceptible.
- 332. Therefore, there would not be any significant adverse effect on the visual amenity of motorists on the A614, A165, Woldgate, Church Lane, Rudston Road, Station Road, Moor Lane and Horse Carr Lane.

Conclusions

- 333. The entire footprint of the construction phase would be on land currently used for arable production and there would not be any adverse effects on landscape fabric as a consequence of the construction or operational phases. The proposed shelterbelt, hedgerows, hedgerow trees and species-rich meadow would establish and mature during the operational phase. These would reinstate the hedgerows which have previously been lost on the site as the result of agricultural operations and would result in long-term beneficial effects on the landscape fabric of the site. There would be some disturbance of the species-rich meadow as the site is dismantled, but this would be restored to agricultural use at the end of the decommissioning phase.
- 334. The site is located within sub-LCA 13D and there would be some short and medium-term significant adverse effects on landscape character during the construction and early operational phases within a localised part of this LCA. The existing hedgerows to the south and west of the site would limit these significant adverse effects to the site and up to approximately 300 m from the site to the north and east where there are not any existing boundary hedgerows to contain the views of the construction works, solar PV panels, substation and BESS infrastructure.
- 335. As the proposed new hedgerows and shelterbelt establish, these will reinstate landscape features which have previously been lost on the site and will progressively screen the proposed development such that, by year 10/11 of the operational phase, these are expected to largely screen the development from the landscape surrounding the site such that the significant adverse long-term effects on landscape character would be limited to within the boundary of the site.
- 336. Any effects on the character of the site arising from the decommissioning works would be minor and short-term and there would not be any significant adverse effects on the character of the site and surrounding landscape during the decommissioning phase.
- 337. There would not be any significant effects on landscape character of the other sub-LCAs during the construction, operational and decommissioning phases of the proposed development.
- 338. The site is located within the Yorkshire Wolds Important Landscape Area and significant adverse effects on the character of the landscape within this designation would occur on the site and up to approximately 300 m from the site to the north and east (where there are not any existing boundary hedgerows to contain the views of the works) during the construction and early operational phase. However, these effects would be very localised, medium-

term and reversible and the proposed new hedgerows and shelterbelt would reinstate landscape features which have previously been lost on the site within this designation and result in medium to long-term beneficial effects on landscape fabric and character.

- 339. There would not be any effects on the visual amenity of residents in Burton Agnes, Carnaby and Thornholme and most of the properties in Haisthorpe and no significant adverse effects on visual amenity for residents in Home Farm, the property on West Back Side or in properties along Lowfield Lane, in Haisthorpe. There would also not be any effects on the visual amenity of residents in the farmsteads on the lower lying farmland in the south of the study area.
- 340. There would not be any significant adverse effects on the visual amenity of visitors to the visitor attractions in the study area, including Burton Agnes Hall, manor house, church and gardens, Park Rose Village and Bridlington Animal Park, John Bull World of Rock, Woldgate Trekking and Livery Centre and Carnaby Temple.
- 341. There would also not be any significant effects on the visual amenity of users of the open spaces in the study area, including the play area, sports field and grounds of Burton Agnes Church of England School in Burton Agnes, the Bridlington Model Boat Society lake just south of Carnaby Industrial Estate and the Churchyard of St John the Baptist Church in Carnaby.
- 342. There would not be any significant adverse effects on the visual amenity of cyclists, equestrians and walkers on Sustrans NCR 1 and the Way of the Roses cycle routes, on the two bridleways to the north of Woldgate (RUDSB02 and RUDSB03), on the two bridleways to the east of the site (CARNB01 and CARNB02), on the minor roads in the study area (Rudston Road to the west of the site and Church Lane to the east of the site), or on most of the other routes with public access.
- 343. There would be a significant adverse effect on the visual amenity of users on the other route with public access that extends from Viewpoint 2 and around the eastern boundary of the site to the Old Chalk Pit just north of Viewpoint 1 during the construction and early operational phase (medium-term, reversible) as there are no hedgerows along the northern and eastern boundaries of the site to screen views of the proposed development. However, there will be progressive screening of the site as the proposed hedgerows and shelterbelt establish such that by year 5, the hedgerows will largely screen the site from the part of the route that is alongside the northern and eastern boundary of the site with further screening of parts of the site by years 10/11 of the operational phase when the shelterbelt has established.
- 344. The terrain would screen views of the proposed development from much of the long-distance paths (Beverley Minster to Bridlington Priory, East Riding Heritage Way and the Rudston Roam) and public footpaths in the study area and where

