

Preliminary Environmental Information Report

Calderdale Energy Park

7 April 2026

Volume 2, Chapter 12 : Landscape and Visual

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Table of contents

12	LANDSCAPE AND VISUAL	1
12.1	Introduction	1
12.2	Legislation, Policy and Guidance	2
12.3	Scoping and Stakeholder Engagement	10
12.4	Assessment Methodology	40
12.5	Baseline Conditions	58
12.6	Environmental Measures	105
12.7	Potential Effects Scoped Out	107
12.8	Preliminary Environmental Assessment	108
12.9	Conclusions	120
	<i>Table 12-1: Legislation, Policy and Guidance</i>	2
	<i>Table 12-2: Consideration of PINS Scoping Opinion</i>	10
	<i>Table 12-3: Other Scoping Comments</i>	17
	<i>Table 12-4: Other Engagement Undertaken</i>	40
	<i>Table 12-5: Assessment of Level and Significance of Effect Matrix</i>	48
	<i>Table 12-6: NCAs</i>	60
	<i>Table 12-7: Local Character Areas</i>	67
	<i>Table 12-6: Landscape Designations</i>	92
	<i>Table 12-9: Settlements</i>	96
	<i>Table 12-10: Potential Effects Scoped Out</i>	107
	<i>Table 12-11: Summary of Preliminary Assessment of Likely Significant Effects</i>	122

12 Landscape and Visual

12.1 Introduction

- 12.1.1 This Chapter of the PEIR has been prepared by SLR Consulting on behalf of the Applicant and presents a preliminary assessment of the likely significant effects of the Proposed Development upon landscape and visual receptors. It is based on the environmental information available to date (which is detailed in this Chapter), as well as the current description of the Proposed Development as set out in **Chapter 4: The Proposed Development**.
- 12.1.2 This Chapter concludes that there are likely significant effects of the Proposed Development on landscape and visual receptors during the construction, operation and maintenance and decommissioning phases. A more detailed assessment will be provided in the ES.
- 12.1.3 The conclusions of the following topic assessments are relevant to the receptors of this assessment, and have been taken into account in the assessment for landscape and visual receptors:
- **Chapter 10: Hydrology and Hydrogeology, Geology and Peat;**
 - **Chapter 13: Historic Environment;**
 - **Chapter 17: Socio-economics and Tourism;** and
 - **Chapter 19: Aviation and Radar.**
- 12.1.4 This Chapter is supported by the following appendices:
- **Appendix 12-1: LVIA Methodology;**
 - **Appendix 12-2: Wirelines and Photography;** and
 - **Appendix 12-3: Residential Visual Amenity Assessment (RVAA) Wirelines.**
- 12.1.5 This Chapter is supported by the following figures:
- **Figure 12-1: Local Planning Authority Context;**
 - **Figure 12-2-1: National Landscape Character;**
 - **Figure 12-2-2: Local Landscape Character and Local Landscape Character Legend;**
 - **Figure 12-3-1: Landscape Designations;**

- **Figure 12-3-2: Parks and Gardens;**
- **Figure 12-3-3: Green Belt;**
- **Figure 12-4: Visual Receptors;**
- **Figure 12-5-1: Blade Tip Zone of Theoretical Visibility (ZTV);**
- **Figure 12-5-2: Blade Tip ZTV Detail;**
- **Figure 12-5-3: Hub Height ZTV;**
- **Figure 12-5-4: Hub Height ZTV Detail;** and
- **Figure 12-6: RVAA.**

12.2 Legislation, Policy and Guidance

12.2.1 Key policy, legislation and guidance relating to the Landscape and Visual Impact Assessment (LVIA) and of relevance to this preliminary assessment comprises the following, as shown in **Table 12-1**.

Table 12-1: Legislation, Policy and Guidance

Type	Name	Relevance to Assessment
Legislation	National Parks and Access to the Countryside Act 1949 ¹	Provided the framework for the establishment of National Parks and Areas of Outstanding Natural Beauty (AONBs), now also known as National Landscapes. Whilst AONBs are now also known as National Landscapes, they are still legally designated as AONBs. The term National Landscapes is used throughout this document unless it refers to a published document e.g. AONB Management Plan.
	The Hedgerow Regulations 1997 ²	Established to protect hedgerows that are considered

¹ National Park and Access to the Countryside Act 1949. Available: <https://www.legislation.gov.uk/ukpga/Geo6/12-13-14/97>

² The Hedgerow Regulations 1997. Available at: <https://www.legislation.gov.uk/uksi/1997/1160/contents>

Type	Name	Relevance to Assessment
		important for their ecological, historical and landscape value.
	Countryside and Rights of Way Act 2000 (CRoW) ³	Countryside and Rights of Way Act 2000 (CRoW) amended the provisions relating to AONBs (National Landscapes).
	Levelling-up and Regeneration Act 2023 ⁴	Introduces a duty for relevant authorities to seek to further the statutory purposes of National Parks and AONBs.
National planning policy	NPS EN-1 ⁵	Establishes national level policy for NSIPs, including policy context that is specific to landscape and visual receptors. EN-1 also includes policy that relates to project design and how measures can be incorporated into a development to mitigate potential adverse effects.
	NPS EN-3 ⁶	Establishes national level policy for NSIPs, specifically renewable energy projects. EN-3 includes policy context that is directly relevant to landscape and visual receptors and the assessment process. For onshore wind, associated assessment issues include potential landscape and visual impacts.

³ Countryside and Rights of Way Act 2000. Available at: <https://www.legislation.gov.uk/ukpga/2000/37/contents>

⁴ Levelling-up and Regeneration Act 2023. Available at: <https://www.legislation.gov.uk/ukpga/2023/55/contents>

⁵ Department for Energy Security & Net Zero (2025) Draft Overarching National Policy Statement for Energy (EN-1). Available at: Overarching National Policy Statement for Energy (EN-1) – December 2025

⁶ Department for Energy Security & Net Zero (2025) National Policy Statement for Renewable Energy (EN-3). Available at: National Policy Statement for Renewable Energy Infrastructure (EN-3)

Type	Name	Relevance to Assessment
	NPS EN-5 ⁷	Establishes national level policy for NSIPs, specifically electricity transmission projects. EN-5 includes policy context that is directly relevant to landscape and visual receptors and the assessment process, with reference to the Holford and Horlock rules. It includes reference to potential options for mitigating potential landscape and visual effects.
	NPPF ⁸	Provides policy in relation to Proposed Developments in England. Includes policy provision for protecting and enhancing the natural, built and historic environment. Includes policy in relation to design. Places an emphasis on protecting and enhancing valued landscapes, particularly nationally designated landscapes, whilst also recognising the intrinsic character and beauty of the countryside.
	Consultation draft NPPF ⁹	The consultation for the NPPF reinforces the themes outlined above for the current NPPF.

⁷ Department for Energy Security & Net Zero (2025) Draft Overarching National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: National Policy Statement for Electricity Networks Infrastructure (EN-5) – December 2025

⁸ Ministry of Housing Communities & Local Government (2024) National Planning Policy Framework (December 2024) Updated online February 2025. Available at: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf

⁹ Ministry of Housing Communities & Local Government (2024) National Planning Policy Framework (December 2024) Updated online February 2025. Available at: National Planning Policy Framework: proposed reforms and other changes to the planning system

Type	Name	Relevance to Assessment
Local planning policy	Calderdale Local Plan 2018/19 to 2032/33 (March 2023) ¹⁰	Provides local policy context, including landscape and visual related issues. Several policies are directly relevant to the preliminary assessment, including BT4 Landscaping, GB1 Development in the Green Belt, GN3 Natural Environment, GN4 Landscape Character, GN5 Trees. It includes policies that are specific to wind energy developments, including CC6, Part 1, Assessment of Proposals for Renewable and Low Carbon Energy and CC6, Part 2, Assessment of Wind Energy Developments.
	Local Plan for the Bradford District: Core Strategy Development Plan Document (July, 2017) ¹¹	Provides local policy context, including landscape and visual related issues. Several policies are directly relevant to the preliminary assessment including EN4 Landscape and DS2 Working with the Landscape.
	Pendle Core Strategy 2021-2040 (December 2025) ¹²	Provides local policy context, including landscape and visual related issues. Key policies relevant to the preliminary assessment include DM03 Renewable Heat and Energy, DM10 Landscape Character and DM11 Forest of Bowland National Landscape.

¹⁰ Calderdale Council, Calderdale Local Plan, adopted March 2023. Available at: <https://new.calderdale.gov.uk/planning-and-building-control/planning-policy/local-plan>

¹¹ City of Bradford Metropolitan District Council, Core Strategy Development Plan Document, adopted July 2017. Available: <https://bradford.gov.uk/planning-and-building-control/planning-policy/core-strategy-dpd/>

¹² Pendle Borough Council, adopted December 2025, Pendle Local Plan Fourth Edition (2021 – 2040). Available at: https://www.pendle.gov.uk/info/20072/planning_policies/600/local_plan_fourth_edition

Type	Name	Relevance to Assessment
	Yorkshire Dales Management Plan 2025-2030 ¹³	Set out the vision and objectives for the nationally designated landscapes, including the special qualities that relate directly to their designation.
	Peak District National Park Management Plan 2023-2028 ¹⁴	
	Forest of Bowland Area of Outstanding Natural Beauty Management Plan 2019-2024 ¹⁵	
	Nidderdale Area of Outstanding Natural Beauty Management Plan 2019-2024 ¹⁶	
	Nidderdale National Landscape: An Area of Outstanding Natural Beauty Management Plan, Consultation Draft, 2025-2030 ¹⁷	
National technical guidance	Guidelines for Landscape and Visual Impact Assessment, Third Edition, (GLVIA3), (2013) ¹⁸ , and Notes and	Provides national level guidance on the approach and method for undertaking LVIA's.

¹³ Yorkshire Dales National Park Management Plan Partnership, Yorkshire Dales National Park Management Plan 2025-2030. Available at: [National Park Management Plan 2025-30 - Yorkshire Dales National Park : Yorkshire Dales National Park](#)

¹⁴ Peak District National Park, Peak District National Park Management Plan 2023-2028. Available at: [National Park Management Plan: Peak District National Park](#)

¹⁵ Forest of Bowland National Landscape Joint Advisory Committee, Forest of Bowland Area of Outstanding Natural Beauty Management Plan 2019-2024. Available at: [Management Plan | Forest of Bowland National Landscape](#)

¹⁶ Nidderdale Area of Outstanding Natural Beauty, Nidderdale Area of Outstanding Natural Beauty Management Plan 2019-2024. Available at: [Management Plan and Annual Reviews - Nidderdale National Landscape](#)

¹⁷ Nidderdale National Landscape, Nidderdale National Landscape Management Plan 2025-2030, Consultation Draft. Available at: [Management Plan and Annual Reviews - Nidderdale National Landscape](#)

¹⁸ Landscape Institute and the Institute of Environmental Management and Assessment (2013), Guidelines for Landscape and Visual Impact Assessment. Third Edition. (GLVIA3). Not available online

Type	Name	Relevance to Assessment
	Clarifications on Aspects of GLVIA3 ¹⁹	
	An Approach to Landscape Character Assessment (2014) ²⁰	Both documents provide national level guidance on the approach to landscape character assessment.
	Landscape Character Assessment, Guidance for England and Scotland (2002 Edition) ²¹	
	Visual Representation of Development Proposals, Landscape Institute Technical Guidance Note 06/19 (July 2019) ²²	Provides national level guidance on the preparation and presentation of visualisations for Proposed Developments.
	Residential Visual Amenity Assessment (RVAA), Landscape Institute Technical Guidance Note 2/19 (March 2019) ²³	Provides national guidance on undertaking residential visual amenity assessments.
	Assessing landscape value outside national designations), Landscape Institute Technical Guidance Note - TGN 02/21 (2021) ²⁴	Provides national guidance on assessing landscape value, part of the judgements that influences the assessment of landscape sensitivity.

¹⁹ Landscape Institute and the Institute of Environmental Management and Assessment (2024), Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3), Technical Guidance Note LITGN-2024-01, Available at: [LITGN-2024-01-GLVIA3-NC_Aug-2024.pdf](https://www.landscapeinstitute.org/technical-resource/litgn-2024-01-clarifications-on-aspects-of-guidelines-for-landscape-and-visual-impact-assessment-third-edition/)

²⁰ Natural England (2014) An Approach to Landscape Character Assessment. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691184/landscape-character-assessment.pdf

²¹ Countryside Agency and SNH (2002), Landscape Character Assessment: Guidance for England and Scotland. Available: <https://digital.nls.uk/pubs/e-monographs/2020/216649977.23.pdf>

²² Landscape Institute (2019) Visual Representation of Development Proposals – Technical Guidance Note 06/19. Available: <https://www.landscapeinstitute.org/visualisation/>

²³ Landscape Institute (2019), Residential Visual Amenity Assessment (RVAA) – Technical Guidance Note 02/19. Available: <https://www.landscapeinstitute.org/technical-resource/rvaa/>

²⁴ Landscape Institute (2021), Assessing Landscape Value Outside National Designations – Technical Guidance Note 02/21. Available: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2021/05/tgn-02-21-assessing-landscape-value-outside-national-designations.pdf>

Type	Name	Relevance to Assessment
	Siting and Designing Wind farms in the Landscape Version 3a (February 2017) ²⁵	Scottish guidance on the design of proposed wind farm developments, noting there is no equivalent guidance that is specific to England.
	Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments (2021) ²⁶	Scottish guidance on the cumulative assessment of wind farm developments, noting there is no equivalent guidance that is specific to England.
	Visual Representation of Wind farms - Good Practice Guidance, Version 2.2 (February 2017) ²⁷	Scottish guidance on the preparation of visualisations for wind farm developments. There is no equivalent English guidance that is specific to wind farms.
	Guidance on Aviation Lighting Impact Assessment (November 2024) ²⁸	Scottish guidance on the assessment of potential effects associated with aviation lighting, noting there is no equivalent guidance that is specific to England.
National guidance	PPG, Design: Process and Tools, ²⁹	Provides high-level national guidance on the design of new developments.

²⁵ Scottish Natural Heritage (now NatureScot) (February 2017) Siting and Designing Wind farms in the Landscape Version 3a. Available: <https://www.nature.scot/sites/default/files/2017-11/Siting%20and%20designing%20windfarms%20in%20the%20landscape%20-%20version%203a.pdf>

²⁶ Scottish Natural Heritage (now NatureScot)(2021) Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments. Available: <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments>

²⁷ Scottish Natural Heritage (now NatureScot)(February 2017) Visual Representation of Wind farms - Good Practice Guidance, Version 2.2. Available: <https://www.nature.scot/doc/visual-representation-wind-farms-guidance>

²⁸ NatureScot (November 2024) Guidance on Aviation Lighting Impact Assessment. Available: <https://www.nature.scot/doc/guidance-aviation-lighting-impact-assessment>

²⁹ Ministry of Housing, Communities and Local Government, Ministry of Housing, Communities & Local Government (2018 to 2021) and Department for Levelling Up, Housing and Communities (March 2014, updated October 2019) Planning Practice Guidance, Design: Process and Tools. Available: <https://www.gov.uk/guidance/design>

Type	Name	Relevance to Assessment
	PPG, Light Pollution ³⁰	Provides high level guidance on artificial guidance and approaches to reduce potential adverse effects.
	PPG, Natural Environment ³¹	Provides high level guidance in relation to the natural environment. Of particular relevance to the preliminary assessment, it includes a section on landscape with reference to landscape value, landscape character and designated landscapes. It also includes guidance in relation to green infrastructure and the relevance of this to the design of new developments.
	PPG, Renewable and Low Carbon Energy, ³²	Provides high level guidance in relation to proposed renewable energy development. It includes sections on the cumulative landscape and visual assessment of such developments and the information required to assess such developments.
	Climate People Places Value, Deign Principles for National Infrastructure ³³	Establishes broad principles in relation to the design of proposed national infrastructure developments

³⁰ Ministry of Housing, Communities and Local Government, Ministry of Housing, Communities & Local Government (2018 to 2021) and Department for Levelling Up, Housing and Communities (March 2014, updated November 2019) Planning Practice Guidance, Design: Process and Tools. Available: [Light pollution - GOV.UK](#)

³¹ Ministry of Housing, Communities and Local Government, Ministry of Housing, Communities & Local Government (2018 to 2021) and Department for Levelling Up, Housing and Communities (January 2016, updated June 2025) Planning Policy Guidance, Natural Environment. Available: <https://www.gov.uk/guidance/natural-environment>

³² Ministry of Housing, Communities and Local Government, Ministry of Housing, Communities & Local Government (2018 to 2021) and Department for Levelling Up, Housing and Communities (June 2015, updated August 2023) Planning Policy Guidance, Renewable and Low Carbon Energy. Available: <https://www.gov.uk/guidance/renewable-and-low-carbon-energy>

³³ National Infrastructure Commission Design Group, Climate People Places Value, Deign Principles for National Infrastructure. Available: <https://majorprojects.org/wp-content/uploads/2024/10/NIC-Design-Principles.pdf>

Type	Name	Relevance to Assessment
		focused on four key themes: climate, people, places and value.
Local guidance	Calderdale Placemaking and Design Guide Supplementary Planning Document (July 2024) ³⁴	Provides local guidance on the design of Proposed Development. The focus of the guidance is on built environment projects (e.g. residential and commercial developments). However, principles included in the document are applicable to the Proposed Development.

12.3 Scoping and Stakeholder Engagement

2025 Scoping Opinion

- 12.3.1 In September 2025, a request for a Scoping Opinion was submitted alongside a Scoping Report to the Planning Inspectorate (PINS) under the EIA Regulations. The Scoping Opinion forms the primary statutory basis for defining the scope of the EIA. **Table 12-2** presents the details of the PINS Scoping Opinion relevant to Landscape and Visual and confirms how these have been addressed within the proposed scope of assessment.
- 12.3.2 Detailed responses were also received from a number of other stakeholders and **Table 12-3** provides a summary of the key topics, comments and recommendations.

Table 12-2: Consideration of PINS Scoping Opinion

Consultee	PINS ID	Summary of Scoping Opinion	Consideration within Proposed Scope of Assessment
PINS	3.5.1	Landscape Character Areas (LCAs) and Landscape Character Types (LCTs) which experience even limited theoretical visibility of the	A final assessment judgement will be made and clearly stated in the ES. A preliminary

³⁴ Calderdale Council, Calderdale Placemaking and Design Guide Supplementary Planning Document, adopted March 2023. Available: <https://calderdale-consult.objective.co.uk/kse/event/38082>

Consultee	PINS ID	Summary of Scoping Opinion	Consideration within Proposed Scope of Assessment
		<p>Proposed Development have the potential to experience significant effects and should be considered within the LVIA. This assessment should be underpinned by clear, published screening criteria and targeted field verification unless evidence is provided in the ES demonstrating the absence of a significant effect and agreement with the relevant consultation bodies.</p>	<p>judgement is provided in this Chapter. LCA/LCTs would all be given due consideration. When no visibility is predicted by the ZTVs no significant effects are likely to occur.</p>
	3.5.2	<p>The Scoping Report does not provide sufficient justification as to why the Proposed Development would not have a significant effect on the townscape character of urban parts of the study area, and effects on townscape character should therefore be considered. The ES should include an assessment of significant townscape effects for all phases, unless evidence is provided in the ES demonstrating the absence of a significant effect and agreement with the relevant consultation bodies.</p>	<p>The Proposed Development will not have any significant physical effects on the fabric of settlements. Townscape effects are not typically included in LVIAs for wind farm developments and a detailed townscape assessment is not proposed to be undertaken for the Proposed Development. The visual assessment will include key views from settlements and will consider the potential for effects on local character as well as effects on visual amenity. The extent to</p>

Consultee	PINS ID	Summary of Scoping Opinion	Consideration within Proposed Scope of Assessment
			<p>which townscape effects are relevant will be discussed through consultation during the preparation of the ES with relevant stakeholders to define what extent of assessment is required, including which settlements are relevant.</p>
	3.5.3	<p>Effects arising from the underground cable connections should be considered during both the construction and operational phases. Impacts may extend beyond the construction phase depending on the landscape habitats affects and method used to reinstate the cable routes. Operational effects may be scoped out if evidence is provided in the ES demonstrating the absence of a significant effect and agreement with the relevant consultation bodies.</p>	<p>This will be reviewed as part of the preparation of the LVIA for the ES. If there are landscape features or elements, including vegetation, that will be affected in a way that will result in long-term change, the consequences of this change will be assessed in the LVIA presented in the ES.</p>
	3.5.4	<p>Consideration should be given to the landscape and visual effects during the decommissioning phase, given the anticipated 24-month decommissioning phase and in the absence of greater detail regarding the removal of above ground structures and the current optionality of leaving</p>	<p>This will be reviewed as more design information is available / the design is refined. It will be assessed, particularly where significant effects may occur. Alternatively,</p>

Consultee	PINS ID	Summary of Scoping Opinion	Consideration within Proposed Scope of Assessment
		<p>the foundations and cabling in-site. Furthermore, decommissioning activities could result in alteration to landform and habitats leading to potentially residual effects. Accordingly, the ES should include an assessment of this matter during all phases or demonstrate the absence of significant effects, with agreement from the relevant consultation bodies.</p>	<p>justification will be provided if no significant adverse effects are predicted.</p>
	3.5.5	<p>The ES should justify the extent of the study areas used for the assessments with reference to professional guidance and the extent of the likely impacts, informed by fieldwork and relevant models or approaches such as the ZTV. The Applicant should agree the study areas with relevant consultation bodies where possible.</p>	<p>Consultation on the study area will be undertaken as part of the preparation of the LVIA for the ES with relevant stakeholders. The proposed study area is based on published guidance relevant to wind energy developments and also experience of working on other similar projects. The nature and level of effects will be reviewed as the assessment work progresses and if significant effects are predicted towards the outer edges of the proposed study area the approach to the assessment</p>

Consultee	PINS ID	Summary of Scoping Opinion	Consideration within Proposed Scope of Assessment
			will be reviewed for the ES, and consultation with the relevant stakeholders on appropriate actions will be undertaken.
	3.5.6	The Applicant should justify the location and number of viewpoints, ensuring these capture a worst-case scenario of impacts from the Proposed Development and are representative of visual receptors. Efforts should be made to agree the number and location of viewpoints as well as the locations for photomontages with relevant consultation bodies.	Viewpoints will be discussed with relevant stakeholders, as part of the consultation process. We note that the responses by other stakeholders to the scoping process identify potential additional viewpoints.
	3.5.7	If the cable route requires the removal of notable landscape features or elements, or above ground infrastructure is required at the point of connection, the ES should provide an assessment of these scenarios. The ES should also provide an assessment of other potential scenarios such as the need for jointing bays (if required) during operation or demonstrate the absence of a significant effect with agreement from the relevant consultation bodies.	Noted. Further detailed assessment of effects related to the Export Cable and the grid connection at the Bradford West Substation will be undertaken and presented in the ES, where there are likely significant effects.
	3.5.8	A separate ZTV should be produced to assess the theoretical visibility of works	A ZTV would not typically be prepared for a

Consultee	PINS ID	Summary of Scoping Opinion	Consideration within Proposed Scope of Assessment
		outside of the turbine area, including the cable corridor search area.	buried cable as it would not be visible and comparable assessments in relation to buried cables have not included the preparation of ZTVs. The requirement for a ZTV for the Bradford West Cable Corridor will be discussed with relevant stakeholders.
	3.5.9	The NCAs in the cable route search area should form part of the assessment of landscape effects in the LVIA.	The relevant NCAs will be referred to for all components of the Proposed Development, including the Turbine Area, Access Routes and Bradford West Cable Corridor.
	3.5.10	Nidderdale National Landscape is shown on the ZTV as within the 45 km study area. As such, effects on the Nidderdale National Landscape should be assessed within the ES.	The Nidderdale National Landscape was referred to in several places in the landscape and visual chapter of the Scoping Report. It will be assessed as part of the LVIA presented in the ES.