there would be views, these would be distant, partial and intermittent due to screening by intervening buildings and vegetation. Therefore, there would not be any significant adverse effects on the visual amenity of walkers on the long-distance paths and public footpaths through the study area.

- 345. There would also not be any significant adverse effect on the visual amenity of motorists on the main and minor roads in the study area, including the A614, A165, Woldgate, Church Lane, Rudston Road, Station Road, Moor Lane and Horse Carr Lane.
- 346. All effects on landscape character and visual amenity would be reversed once the site is decommissioned and the proposed shelterbelt, hedgerows and hedgerow trees would result in beneficial effects on landscape fabric, landscape character and visual amenity in the medium to long-term.

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Legislation

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Ministry of Housing, Communities and Local Government (6 June 2018) The Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018, SI 2018 No 695

Secretary of State for the Environment and the Minister of Agriculture, Fisheries and Food (24 March 1997) *The Hedgerows Regulations 1997*, SI 1997 No 1160

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Environmental Baseline Data:

Beverley Minster to Bridlington Priory long distance path

https://ldwa.org.uk/ldp/members/show_path.php?menu_type=S&path_name=Beverley+Minster+to+Bridlington+Priory

David Hockney's Yorkshire Wolds

https://www.iknow-uk.com/articles/david-hockneys-yorkshire-wolds

East Riding Heritage Way long distance path

https://ldwa.org.uk/ldp/members/show_path.php?menu_type=S&path_name=East+Rid ing+Heritage+Way

East Riding of Yorkshire Council (current) interactive online mapping system web source: https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-constraints-map/planning-constraints-map-tool/

East Riding of Yorkshire Highways and Public Rights of Way online map https://eastriding.maps.arcgis.com/apps/webappviewer/index.html?id=0765ff43d0194 fd0937289105186e13c

Google (current) google maps © Google 2022

https://www.google.co.uk/maps/

Microsoft (current) Bing maps © Microsoft 2022

https://www.bing.com/maps/

Ordnance Survey Explorer 1:25,000 map sheet no 295

Rudston Roam

https://ldwa.org.uk/ldp/members/show_path.php?menu_type=S&path_name=Rudston
+Roam

Sustrans NCR 1

https://explore.osmaps.com/?lat=54.064669&lon=-

0.274950&style=Standard&zoom=12.8173&overlays=os-ncn-layer&type=2d

Way of the Roses

 $\frac{https://ldwa.org.uk/ldp/members/show_path.php?menu_type=S\&path_name=Way+of+}{the+Roses}$

Applicant's Development Information:

Ecology Consulting (August 2022) Three Oaks Renewable Energy Park: *Ecological Impact Assessment*

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Engena (31 January 2022) Request to ERYC to agree the proposed viewpoint locations

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Ridge Clean Energy Three Oaks Renewable Energy Park Community Engagement website: https://ridgecleanenergy.com/threeoaks-community-engagement/

Ridge Clean Energy - Three Oaks Renewable Energy Park project website: https://ridgecleanenergy.com/threeoaks/

H:B:A Environment
August 2022

Thornholn Field East Field 2 km AGNES C Burton Agnes Moor BARMSTON CP Carr Hill Scale (Km

THREE OAKS RENEWABLE ENERGY PARK

Key:



Application Boundary



Viewpoint Locations

Landscape Character Areas:

- 3D NORTH WOLDS PLATEAU FARMLANDS
- 15A GYPSEY RACE CORRIDOR RUDSTON TO BRIDLINGTON
- 18E KELK BECK FARMLAND
- 19C NORTH HOLDERNESS OPEN FARMLAND
- 20C BRIDLINGTON TO HORNSEA COAST