Consultee	PINS ID	Summary of Scoping Opinion	Consideration within Proposed Scope of Assessment
	3.5.11	The impact of severance on landscape should be assessed for the cable and infrastructure routes alongside the turbine area. The risk of reinstatement of habitat types where construction methods prove to be unfeasible, or changes in hydrology leading to degradation or change of habitats should be considered.	Noted. Further detailed assessment of effects related to the Access Routes and Bradford West Cable Corridor will be undertaken and presented in the ES, where there are likely significant effects.
	3.5.12	Impacts on the setting of the Protected Landscapes and how these effects will be avoided, reduced and mitigated should be detailed in the LVIA.	Effects on protected landscapes, including their setting and special qualities will be assessed in the LVIA presented in the ES.
	3.5.13	Route selection should avoid impacts to hydrological regimes in highly sensitive and priority habitats to avoid consequential landscape effects. The potential impact should be assessed within the LVIA to include the hydrological impact zone and zone of influence, unless evidence is provided in the ES demonstrating the absence of a significant effect and agreement with the relevant consultation bodies.	Noted. Further consideration of landscape effects related to the Access Routes and Bradford West Substation will be presented in the ES.

Table 12-3: Other Scoping Comments

Consultee	Summary of Discussion	Discussion Response
Stronger Together to Stop Calderdale Windfarm ³⁵	Professional judgement should be used to extend the cable corridor study area beyond 1 km where necessary, particularly with reference to impacts on mature trees, groups of trees or woodland.	Professional judgement will be applied and the scope of the assessment will be informed by an iterative approach as the design of the Proposed Development evolves.
	Landscape character description refers to tors and describes the landcover as 'largely rough grassland'. These should instead refer to outcrops and blanket bog.	A more detailed description of the landscape context is included in the preliminary assessment and this will be expanded further for the ES.
	Wind farms on Todmorden Moor should be included within the list of wind farms in the vicinity of the Proposed Development.	These wind farms will be considered as part of the LVIA undertaken for the ES.
	Table 10.1 should include Nidderdale National Landscape.	Noted.
	Confirm that ZTV has been used to inform route selection, particularly where there is a chance that mature trees and woodland would require removal, which would have a visual impact.	A ZTV has not been used to inform route selection. Refer to Chapter 5: Alternatives and Design Evolution for further details.
	Unclear how consultation will be carried out in relation to agreeing viewpoint list. Important viewpoints which were highlighted as being missing in the 2023 Scoping Report, and which are still missing from this Scoping Report include Sheepstones	Further consultation in relation to viewpoint selection will be undertaken with local authorities within the study area. These locations will be

³⁵ Stronger Together to Stop Calderdale Windfarm (on behalf of Upper Calderdale Wildlife Network, Worth Valley Against Walshaw Moor Wind Farm, Walshaw Turbines Research Group, For Peat's Sake) (also cited by Haworth and Stanbury Village Council, Oxenhope Village Council, and Wadsworth Parish Council).

Consultee	Summary of Discussion	Discussion Response
	<p>Edge; Yorkshire Three Peaks; Haworth, The Parsonage; Blackstone Edge; and Leeds Liverpool Canal between Blackburn and Barrowford. Additional viewpoints requested include Lund Tower, above Cowling; Simon’s Seat on the Bolton Estate in the Dales; Pinhaw Beacon above Lothersdale; and Within the Peak District.</p>	<p>considered as part of the final selection of viewpoints included in the ES. Viewpoints included in the ES will be selected with reference to the ZTVs for the final layout for the Proposed Development.</p>
	<p>Opportunities to restore and improve ecological links within the moorland environment, in line with guidance in the NCA, should form the ethos of the project, and not be simply a consideration.</p>	<p>Noted, these factors are influencing and will continue to influence the ecological and landscape strategy for the moorland.</p>
	<p>A hierarchy of mitigation between landscape and visual issues and ecological issues should be set out within the ES.</p>	<p>The mitigation hierarchy has been applied across the technical aspects considered within the EIA process. A balance between different impacts has been considered as part of the evolving design. Further details on the finalised mitigation will be provided as part of the ES.</p>
	<p>Where routeing and siting of elements of the Proposed Development seeks to avoid notable landscape features, these should be clearly defined, and justification should be given for how they relate to important ecological features such as blanket bog.</p>	<p>Refer to Chapter 5: Alternatives and Design Evolution.</p>
	<p>Mitigation measures should respond to the ecological importance of the blanket bog habitat. The NCA provides clear and concise guidance that should</p>	<p>The ecological importance of the blanket bog habitat is being considered as</p>

Consultee	Summary of Discussion	Discussion Response
	<p>be followed in relation to this. The OLEMP would need to reflect the objectives of the Catchment Management Plan and Biodiversity Net Gain.</p>	<p>part of the proposals for ecological enhancement of the Turbine Area. This will form an integral part of the Proposed Development and OLEMP.</p>
	<p>Cumulative sequential effects should be considered from the following routes: the Pennine Way; the Pennine Bridleway; Brontë Way; Leeds Liverpool Canal; Calderdale Way; Burnley Way; Pendle Way; Calder Aire Link; E2 European Long-distance Path; Widdop Road; and A6033 from Hebden Bridge to Oxenhope.</p>	<p>Sequential cumulative effects will be considered as part of the LVIA included in the ES.</p>
	<p>The assessment should consider effects on the sense of openness, in relation to being able to experience wide open spaces unimpaired by built development.</p>	<p>This has informed the preliminary assessment judgement and further analysis will be undertaken as part of the LVIA included in the ES.</p>
	<p>Consideration of effects on townscape character should be considered from the following settlements: Haworth, Heptonstall, Trawden, Pecket Well, Stanbury and Oxenhope, as skylines and backdrops to these settlements will be affected by the Proposed Development.</p>	<p>Townscape effects are not typically included in LVIA's for wind farm developments. Settlements will be considered in relation to potential effects on visual amenity. This will be discussed through consultation with relevant stakeholders to define what extent of assessment is required, including which settlements would be relevant.</p>

Consultee	Summary of Discussion	Discussion Response
	Effects during the decommissioning phase should be considered, as there are likely to be long term changes resulting from the reinstatement of vegetation over hardstanding.	This will be reviewed as more design information is available. It will be assessed, particularly where significant effects may occur. Alternatively, justification will be provided if no significant adverse effects are predicted.
	Effects of the BESS should be considered.	A BESS no longer forms part of the Proposed Development.
	The design of the Proposed Development should be considered in relation to the regional context, not simply the local context, as Walshaw Moor is the highest ground in the South Pennines.	Refer to Chapter 5: Alternatives and Design Evolution . Further details on design will be provided in the ES.
	The study area of 15 km underestimates the extent of the potential impact of the Proposed Development across the wider region.	This will be reviewed and agreed with stakeholders as the assessment is prepared, to ensure the focus is on the likely significant effects.
	Effects on perceptual qualities of the landscape should be considered.	This has been considered as part of the judgements included in Section 12.8 and will be explained in more detail in the LVIA for the ES.
	Physical effects of the Proposed Development should be considered beyond the footprint of the development itself. It is likely that there	The consideration of impacts on blanket bog habitats are provided within Chapter 8:

Consultee	Summary of Discussion	Discussion Response
	will be effects on blanket bog beyond the site boundary due to hydrological factors.	Biodiversity and Chapter 10: Hydrology and Hydrogeology, Geology and Peat.
	Agree that a precautionary approach should be taken with regard to classification of the nature of landscape and visual effects.	Noted.
	The LVIA should be an iterative process which responds to changes in the design as it evolves.	Noted. Refer to Chapter 5: Alternatives and Design Evolution.
Bradford Council	Note that comments provided in relation to the 2023 Scoping Report have been incorporated and requested viewpoints added.	Noted.
	Interactions between cultural heritage, landscape and visual, and tourism matters should be considered and cannot be considered in isolation. Many receptors relative to this aspect are intangible and not specific heritage assets.	Noted. Impacts in relation to cultural heritage are considered within Chapter 13: Historic Environment and tourism-related impacts are presented in Chapter 17: Socio-Economics and Tourism.
Calderdale Council	Disagree with proposals to scope out consideration of effects on LCTs / LCAs outside the ZTV or where limited theoretical visibility is predicted; townscape character effects; and effects arising during the decommissioning phase.	An assessment judgement will be made and clearly stated in the ES. LCA/LCTs would all be given due consideration. When no visibility is predicted by the ZTVs it would be reasonable to assume that no significant effects are likely to occur. Effects

Consultee	Summary of Discussion	Discussion Response
		during decommissioning will be considered.
	LVIA study area appears to be justified.	Noted.
	The LVIA should also reference the following policy / legislation: CMBC and neighbouring LPAs Landscape Character Assessments (LCAs) / Supplementary Planning Documents (SPDs); Conservation Area Appraisals / Management Plans; and relevant National Park / National Landscape (AONB) 'special qualities' documents / Management Plans within the study area. Judgements of receptor sensitivity must be evidenced from published character assessments, LCAs, SPDs and Character Area Appraisals.	Relevant legislation, policy and guidance has informed the preparation of this preliminary assessment and will continue to inform the LVIA for the ES.
	Given the height of proposed turbines, potential visibility of the Proposed Development should be checked for designated landscapes / iconic viewpoints, >50 km.	The study area includes multiple designated landscapes. If significant landscape or visual effect are identified towards the outer edges of the study area the approach being taken will be reviewed. This would include whether it would be appropriate to select additional viewpoints, with consideration of designated landscape and iconic viewpoints. Further consultation in relation to viewpoint selection will be undertaken with local

Consultee	Summary of Discussion	Discussion Response
		authorities within the study area.
	<p>The cumulative search should extend to 60 km or feature targeted long-range checks. The LVIA should justify why landscape character effects are considered only within 15 km when the consideration of visibility extends to 45 km, and evidence agreement with consultees.</p>	<p>Noted, potential cumulative developments up to 60km from the Turbine Area will be reviewed, with a focus on wind energy developments. Potential effects are being considered throughout the 45km study area in response to the comments received in relation to the Scoping Report.</p>
	<p>RVAA study area should extend to 5 km from the proposed turbine area, and should include residential properties along the site access and cable corridor within an appropriate buffer.</p>	<p>A 2km study area is based on guidance³⁶ and is considered appropriate based on experience of similar developments. The nature of the Access Routes (ground level track/access road) and Bradford West Cable Corridor (buried cable) means RVAA is not expected to be required for these elements of the Proposed Development.</p>
	<p>LVIA should include clear criteria for scoping out consideration of effects on certain LCAs, and should provide a justification note for exclusion to be agreed with CMBC, relevant</p>	<p>The methodology provides detail regarding how potential effects on landscape receptors will be assessed.</p>

³⁶ Landscape Institute (2019), Residential Visual Amenity Assessment (RVAA) – Technical Guidance Note 02/19. Available:

<https://www.landscapeinstitute.org/technical-resource/rvaa/>

Consultee	Summary of Discussion	Discussion Response
	neighbouring LPAs and relevant National Park authorities.	Justification will be provided for receptors that are not assessed.
	Non-turbine elements of the Proposed Development, including BESS, substation / transformers, compounds / laydown, access / haul roads, borrow pits, cable routes / joint bays, security fencing, lighting (construction / operational), and aviation lighting should be considered as they can also be main sources of landscape / visual impact.	The Proposed Development does not include a BESS. All the other elements have been considered as part of the preliminary assessment where information is available, and will be assessed as part of the LVIA included in the ES.
	Effects on the Nidderdale National Landscape should be considered.	The Nidderdale National Landscape has been considered as part of this preliminary assessment and will be assessed in the LVIA.
	Additional maps should be provided at appropriate scales, i.e. 1:25,000 and 1:10,000.	The figures that form part of this preliminary assessment (Figures 12-1 to 12-6) have used different map bases, selected to be appropriate for the size of each drawing. Further specific requirements can be identified during consultation with Local Planning Authorities.
	Effects on the openness of the Green Belt should be appropriately addressed, and cross-referenced to planning policy.	The LVIA will inform judgements regarding potential effects on the Green Belt and this will be presented in the Planning Statement

Consultee	Summary of Discussion	Discussion Response
		that accompanies the DCO Application.
	<p>The LVIA should include fully rendered, NatureScot (SNH, 2017) compliant photomontages from all agreed representative, illustrative and specific viewpoints, including night-time imagery where aviation or construction lighting is relevant. Wirelines are only appropriate during the iterative / design-testing and viewpoint-agreement stage, and should not be included within the LVIA.</p>	<p>Noted. However, wirelines are also an important assessment tool and will be included in addition to photomontages, in line with guidance by the Landscape Institute³⁷ and NatureScot³⁸.</p>
	<p>The viewpoint list is not considered to enable a sufficient and robust assessment. A receptor typology is considered necessary to ensure consistent and transparent judgements of receptor value and susceptibility. The receptor list set out in Table 10-2 should be augmented with sequential views from all footpaths / cycleways / bridleways within 5 km of the Proposed Development. Users of open access land should also be considered. Visual receptors set out at paragraphs 10.3.17 – 10.3.21 should be incorporated into Table 10-2. Viewpoints should be added at Stoodley Pike, Top Withens, Parsons Field, Brontë Parsonage Museum, and Haworth, Yorkshire Three Peaks (Pen y Ghent, Ingleborough and Whernside), alongside the Trig Points of Bridestones, Sheepstones, Standing Stone, Hoof Stones, High Brown Knoll and Lad Law. Additional viewpoints</p>	<p>Viewpoints will be discussed as part of the consultation process for the LVIA.</p>

³⁷ Landscape Institute (2019) Visual Representation of Development Proposals – Technical Guidance Note 06/19. Available:

<https://www.landscapeinstitute.org/visualisation/>

³⁸ Scottish Natural Heritage (now NatureScot)(February 2017) Visual Representation of Wind farms - Good Practice Guidance, Version 2.2. Available:

<https://www.nature.scot/doc/visual-representation-wind-farms-guidance>

Consultee	Summary of Discussion	Discussion Response
	<p>should be included from within Brontë Country, an internationally recognised literary landscape and tourist attraction. Heptonstall old church and church, within Heptonstall Conservation Area, should be added as viewpoint locations as they are key visitor destinations.</p>	
	<p>Viewpoints should be considered and assessed with regard to their distance from the proposed turbines and from the proposed access road corridors, junctions and associated earthworks. Route-based viewpoints should be included along the access corridors (including key bends, gradients and settlement interfaces) and should present sequential assessment where appropriate.</p>	<p>Viewpoints will be discussed as part of the consultation process for the LVIA.</p>
	<p>All Public Rights of Way (PRoW), bridleways, cycle routes and residential receptors within 5 km of the proposed turbines (and within appropriate buffers of the site access and cable corridors) should be identified and assessed.</p>	<p>These receptors have been considered within this preliminary assessment in Section 12.8 and will be assessed in the LVIA.</p>
	<p>The Calder-Aire Link is a regionally important route linking population centres in the Bradford District to the Pennine Bridleway, and runs through the site. This route should be named and recognised alongside the Pennine Bridleway in the relevant sections. There should be an assessment of effects on more visual receptors on the Pennine Bridleway, an assessment of the visual impact on horse riders.</p>	<p>These receptors have been considered at a high level as part of this preliminary assessment and will be assessed in more detail in the LVIA.</p>
	<p>There should be a formal mechanism for securing stakeholder feedback on the viewpoint list. A draft viewpoint list should be issued along with maps; a consultee workshop should be held</p>	<p>Noted and as stated above viewpoints will be discussed further, with relevant stakeholders.</p>

Consultee	Summary of Discussion	Discussion Response
	<p>with CMBC, National Parks, Natural England and others; and an agreement log published summarising responses and final agreed viewpoints.</p>	
	<p>The LVIA should consider effects within the Site Access Search Area and Cable Corridor Search Area. Viewpoints relating to these areas should be agreed with relevant stakeholders and night-time / lighting effects should be addressed where relevant.</p>	<p>Noted and viewpoints will be discussed as part of the consultation process for the LVIA.</p>
	<p>Siting and detailed design of the site access in particular should be informed by visual sensitivities and local landscape character, and embedded mitigation incorporated. The design rationale should be clearly explained and any alternatives considered described.</p>	<p>Noted. The Design of the Proposed Development is explained within Chapter 5: Alternatives and Design Evolution.</p>
	<p>ES should provide a clear, evidenced approach to mitigation that distinguishes embedded design parameters from additional / management measures, demonstrates genuine design evolution and secures commitments through the DCO. ES should provide a design-evolution narrative and mitigation commitments schedule. Where LVIA-recommended embedded mitigation is not adopted this should be robustly justified.</p>	<p>Noted. The Design of the Proposed Development is explained within Chapter 5: Alternatives and Design Evolution.</p>
	<p>The following mitigation measures are expected: priorities avoidance of cut and fill, earthworks and vegetation removal, adopt peat-appropriate track solutions and careful siting of compounds / borrow pits; replace generic woodland screening with character-appropriate moorland restoration / ghyll-side planting only where typical, use locally native seed</p>	<p>The design process is described in Chapter 5: Alternatives and Design Evolution. The design of the Proposed Development will continue to evolve and will take account of the measures suggested.</p>

Consultee	Summary of Discussion	Discussion Response
	<p>mixes and specify temporary lighting controls in the oCEMP; add a clear aviation lighting strategy and site-lighting controls for BESS / substation; set layout / micro-siting principles (i.e. skyline / valley-rim setbacks, PRow / townscape view cones, coherent massing), evidenced through the agreed viewpoints and sequential assessment; scope in townscape / CA receptors (i.e. Brontë settlements such as Haworth / Oxenhope) where open moorland skylines underpin character, provide rendered photomontages from agreed townscape / CA viewpoints; in addition to an oDEMP, scope in decommissioning and post-decommissioning LVIA, define the asset removal strategy (tracks / foundations), assess temporary and residual effects (compounds, haul roads, lighting removal), and present an outcomes-led restoration strategy with monitoring / aftercare aligned to moorland character.</p>	
	<p>Disagree with proposal to scope out consideration of effects where there is limited theoretical visibility. All judgements should be evidence-based and transparent.</p>	<p>An assessment judgement will be made and clearly stated in the ES. LCA/LCTs would all be given due consideration. When no visibility is predicted by the ZTVs it would be reasonable to assume that no significant effects are likely to occur.</p>
	<p>Disagree with proposal to scope out effects on townscape character. The landscape is a defining attribute of nearby townscapes, notably within the Brontë Cultural Landscape, and effects</p>	<p>Townscape effects are not typically included in LVIAs for wind farm developments. Settlements will be considered in relation</p>

Consultee	Summary of Discussion	Discussion Response
	<p>on townscape character should therefore be considered.</p>	<p>to potential effects on visual amenity. This will be discussed through consultation with relevant stakeholders to define what extent of assessment is required, including which settlements would be relevant.</p>
	<p>Disagree with proposal to scope out consideration of effects within the decommissioning phase.</p>	<p>This will be reviewed as more design information is available. It will be assessed, particularly where significant effects may occur. Alternatively, justification will be provided if no significant adverse effects are predicted.</p>
<p>Kirkburton Parish Council</p>	<p>Request that landscape impact of the development is considered in the ES.</p>	<p>Noted.</p>
<p>Natural England</p>	<p>LVIA should refer to relevant National Character Areas. These are considered to be at an appropriate scale for the consideration of effects arising from the Proposed Development, given its scale.</p>	<p>It is intended to refer to the National Character Area for context, but the assessment would concentrate on published local landscape character assessments.</p>
	<p>NCA's in the Cable Route Search Area should form part of the assessment of landscape effects.</p>	<p>NCA's will form part of the assessment landscape effects. The Cable Corridor is mapping in relation to NCA's in Figure 12-2.1.</p>

Consultee	Summary of Discussion	Discussion Response
	<p>The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. This should take into account guidance published by the Landscape Institute and Institute for Environmental Management and Assessment (IEMA) in 2013.</p>	<p>The methodology is described in Section 12.4 and Technical Appendix 12-1.</p>
	<p>The LVIA will need to fully assesses the impacts of the entire scheme on the landscape character and the special qualities of the Protected Landscapes included in the final study area.</p>	<p>Designated landscapes have been considered as part of the preliminary assessment and will be assessed in more detail as part of the LVIA.</p>
	<p>Landscape character should inform 'good design', in line with NPS EN-1, paragraph 4.5.3 and the draft NPS EN-1, paragraph 4.7.6.</p>	<p>Landscape and visual considerations have informed the design of the Proposed Development and will continue to do so as this evolves. The design process is described in Chapter 5: Alternatives and Design Evolution.</p>
	<p>Support use of NatureScot guidance documents on the assessment of onshore wind development in the absence of comparable guidance in England.</p>	<p>Noted.</p>
	<p>Siting and design of the Proposed Development should reflect local characteristics and, wherever possible, use local materials. Account should be taken of local design policies, design codes and guides as well as guidance in the National Design Guide and National Model Design Code. The ES should set out the measures to be</p>	<p>Alternative designs have been considered to date and an analysis of these is provided in Chapter 5: Alternatives and Design Evolution. Further design refinement will be</p>