FIGURE 3 LANDSCAPE CHARACTER AREAS



East Field 2 km AGNES C Burton Agnes Moor Farm 3 km BARMSTON CP Carr Hill Scale (Km O Bridge O Bridge

THREE OAKS RENEWABLE ENERGY PARK

Key:



Application Boundary



Viewpoint Locations



Important Landscape Areas (ENV2) - Yorkshire Wolds



Key Open Areas (ENV2)



Open Spaces C3

FIGURE 4 LANDSCAPE AND PLANNING DESIGNATIONS



BS BRIDF02 East Field 2 km BAGNF04 AGNES CP Burton Agnes Moor Farm 3 km BARMSTON CP Carr Hill Scale (Km O Praisthorpe New Bridge O Bridge

THREE OAKS RENEWABLE ENERGY PARK

Key:



Application Boundary



Viewpoint Locations



Villages



Sustrans NCR1 and Way of the Roses cycle routes



Long Distance Paths



- A. Beverley Minster to Bridlington Priory
- C. Rudston Roam

B. East Riding Heritage Way



Public Right of Way



Public Bridleway



Other routes with public access



Visitor Attractions

- a. Burton Agnes Hallb. Park Rose Village/Bridlington Animal Park
- c. John Bull World of Rock
- d. Woldgate Trekking and Livery Centre
- e. Carnaby Temple

FIGURE 5 VISUAL RECEPTOR LOCATIONS



2 km

THREE OAKS RENEWABLE ENERGY PARK

Key:



Application Boundary



Viewpoint Locations

Theoretical Visibility of Panels



<10%



10 - 25%



25 - 50%



50 - 75%



75 - 90%



90 - 100%

The terrain data used is Environment Agency LIDAR 2m DTM, and includes 100 target points set along the alignment of the proposed solar panels. Target height used: 3m.

Viewer height used in calculation 1.60m.

This ZTV is a bare earth calculation, and does not include the screening effects of buildings and vegetation in the study area.

The calculation takes into account the effects of the curvature of the earth and light refraction. The calculation does not use mathematically approximate methods.

FIGURE 6a ZTV - Solar PV Panels





2 km AGNES

THREE OAKS RENEWABLE ENERGY PARK

Key:



Application Boundary



Viewpoint Locations



Theoretical Visibility of Substation/BESS Infrastructure

The terrain data used is Environment Agency LIDAR 2m DTM, and includes 6 target points set within the sub station area. Max target height used: 52.5mAOD.

Viewer height used in calculation 1.60m.

This ZTV is a bare earth calculation, and does not include the screening effects of buildings and vegetation in the study area.

The calculation takes into account the effects of the curvature of the earth and light refraction. The calculation does not use mathematically approximate methods.

FIGURE 6b ZTV - Substation and BESS Infrastructure







This photograph and visualisation is a cylindrical projection panorama. Hold this sheet at a comfortable arm's length from your eyes and curve the image through 90° and turn head to view. Alternatively, the visualisation can be laid flat and viewed by scanning left or right parallel to the sheet maintaining a 50cm viewing distance

H:B:A Environment





Three Oaks Renewable Energy Park

Viewpoint 1: West Back Side, Haisthorpe

Existing View



This photograph and visualisation is a cylindrical projection panorama. Hold this sheet at a comfortable arm's length from your eyes and curve the image through 90° and turn head to view. Alternatively, the visualisation can be laid flat and viewed by scanning left or right parallel to the sheet maintaining a 50cm viewing distance between your eye and the page.

The visualisations do not include the boundary planting proposed in the landscape and biodiversity mitigation and enhancement plan.