Consultee	Summary of Discussion	Discussion Response
	<p>taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives with a justification of the selected option in terms of landscape impact and benefit.</p>	<p>undertaken, including based on the feedback from Statutory Consultation, and this further analysis will be provided as part of the ES.</p>
	<p>Consideration should be given to the Design Principles for National Infrastructure (National Infrastructure Commission).</p>	<p>The design process is described in Chapter 5: Alternatives and Design Evolution.</p>
	<p>LVIA methodology should be in line with GLVIA3.</p>	<p>The methodology is described in Section 12.4 and Technical Appendix 12-1.</p>
	<p>Cumulative effects should be considered, including effects of other proposals currently at scoping stage.</p>	<p>A proportionate list of other projects for assessment has been developed and is presented in Chapter 24: Cumulative Effects. Given the limited information available for projects at the scoping stage which prevent a meaningful assessment, these have been discounted from further consideration at this stage. However, this approach will continue to be reviewed for the ES.</p>
	<p>Assessment of effects on Protected Landscapes should include a separate section which assesses effects on the ‘special qualities’ of the Protected Landscape, as set out in the statutory management plan for the area.</p>	<p>Designated landscapes have been considered as part of the preliminary assessment and will be assessed in more</p>

Consultee	Summary of Discussion	Discussion Response
		detail as part of the LVIA.
	Effects on Nidderdale National Landscape should be considered.	The Nidderdale National Landscape has been considered as part of this preliminary assessment and will be assessed in the LVIA.
	Applicant will need to demonstrate that they have sought to further the purposes of the statutory designation of Protected Landscapes through each stage of the mitigation hierarchy based on the requirements of the LURA, 2023. The LVIA will therefore need to assess the proposal in line with the 'seek to further purpose' duty.	Designated landscapes have been considered as part of the preliminary assessment and will be assessed in more detail as part of the LVIA.
	Expect Protected Landscapes and National Trails to be included in highest category of landscape and visual sensitivity.	The value and susceptibility of all landscape and visual receptors will be assessed in the LVA based on the methodology described in Section 12.4 and Technical Appendix 12-1 .
	The methodology should clearly set out a transparent rationale for combining judgements to demonstrate: how value and susceptibility (each judged separately) are combined to form a judgement on the sensitivity of both landscape and visual receptors; how judgements about scale, extent and duration (each judged separately) combine to form a judgement on the magnitude of change; how the resulting judgements about sensitivity and magnitude of	A summary of the methodology is provided in the Chapter below and provided in full in Technical Appendix 12-1 .

Consultee	Summary of Discussion	Discussion Response
	<p>change are combined to form judgements about overall landscape and visual significance of effects; what residual significant landscape and visual effects remain after mitigation.</p>	
	<p>An integrated landscape-scale assessment is required in the EIA to assess the impact of the Proposed Development on the landscape. Advise that the impact of severance on landscape should be clearly assessed for the cable and infrastructure routes alongside the turbine development area. The scale of these effects must be robustly assessed alongside the risk of reinstatement of habitat types where construction methods are proven to be unfeasible, or changes in hydrology lead to degradation of habitats and thus landscape character.</p>	<p>Noted. Further consideration will be provided in the ES.</p>
	<p>Major, major/moderate and moderate effects should all be assessed as significant due to the scale of the Proposed Development and its likely significant adverse effects. Due to the scale of the project, levels of the sensitivity and magnitude of change should include both the primary levels as well as the intermediate.</p>	<p>Noted. Details are provided in this Chapter below. Moderate effects have the potential to be significant, although specific judgements will be made in the LVIA.</p>
	<p>Impacts on the setting of Protected Landscapes and how these will be avoided, reduced and mitigated should be detailed. We welcome that the impacts of the development will be assessed against the special qualities of the identified Protected Landscapes. We advise that potential effects on the special qualities of the Protected Landscapes should be scoped into the assessment in paragraph 10.6.5 as a fifth category of effects.</p>	<p>Designated landscapes have been considered as part of the preliminary assessment in Section 12.8 and will be assessed in more detail as part of the LVIA.</p>

Consultee	Summary of Discussion	Discussion Response
	<p>Advise that temporary and permanent landscape and visual effects should be scoped into the assessment for each phase of the project, until the methods of construction for each part of the development has been clearly established.</p>	<p>All phases of the Proposed Development have been considered as part of the preliminary assessment and will be assessed as part of the detailed LVIA.</p>
	<p>Advise that direct and indirect landscape effects of the construction phase of the Proposed Development are assessed. Should include a full assessment of the potential effects on the 'special qualities' of the Protected Landscapes.</p>	<p>All phases of the Proposed Development have been considered as part of the preliminary assessment and will be assessed as part of the detailed LVIA. Designated landscapes have been considered as part of the preliminary assessment in Section 12.8 and will be assessed in more detail, including effects on special qualities, as part of the LVIA.</p>
	<p>Disagree with scoping out effects of underground cable connection during operation. Effects may be longer term, given the geology, landscape and habitats, and depending on the method used to reinstate the cable route.</p>	<p>This will be reviewed as part of an iterative assessment process. If there are landscape features or elements, including vegetation, that will be affected in a way that will result in long-term change to consequences of this change will be assessed and presented in the ES.</p>
	<p>Assessment of effects on special qualities of Protected Landscapes should be carried out for construction and operational phases.</p>	<p>All phases of the Proposed Development have been considered as</p>

Consultee	Summary of Discussion	Discussion Response
		<p>part of the preliminary assessment and will be assessed as part of the detailed LVIA. Designated landscapes have been considered as part of the preliminary assessment in Section 12.8 and will be assessed in more detail, including effects on special qualities, as part of the LVIA.</p>
	<p>ES should consider the potential landscape and visual effects of the whole scheme, including areas outside of the proposed turbine area, such as the access and cable search areas. Distances provided to Protected Landscapes should be calculated from full red line boundary, not turbine area.</p>	<p>The LVIA in the ES will assess the predicted effects of all elements of the Proposed Development. At present the distances quoted are relative the Turbine Area, This will be adjusted to reflect the Order Limits for the DCO Application (and ES) if elements away from the Turbine Area are likely to adversely affect a protected landscape.</p>
	<p>ZTV should be produced showing theoretical visibility of works outside the turbine area, including cable corridor search area.</p>	<p>A ZTV would not typically be prepared for a buried cable or access routes/internal site access tracks and comparable assessments in relation to buried cables have not included the preparation of ZTVs for these elements. The requirement for a ZTV for the Bradford West</p>

Consultee	Summary of Discussion	Discussion Response
		Cable Corridor and Access Routes would be discussed as the assessment work progresses and, if required, presented in the ES.
	1 km buffer from the cable corridor search area is considered to be insufficient, due to variation in and elevation of topography, and changes to the landscape due to permanent access roads and other buildings.	To be reviewed as part of the detailed assessment that will be presented in the ES.
	Impacts to habitats connected to the existing hydrological regime would also incur deleterious landscape impacts. Advise that this impact should be fully assessed within the LVIA to include the hydrological impact zone and zone of influence. Route selection should avoid impacts to hydrological regimes to avoid consequential landscape effects.	This will be considered as part of the LVIA, based on the final design of the Proposed Development.
	The SNH Visual Representation of Wind Farms guidance (February 2017) recommends 45 km for the purpose of establishing the initial ZTV distance (paragraph 48). In paragraph 50, the guidance states that the purpose of the ZTV is not to identify significant effects and that regardless of significance, potential visibility should be shown on the ZTV. We advise that the approach should follow the guidance.	Noted. No areas of theoretical visibility have been omitted from the ZTV. The SNH Visual Representation of Wind Farms guidance has been followed.
	15 km study area for assessment of landscape effects unlikely to be sufficient and should be reviewed.	This will be reviewed as the assessment is prepared to ensure the focus is on the likely significant effects.
	Five viewpoints proposed within Protected Landscapes unlikely to be sufficient for robust consideration of effects, including on 'special qualities'.	Viewpoints will be discussed, as part of the consultation process for the LVIA

Consultee	Summary of Discussion	Discussion Response
	Viewpoints within Protected Landscapes should be comprehensive and include views which demonstrate effects of proposed roads and infrastructure, not just turbine area.	with national park authorities and national landscape partnerships.
	Clear methodology should be set out for capturing the visual effects of the entire development. We advise that the LVIA will need to include important sequential views through the Protected Landscapes and Pennine Way National Trail and any other key routes.	A summary of the methodology is provided in the Chapter below and provided in full in Technical Appendix 12-1 . Sequential visual effects will be considered as part of the LVIA.
	Would welcome consultation regarding additional viewpoint selection.	Noted.
	Welcome that the ES will be based on an EIA mitigation hierarchy. Advise that ensuring the principles of the mitigation hierarchy are clearly adopted will be of critical importance. Employing practices to avoid impact will be key.	Noted. The mitigation hierarchy has been applied through the EIA process and informed the emerging design. Key design principles to avoid and reduce impacts are set out in Chapter 5: Alternatives and Design Evolution .
	Any woodland planting will need to be strictly in accordance with the relevant LCA. Note that there are various references to woodland planting within the EIA scoping document, which do not appear to complement the sparsely wooded character of the landscape.	All proposed planting will take account of the baseline landscape character and the objectives for the relevant landscape character areas.
	Visual effects of lighting on the hours of darkness should be assessed, including effects on recognised 'dark skies'. Would welcome consultation on location of night-time visualisations.	The potential visual effects of lighting will be assessed in the LVIA. This has been considered as part of the preliminary

Consultee	Summary of Discussion	Discussion Response
		assessment in Section 12.8 .
	Conclusions of Landscape Capacity Study for Wind Energy Developments in the South Pennines (Julie Martin Associates, 2010) should be reflected in LVIA.	The conclusions of this published document will be considered and reflected where considered relevant in the LVIA.
Wadsworth Parish Council	1 km study area for cable corridor considered to be insufficient. Potential loss of mature trees and woodland mean that visual effects will extend beyond 1 km.	At this stage, there are no plans to remove mature trees and woodland along the Bradford West Cable Corridor. This will be reviewed as part of the detailed assessment to be presented in the ES.
	Description of 'largely rough grassland' land cover is inaccurate. The land cover is blanket bog, as identified in the description for NCA 36. Description of geological features is incorrect. List of nearby windfarms omits those on Todmorden Moor. List of landscape designations omits Nidderdale National Landscape.	Noted. The descriptions have been updated, where relevant.
	Viewpoint list is inadequate. Viewpoints should be included from Sheepstones Edge and the Yorkshire Three Peaks, as well as within the Peak District and Lund Tower. Concerns regarding incorporation of stakeholder feedback into viewpoint list.	Viewpoints will be discussed as part of the consultation process for the LVIA.
	Environmental restoration must be a core ethos of the Proposed Development, not simply a consideration. Proposed mitigation measures including grassland and woodland planting are not appropriate for the blanket bog habitat. Mitigation	Noted. Peat restoration proposals are under development and will be presented in the ES.

Consultee	Summary of Discussion	Discussion Response
	<p>should involve restoration of the peatland hydrology and sphagnum-dominated bog for biodiversity, carbon and water management.</p>	
	<p>Cumulative assessment must include consideration of sequential effects on key rights of way including Pennine Way and Brontë Way, and consider the loss of sense of openness i.e. the experience of wild, unimpaired spaces.</p>	<p>Sequential visual effects will be considered as part of the LVIA.</p>
	<p>Disagree with scoping out townscape assessments for villages like Haworth and Heptonstall.</p>	<p>Townscape effects are not typically included in LVIA's for wind farm developments. Settlements will be considered in relation to potential effects on visual amenity. This will be discussed consultation with relevant stakeholders to define what extent of assessment is required, including which settlements would be relevant.</p>
	<p>Effects during decommissioning phase should be considered.</p>	<p>This will be reviewed as more design information is available. It will be assessed, particularly where significant effects may occur. Alternatively, justification will be provided if no significant adverse effects are predicted.</p>
	<p>Landscape and visual impact of BESS not considered appropriately.</p>	<p>A BESS no longer forms part of the Proposed Development.</p>

Consultee	Summary of Discussion	Discussion Response
	15 km study area considered to be insufficient.	This will be reviewed as the assessment is prepared to ensure the focus is on the likely significant effects.
	Perceptual qualities such as wildness and tranquillity should be considered.	Noted.
	Physical effects may arise beyond the footprint of development due to hydrological processes and should be considered within a wider area.	Noted.

Further Stakeholder Engagement

- 12.3.3 An overview of other consultation (beyond the PINS Scoping Opinion) undertaken to date for the LVIA, and how this has informed the scope of the assessment is provided in **Table 12-4** (as set out below).

Table 12-4: Other Engagement Undertaken

Consultee	Type and Date	Summary of Discussion	Discussion Response
National Trust	Online meeting 13 th November 2025	Meeting to discuss National Trust site and land within the 45km LVIA study area.	Dialogue to be maintained as the Proposed Development is refined.

12.4 Assessment Methodology

Study Area

- 12.4.1 The initial step in the LVIA is the establishment of the study area for the assessment. Guidance developed by NatureScot (Visual Representation of Wind Farms Version 2.2, February 2017), the only relevant guidance that identifies potential study areas for wind energy developments, indicates that an area with a radius of 45km from the nearest turbine is generally appropriate for turbines of the size proposed.
- 12.4.2 This study area, also illustrating the local authorities that lie within it, is shown in **Figure 12-1**. A Zone of Theoretical Visibility (ZTV) analysis has therefore been

carried out for this area (see **Figures 12-5-1 to 12-5-4**), as has mapping of landscape character (**Figures 12-2-1 and 12-2-2**), landscape related designations (**Figures 12-3-1 to 12-3-3**) and principal visual receptors (**Figure 12-4**).

- 12.4.3 Cumulative effects will be assessed with other existing, consented and proposed wind farms within the 45km radius study area, with further consideration given to the appropriateness of assessment potential cumulative effects with other wind farm developments up to 60km. Consideration will also be given to the inclusion of other relevant developments in the LVIA. The assessment of cumulative effects is provided in **Chapter 24: Cumulative Effects**.
- 12.4.4 A cut-off date will be applied in respect of the cumulative situation to enable the completion of the visualisations and assessment. This was December 2025 for this PEIR. An appropriate cut-off date will be utilised for the technical assessments as part of the ES and clearly stated in the ES.
- 12.4.5 Due to the degree of uncertainty in relation to the progression of a number of the scoping or screening stage sites, and also elements of their design, these will not be considered as part of the assessment of cumulative effects, or a more limited assessment undertaken based on the information that is available. The status of such projects will be reviewed towards submission of the DCO Application. This approach will be reviewed as part of the preparation of the ES.

Sources

- 12.4.6 The LVIA has and will continue to be informed by field survey work undertaken within the study area. This fieldwork has been undertaken between 2022 and 2025 and has involved visits to the site and immediate context and viewpoint photography in the wider landscape. In addition, the landscape and visual baseline has and will continue to be informed by desk-based review of published landscape and character assessments, and the ZTV, to identify receptors that may be affected by Proposed Development and produce written descriptions of their key characteristics and value.
- 12.4.7 The LVIA has and will continue to draw on the content of the published landscape character assessments applicable to the study area. The assessment scope will continue to be reviewed during the preparation of the LVIA and a pragmatic or proportionate approach will be taken in relation to the level of detail applied, ensuring likely significant effects are identified for the Turbine Area, Access Routes and the Bradford West Cable Corridor. This may involve a focus on local landscape character areas close to the Proposed Development and using National Character Areas at greater distances. The published local landscape character assessments include:

- Calderdale District Landscape Character Assessment and Review of Special Landscape Areas Designation (October 2016)³⁹;
- Landscape Capacity Study for Wind Energy Developments in the South Pennines (January 2010)⁴⁰;
- Landscape Character, Supplementary Planning Document – Local Development Framework for Bradford (October 2008)⁴¹;
- Draft Bradford Landscape Character Assessment Supplementary Planning Document (November 2025)⁴²;
- A Landscape Strategy for Lancashire – Landscape Character Assessment (December 2000)⁴³;
- Forest of Bowland Area of Outstanding Natural Beauty Landscape Character Assessment September 2025)⁴⁴;
- Pendle Hill Landscape Partnership Landscape Character Assessment (undated)⁴⁵;
- North Yorkshire and York Landscape Characterisation Project (May 2011)⁴⁶;

³⁹ LUC for Calderdale District Council (October 2016) Calderdale District Landscape Character Assessment and Review of Special Landscape Areas Designation. Available: <https://new.calderdale.gov.uk/sites/default/files/2023-06/landscape-character-assessment.pdf>.

⁴⁰ Julie Martin Associates for Burnley Borough Council, Bury Metropolitan Borough Council, Calderdale Metropolitan Borough Council, Kirklees Metropolitan Council, Rochdale Metropolitan Borough Council and Rossendale Borough Council (January 2010) Landscape Capacity Study for Wind Energy Developments in the South Pennines. Available: <https://www.rochdale.gov.uk/downloads/file/543/landscape-capacity-study-for-wind-energy-developments-in-the-south-pennines>.

⁴¹ City of Bradford Metropolitan District Council (October 2008) Landscape Character, Supplementary Planning Document – Local Development Framework for Bradford. Available: <https://www.bradford.gov.uk/planning-and-building-control/planning-policy/landscape-character-assessment-supplementary-planning-document/>.

⁴² City of Bradford Metropolitan District Council (November 2025) Landscape Character Assessment Supplementary Planning Document. Available: [Landscape Character Assessment Supplementary Planning Document | Bradford Council](#)

⁴³ Lancashire County Council (December 2000) A Landscape Strategy for Lancashire – Landscape Character Assessment. Available (<https://www.lancashire.gov.uk/council/strategies-policies-plans/environmental/landscape-strategy/>).

⁴⁴ Forest of Bowland (July 2025) Forest of Bowland National Landscape, Landscape Character Assessment. Available: [Landscape Character Assessment | Forest of Bowland National Landscape](#).

⁴⁵ Lancashire County Council (undated) Pendle Hill Landscape Partnership Landscape Character Assessment. Available: <https://www.pendlehillproject.com/sites/default/files/docs/reports/Pendle%20Hill%20LPS%20Landscape%20Character%20Assessment%20Context.pdf>.

⁴⁶ Chris Blandford Associates for North Yorkshire County Council (May 2011) North Yorkshire and York Landscape Characterisation Project. Available: <https://www.northyorks.gov.uk/environment-and-neighbourhoods/conservation/describing-and-understanding-our-landscape>.

- Yorkshire Dales Landscape Character Assessment (2002, updated 2020)⁴⁷;
- Yorkshire Dales National Park Authority Design Guide, Appendix D.6 Wind energy (2015)⁴⁸;
- Peak District Landscape Character Assessment, online tool⁴⁹;
- Peak District Landscape Strategy 2022 – 31⁵⁰;
- Peak District National Park Authority Climate Change and Sustainable Building Supplementary Planning Document, Annex 1: Landscape Sensitivity Assessment and Guidance for Wind Turbine Applications (March 2013)⁵¹; and
- Greater Manchester Landscape Character and Sensitivity Assessment (August 2018)⁵².
- Barnsley Landscape Character Assessment (December 2002)⁵³;
- Barnsley Landscape Character Assessment: 2016 update⁵⁴;
- Kirklees District Landscape Character Assessment (July 2015)⁵⁵;
- Leeds Landscape Assessment (1994)⁵⁶;

⁴⁷Yorkshire Dales National Park Authority (2002, updated 2020) Yorkshire Dales Landscape Character Assessment. Available: <https://www.yorkshiredales.org.uk/about/landscape/landscape-character-assessment/>.

⁴⁸ Yorkshire Dales National Park Authority (2015) Design Guide. Available: <https://www.yorkshiredales.org.uk/wp-content/uploads/sites/13/2019/06/Yorkshire-Dales-Design-Guide.pdf>.

⁴⁹ Peak District Landscape Character Assessment, online tool. Available: <https://www.peakdistrict.gov.uk/looking-after/strategies-and-policies/landscape-strategy>.

⁵⁰ Peak District National Park, Peak District Landscape Strategy 2022 – 31. Available: <https://www.peakdistrict.gov.uk/looking-after/strategies-and-policies/landscape-strategy>.

⁵¹ Peak District National Park Authority (March 2013) Climate Change and Sustainable Building Supplementary Planning Document. Available: <https://www.peakdistrict.gov.uk/planning/policies-and-guides/climate-change-and-sustainable-building>.

⁵² LUC for Greater Manchester Combined Authority Greater Manchester (August 2018) Landscape Character and Sensitivity Assessment. Available: <https://www.greatermanchester-ca.gov.uk/media/1727/greater-manchester-landscape-character-and-sensitivity-report.pdf>.

⁵³ Barnsley Metropolitan Borough Council (December 2002) Barnsley Landscape Character Assessment. Available: <https://www.barnsley.gov.uk/services/planning-and-buildings/local-planning-and-development/local-plan/local-plan-research-and-evidence-documents/>.

⁵⁴ Barnsley Metropolitan Borough Council (2016) Barnsley Landscape Character Assessment – 2016 Review. Available: <https://www.barnsley.gov.uk/services/planning-and-buildings/local-planning-and-development/local-plan/local-plan-research-and-evidence-documents/>.

⁵⁵ Kirklees Council (July 2015) Kirklees District Landscape Character Assessment. Available: [https://www.kirklees.gov.uk/beta/planning-](https://www.kirklees.gov.uk/beta/planning-policy/pdf/supportingDocuments/climateChange/Kirklees-Landscape-Character-2015.pdf)

[policy/pdf/supportingDocuments/climateChange/Kirklees-Landscape-Character-2015.pdf](https://www.kirklees.gov.uk/beta/planning-policy/pdf/supportingDocuments/climateChange/Kirklees-Landscape-Character-2015.pdf).

⁵⁶ Leeds City Council (1994) Leeds Landscape Assessment. Available:

<https://www.leeds.gov.uk/planning/conservation-protection-and-heritage/landscape-planning-and-development>.

- Lives and Landscapes Assessment for Rossendale Borough Council (December 2015)⁵⁷; and
- Landscape Character Assessment of Wakefield District (October 2004)⁵⁸.