Printing Note



Three Oaks Renewable Energy Park Viewpoint 1: West Back Side, Haisthorpe

3D Model View



Page 3 of 4



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Composite View





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Three Oaks Renewable Energy Park

Viewpoint 1: West Back Side, Haisthorpe

Photomontage



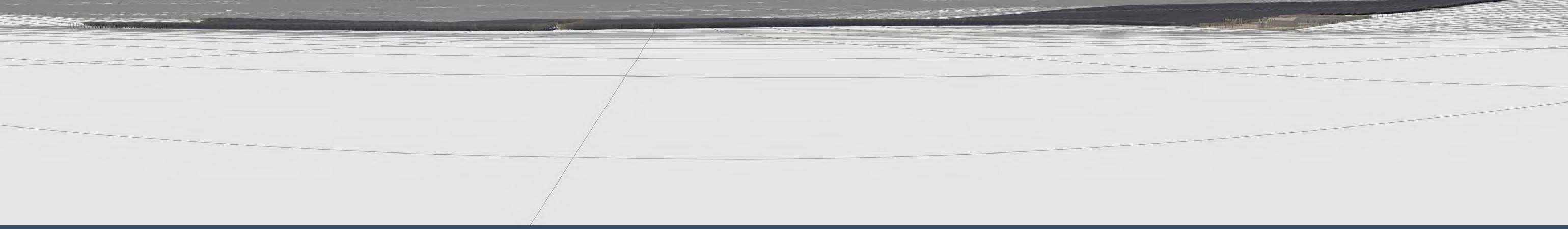


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Three Oaks Renewable Energy Park
Viewpoint 2: PRoW off Woldgate

Existing View



Page 2 of 4

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Printing Note

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Three Oaks Renewable Energy Park Viewpoint 2: PRoW off Woldgate

3D Model View



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H:B:A Environment



Three Oaks Renewable Energy Park Viewpoint 2: PRoW off Woldgate

Composite View





This photograph and visualisation is a cylindrical projection panorama. Hold this sheet at a comfortable arm's length from your eyes and curve the image through 90° and turn head to view. Alternatively, the visualisation can be laid flat and visualisation gestion and enhancement plan.



Three Oaks Renewable Energy Park
Viewpoint 2: PRoW off Woldgate

Photomontage



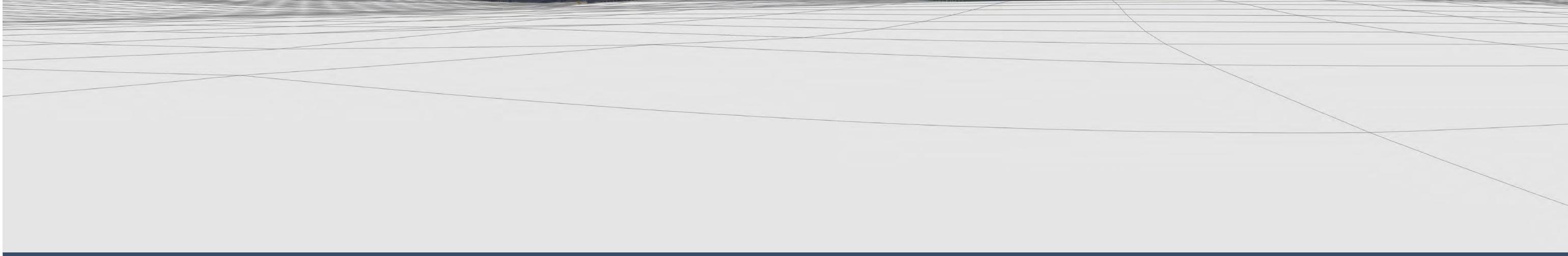


This photograph and visualisation is a cylindrical projection panorama. Hold this sheet at a comfortable arm's length from your eyes and curve the image through 90° and turn head to view. Alternatively, the visualisation can be laid flat and visualisation graph and visualisation is a cylindrical projection panorama. Hold this sheet at a comfortable arm's biodiversity mitigation and enhancement plan.



Viewpoint 3: A614

Existing View



Page 2 of 4



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The visualisations do not include the boundary planting proposed in the landscape and biodiversity mitigation and enhancement plan.

Printing Note

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Three Oaks Renewable Energy Park Viewpoint 3: A614

3D Model View







Composite View