12.4.8 In addition, data has been and will continue to be gathered from a number of other sources to inform the LVIA, including:

- Campaign to Protect Rural England (CPRE) interactive maps of the UK's light pollution and dark skies as part of a national mapping project (LUC/CPRE, 2016) (available online: <https://www.nightblight.cpre.org.uk/>);
- OS 1:50,000 and 1:25,000 scale mapping, together with Ordnance Survey Terrain 5 and Terrain 50 Digital Terrain Model (DTM) data;
- Aerial imagery;
- Sustrans National Cycle Network data (available online: <https://www.sustrans.org.uk/>);
- National Trust - specific visitor attractions/tourist destinations (available online: <https://www.nationaltrust.org.uk/days-out>);
- Long Distance Walkers Association Overview map for Long Distance Paths and Walks (available online: https://www.ldwa.org.uk/ldp/public/ldp_overview_map.php);
- Historic England - Registered Parks and Gardens and UNESCO World Heritage Sites (available online: <https://historicengland.org.uk/listing/what-is-designation/registered-parks-and-gardens/>);
- Natural England - GIS datasets for:
 - National Parks (<https://data.gov.uk/dataset/334e1b27-e193-4ef5-b14e-696b58bb7e95/national-parks-england>);
 - Areas of Outstanding Natural Beauty (AONB) (National Landscapes) (<https://data.gov.uk/dataset/8e3ae3b9-a827-47f1-b025-f08527a4e84e/areas-of-outstanding-natural-beauty-england>);

⁵⁷ Rossendale Borough Council (December 2015) Lives and Landscapes for Rossendale Borough Council. Available:

https://www.rossendale.gov.uk/downloads/download/10829/landscape_study_2015.

⁵⁸ Wakefield Council (October 2004) Landscape Character Assessment of Wakefield District. Available: <https://www.wakefield.gov.uk/planning/planning-policy/information-and-monitoring/landscape-character-assessment/>.

- Country Parks (<https://data.gov.uk/dataset/e729abb9-aa6c-42c5-baec-b6673e2b3a62/country-parks-england>); and
- Open Access Land (<https://data.gov.uk/dataset/05fa192a-06ba-4b2b-b98c-5b6bec5ff638/crow-act-2000-access-layer>).

Methodology

Baseline Survey Methodology

Desk Study

- 12.4.9 The assessment is initiated through a desk study of the PEIR Boundary and the 45km radius study area from the Turbine Area, noting this 45km study area therefore is inclusive of all components of the Proposed Development. This desk study identifies aspects of the landscape and visual resource that may need to be considered in the landscape and visual assessment, including landscape-related planning designations (i.e. National Parks and AONBs (National Landscapes)), landscape character assessments, operational and potential cumulative wind farms, and views from routes (including roads, railway lines, National Cycle Routes, PRoWs and long-distance walking routes) and settlements.
- 12.4.10 The desk study also utilises Geographic Information System (GIS) and Resoft Windfarm software to explore the potential visibility of the Proposed Development. The resultant ZTV maps and wirelines provide an indication of which landscape and visual receptors are likely to be of most relevance for the assessment.

Field Survey

- 12.4.11 Field surveys are carried out throughout the 45km radius study area, although the focus is on the areas shown on the ZTV to gain theoretical visibility of the Proposed Development. The baseline field survey has four broad stages:
- A preliminary familiarisation around the study area in order to visit the aspects of the landscape and visual resources that have been identified through the desk study and verify their existence and importance. Important features and characteristics that have not become apparent through the desk study are also identified, and particularly sensitive receptors are noted in order to inform the design process;
 - A visit around the location of the Proposed Development, in order to establish its potential for wind farm development and identify the most suitable areas for Proposed Development in landscape and visual terms, along with any constraints that may restrict the area available for development;

- Further field survey around the study area, concurrent with the design process for the Proposed Development, to identify those receptors that are likely to be particularly important in the assessment and to inform the layout design, possible turbine height and the spatial extent of the Proposed Development; and
- The identification of and photography at representative viewpoints to include in the landscape and visual assessment, to capture a wide range of receptors, landscape character, and directions and distances from the Proposed Development.

Methodology for the Assessment of Effects

12.4.12 The significance of the potential effects of the Proposed Development has been determined by professional consideration of the sensitivity of the receptor and the magnitude of the potential change. This section summarises the methodology and guidance used to carry out the LVIA, which is described in full in **Technical Appendix 12-1**.

Categories of Effects

12.4.13 The LVIA is intended to determine the likely significant effects that the Proposed Development would have on the landscape and visual resource. For the purposes of assessment, the potential effects on the landscape and visual resource are grouped into the following five categories:

- Physical effects;
- Effects on landscape character;
- Effects on landscape designations (specifically the special qualities set out in their citations);
- Effects on visual receptors (during daytime and night-time); and
- Cumulative effects (noting that the assessment is presented in **Chapter 24: Cumulative Effects**).

Assessment of Effects

12.4.14 The broad principles used in the assessment of level and significance of effect for the various categories of effects outlined above are the same and are described below. The detailed methodology for the assessment does, however, vary, and the specific criteria used for each of the categories of effects are described in **Technical Appendix 12-1**.

12.4.15 The objective of the assessment of the Proposed Development is to predict the likely significant effects on the landscape and visual resource. In accordance with

the EIA Regulations the LVIA effects are assessed to be either Significant or Not Significant.

- 12.4.16 The level and significance of effects is assessed through a combination of two considerations; the sensitivity of the landscape receptor or view and the magnitude of change that will result as a consequence of the introduction of the Proposed Development.

Sensitivity

- 12.4.17 Sensitivity is an expression of the ability of a landscape or visual receptor to accommodate the Proposed Development. Sensitivity is determined through a combination of the value of the receptor and its susceptibility to development. The factors that determine these criteria are described in **Technical Appendix 12-1**.
- 12.4.18 Levels of sensitivity (i.e. high, medium-high, medium, medium-low and low) are applied in order that the judgement used in the process of assessment is apparent.

Magnitude of Change

- 12.4.19 Magnitude of change is an expression of the extent of the impact on landscape and visual receptors that will result from the introduction of the Proposed Development. The magnitude of change is assessed in terms of a number of variables, including the size and scale of the impact and the extent of the affected area. The factors that determine these criteria are described in **Technical Appendix 12-1**.
- 12.4.20 Levels of magnitude of change (i.e. high, medium-high, medium, medium-low, low and negligible) are applied in order that the judgement used in the process of assessment is apparent.

Assessment of Level and Significance of Effect

- 12.4.21 The significance and level of effects are assessed through a combination of the sensitivity of the landscape or visual receptor and the magnitude of change that will result from the addition of the Proposed Development. While this methodology is not reliant on the use of a matrix to determine a Significant or Not Significant effect, a matrix is included in **Table 12-5** to illustrate how combinations of sensitivity and magnitude of change ratings can give rise to significant effects, and the level of those effects in terms of whether they are major, moderate, minor or negligible. The matrix also gives an understanding of the threshold at which Significant effects may arise, where a moderate level of effect is assessed.

Table 12-5: Assessment of Level and Significance of Effect Matrix

		Magnitude of Change					
		High	Medium-High	Medium	Medium-Low	Low	Negligible/ No Change
Sensitivity	High	Major Significant	Major Significant	Major/moderate Significant	Moderate Significant or Not Significant	Moderate/minor Not Significant	Minor Not Significant
	Medium-High	Major Significant	Major/moderate Significant	Major/Moderate Significant	Moderate Significant or Not Significant	Moderate/minor Not Significant	Minor Not Significant
	Medium	Major/moderate Significant	Major/Moderate Significant	Moderate Significant or Not Significant	Moderate/minor Not Significant	Minor Not Significant	Minor Not Significant
	Medium-Low	Moderate Significant or Not Significant	Moderate Significant or Not Significant	Moderate/minor Not Significant	Minor Not Significant	Minor Not Significant	Negligible Not Significant
	Low	Moderate Significant or Not Significant	Moderate/minor Not Significant	Minor Not Significant	Minor Not Significant	Negligible Not Significant	Negligible Not Significant

12.4.22 Effects within the dark grey boxes in the matrix are considered to be Significant with either a Major or Major/ Moderate level of effect. Effects within the light grey boxes may be Significant or Not Significant, depending on the specific relevant factors that arise at a particular landscape or visual receptor and the level of effect is Moderate. Effects within the white boxes are considered to be Not Significant at either a Moderate/ Minor, Minor or Negligible level. In accordance with GLVIA3, experienced professional judgement is applied to the assessment of all effects and reasoned justification is presented in respect of the findings of each case.

12.4.23 A Significant effect typically occurs where the Proposed Development will provide one of the defining influences on a landscape element, landscape character receptor or view, or where a higher sensitivity landscape may experience more modest changes. A Not Significant effect occurs where the effect of the Proposed Development is not material, and the baseline characteristics of the landscape element, landscape character receptor, view or visual receptor continue to provide the definitive influence. In this instance, the Proposed Development may have an influence but this influence will not be definitive.

Cumulative Assessment

12.4.24 NatureScot's 'Guidance – Assessing the cumulative landscape and visual impact of onshore wind energy development' (2021) is widely used to inform the specific assessment of the cumulative effects of wind farms. Whilst this document is directly applicable to Scotland it provides the most comprehensive guidance for wind energy development, with no English alternative. This guidance provides the basis for the methodology for the cumulative assessment and notes that:

- *“The purpose of a Cumulative Landscape and Visual Impact Assessment (CLVIA) is to describe, visually represent and assess the ways in which a proposed wind farm would have additional impacts when considered with other consented or proposed wind farms. It should identify the significant cumulative impacts arising from the proposed wind farm.”*

12.4.25 The outcome of the above process is the identification of any significant cumulative effects that may arise from the addition of the Proposed Development to the cumulative situation, in accordance with NatureScot (2021) Guidance, which states that the cumulative assessment should *“focus on the likely significant impacts and those which are likely to influence the outcome of the consenting process”*.

12.4.26 In relation to the significance of cumulative landscape effects, GLVIA3 notes (paragraph 7.28) that:

- *“the most significant cumulative landscape effects are likely to be those that would give rise to changes in the landscape character of the study area of such an extent as to have major effects on its key characteristics and even, in some cases, to transform it into a different landscape type. This may be the case where the project being considered itself tips the balance through its additional effects.”*

12.4.27 GLVIA3 (paragraph 7.38) goes on to state the following in relation to the significance of cumulative visual effects:

- *“Higher levels of significance may arise from cumulative visual effects related to:*
 - *developments that are in closer proximity to the main project and are clearly visible together in views from the elected viewpoints;*
 - *developments that are highly inter-visible, with overlapping ZTVs – even though the individual developments may be at some distance from the main project and from individual viewpoints, and when viewed individually not particularly significant, the overall combined cumulative effect on a viewer at a particular viewpoint may be more significant.”*

- 12.4.28 The methodology used in the assessment of cumulative effects differs in some respects from that used for the rest of the LVIA and is described in **Technical Appendix 12-1**. It is important to remember that the objective of the cumulative assessment is different from the assessment of effects of the Proposed Development itself. While the focus of the cumulative assessment will be the additional effects resulting from the Proposed Development, consideration will also be given to the cumulative effects of relevant developments. The cumulative development of wind farms within a particular area may build up to create different types of landscape. Significant cumulative landscape effects may arise where a 'landscape with wind farms' is created, as a result of the addition of the Proposed Development to other existing or proposed wind farms, which results in wind turbines becoming sufficiently prolific that they become a prevailing or key landscape and visual characteristic.
- 12.4.29 The significance of the cumulative landscape effect from the addition of the Proposed Development reflects the intensification of wind farms within the landscape, which is assessed as follows:
- The Proposed Development forms a separate isolated feature from other wind farms within the landscape, too infrequent and of insufficient influence to be perceived as a characteristic of the area. The cumulative landscape effect of the Proposed Development is unlikely to be significant;
 - The addition of the Proposed Development results in wind farms forming a key characteristic of the landscape, exerting sufficient presence as to establish or increase the extent of a 'landscape with wind farms', but not of sufficient dominance to be a defining characteristic of the area. The cumulative landscape effect of the Proposed Development may be significant or not significant, depending on the sensitivity of the receptor, magnitude of the change and nature of the specific effects arising from the Proposed Development; and
 - The addition of the Proposed Development results in wind farms forming the prevailing characteristic of the landscape, seeming to define the landscape as a 'wind farm landscape' character type. The cumulative landscape effect of the Proposed Development is likely to be significant.
- 12.4.30 These effects can occur at varying scales, for example, effecting a local character type, or at a regional level, which is assessed as part of the geographic extent assessment in the LVIA.
- 12.4.31 It should be noted that if the Proposed Development itself is assessed to have a significant effect, it does not necessarily follow that the cumulative effect will also be significant.

12.4.32 A preliminary assessment of cumulative effects is presented in **Chapter 24: Cumulative Effects**.

Nature of Effects

12.4.33 The 'nature of effects' relates to whether the effects of the Proposed Development are positive/beneficial, negative/adverse or neutral. Guidance provided in GLVIA3 states that "...*thought must be given to whether the likely significant landscape and visual effects are... judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity...*" (para. 3.22) but does not provide an indication as to how that may be established in practice. The nature of effect is therefore one that requires interpretation and reasoned professional opinion.

12.4.34 In relation to many forms of development, beneficial and adverse effects are identified under the term 'nature of effect'. The landscape and visual effects of wind farms are difficult to categorise in either of these brackets as, unlike other technical aspects, there are no definitive criteria by which these effects can be measured as being categorically beneficial or adverse. For example, in technical aspects such as noise or biodiversity it is possible to identify the nature of the effect of a wind farm by objectively quantifying its effect and assessing the nature of that effect in prescriptive terms. However, this is not the case with landscape and visual effects, where the approach combines quantitative and qualitative assessment.

12.4.35 For the landscape and visual assessment, beneficial, neutral and adverse effects are defined as follows:

- Beneficial effects contribute to the landscape and visual resource through the enhancement of desirable characteristics or the introduction of new, beneficial attributes. The removal of undesirable existing elements or characteristics can also be beneficial, as can their replacement with more appropriate components;
- Neutral effects occur where the Proposed Development neither contributes to nor detracts from the landscape and visual resource and is accommodated with neither beneficial nor adverse effects, or where the effects are so limited that the change is hardly noticeable. A change to the landscape and visual resource is not considered to be adverse simply because it constitutes an alteration to the existing situation; and
- Adverse effects are those that detract from or weaken the landscape and visual resource through the introduction of elements that contrast, in a detrimental way, with the existing characteristics of the landscape and visual resource, or through the removal of elements that are key in its characterisation.

Duration and Reversibility of Effects

- 12.4.36 The effects of the Proposed Development are of variable duration, and are assessed as short-term or long-term, and permanent or reversible.
- 12.4.37 It is proposed that the operational life of the Proposed Development will be 35 years. The turbines, including associated transformers and hardstands, internal site access tracks and onsite substation compound would be apparent during this time, and these effects are assessed as if permanent, although they would also be largely reversible.
- 12.4.38 Other infrastructure and operations, such as the construction processes and plant (including tall cranes for turbine erection) and construction compounds, would be apparent only during the (approximately 30 months) initial construction period of the Proposed Development and therefore are considered to give rise to short-term effects. The tall cranes would be apparent intermittently and over a shorter duration. Borrow pit excavation would also be short-term as borrow pits will be restored towards/at the end of the construction process, although a permanently altered ground profile may remain evident.
- 12.4.39 The reversibility of effects is variable. The most apparent effects on the landscape and visual resource, which arise from the presence and movement of the turbines, are reversible as the turbines would be removed on decommissioning. The effects of the tall cranes and heavy machinery used during the construction and decommissioning periods are also reversible.
- 12.4.40 It is anticipated that the internal site access tracks and those on the access routes would remain at decommissioning. Turbine foundations and underground cabling would be left in-situ below ground with no residual landscape and visual effects.

Graphic Production

- 12.4.41 The written LVIA will be accompanied by a set of graphics. Reference will be made throughout the written text to these graphics, as they are an integral part of the overall assessment and of importance in illustrating specific matters. They should be viewed in accompaniment to the written text.
- 12.4.42 The graphics can be divided into two categories; maps and visualisations. The majority of the maps are based on the 45km study area around the Turbine Area and present data of relevance to the assessment, such as the location and extent of landscape designations. ZTV maps are also included. These digitally calculate the extent and level of theoretical visibility of the Proposed Development across a given area, using OS Terrain 5 mapping as the basis for the calculations. As this terrain model is based only on the 'bare earth', it does not take account of potential

screening by vegetation or buildings, and this is why it is referred to as theoretical and not actual visibility.

- 12.4.43 Additionally, aviation warning lighting intensity ZTV maps show the reduction in aviation lighting intensity that may be achieved through mitigation (e.g. design of the light fitting) and the degree of negative vertical angle of view from the light in relation to landform will be prepared (further details are provided in **Technical Appendix 12-1**).
- 12.4.44 The visualisations will illustrate the viewpoints, to be agreed, which are representative of the visual amenity of visual receptors in the area surrounding the Proposed Development. These viewpoints will be agreed with key stakeholders, expected to comprise local authorities within the study area. For each viewpoint, it is expected that there will be baseline photography and wirelines of the Proposed Development and the 'bare earth' landform for the same extent as shown in the photography. In accordance with published visualisation guidance, the viewpoints will also have accompanying photomontages for the majority of locations. Further details will be provided in the ES and the visualisations will be discussed with the relevant stakeholders. These use the baseline photography and add onto this a computer-generated model of the Proposed Development. Where aviation lighting is to be illustrated, the position of visible aviation lighting on each turbine is indicated on the wirelines for each viewpoint by way of a black dot shown on the turbine nacelle. More detailed information on graphic production is included in the 'Assessment Methodology' in **Technical Appendix 12-1**.

Night-time Assessment

- 12.4.45 The Civil Aviation Authority (CAA) requires that 'en-route obstacles' at or above 150m above ground level are lit with visible lighting to assist their detection by aircraft. As the turbines in the Proposed Development are proposed to be more than 150m to tip height there is a requirement for the turbines to display medium intensity 'steady' red aviation lights at night. These would ordinarily be fitted to all Proposed Development turbines, but the Applicant is seeking to agree a reduced aviation lighting scheme with the CAA, where lights will be displayed at agreed positions on a reduced number of turbines (see **Chapter 19: Aviation and Radar**).
- 12.4.46 The actual effect/perception of visible aviation lights at the Proposed Development would be dependent on a range of factors, including the distance of the viewer from the lighting, the model and specific intensity profile of lights used, the clarity of atmospheric visibility and the degree of negative vertical angle of view from the light to the receptor.

- 12.4.47 The required operating intensity for aviation warning lights is 2000 cd. However, the 2017 CAA Policy Statement⁵⁹ (Policy 4a-g) permits the ability to automatically dim the light intensity to 200cd (being not less than 10% of the minimum peak intensity) when the horizontal meteorological visibility in all directions from every wind turbine in the group is more than 5km – in other words when clear visibility prevails. NatureScot Guidance on Aviation Lighting Impact Assessment (paragraphs 82-83) permits that the assessment of visual effects, including the illustration of lighting within photomontages, can be confined to 200 cd intensity where an applicant commits to integrating automatic dimming as part of the lighting specification for the project, as is the case in respect of the Proposed Development. Therefore, it is anticipated that the visual assessment will focus on 200 cd lights during periods of clear visibility. The aviation warning lights would only need to operate at 2000 cd during periods of poor visibility. Whilst 2,000 cd lighting represents a theoretical worst-case position, it is unlikely the lights would be experienced at the maximum illumination level.
- 12.4.48 The Applicant commits to the installation of sensors on the proposed wind turbines so that the lights would dim automatically when visibility is greater than 5km. Furthermore, modern aviation lights comprise vertical directional intensity mitigation which contains embedded reduction in intensity above and below the horizontal plane of the nacelle (there is no requirement for any specified minimum or maximum light intensity at elevation angles lower than -1° , or above $+2^{\circ}$), which means that the lighting intensity of 200 cd is unlikely to be experienced by observers at locations lower than the turbine nacelle heights due to the reduction in light intensity at negative elevation angles that can be achieved through selection of specific lights with embedded mitigation.
- 12.4.49 The visual assessment of turbine lighting is intended to determine the likely worst-case effects that the Proposed Development would have on the visual resource (e.g. it is an assessment of the effects of visible aviation lighting on views experienced by people at night). The assessment of visible aviation lighting is largely a visual effect because the lighting would not be activated during daylight hours when physical aspects and characteristics of the landscape are most clearly apparent. The hours of darkness assessment will therefore focus on viewpoints and visual receptors. However, while many aspects of the landscape become indistinct or less distinct during hours of darkness, other characteristics can remain as important features or increase in importance. This is noted in NatureScot guidance (NatureScot, 2024) (paragraph 21), which states:

“Some characteristics are weakened by darkness and are ultimately no longer present, as they are less visible, such as evidence of cultural settlement, variations

⁵⁹ CAA (2017) DAP Policy 124: Lighting of Onshore Wind Turbine Generators in the United Kingdom with a maximum blade tip height at or in excess of 150m Above Ground Level.

in landcover and habitats, or an appreciation of key vistas. Other perceptual characteristics can however be strengthened, such as the apparent absence of development, or the profile of an important skyline.”

12.4.50 The assessment of hours of darkness effects at viewpoints will make reference to landscape features and characteristics that are discernible during the hours of darkness, or at dawn and dusk, such as important skylines and the lack of lighting in the prevailing baseline. The assessment will also consider the effect that visible aviation lighting might have on relevant designated areas where there are documented special qualities that are specific to the hours of darkness environment. **Technical Appendix 12-1** describes the detailed methodology used to assess night-time effects.

12.4.51 In summary, the following assumptions have been made in relation to the assessment of effects of visible lighting:

- The CAA requires that all obstacles at or above 150m above ground level are fitted with visible lighting and in the case of wind turbines, the lights should be located on the nacelle;
- The 2,000 cd medium intensity lights may be dimmed to 10% of their minimum operational output, or 200 cd, if visibility is greater than 5km (i.e. in moderate to excellent or ‘clear’ visibility);
- In accordance with CAA requirements the lights would be switched on 30 minutes after official sunset and switched off again 30 minutes before sunrise;
- The CAA requires that a secondary light is fitted for use only when the primary light fails, and these would not be lit concurrently; and
- The steady red medium intensity lighting fixed to the top of the nacelles may appear to flicker on and off with blade rotation when the turbine blades pass between the lights and the observer, dependent on wind direction and the position of the observer.

Residential Visual Amenity Assessment (RVAA)

12.4.52 The Landscape Institute and the Institute of Environmental Management and Assessment’s GLVIA3 states at para. 6.17 that ‘*Effects of development on private property are frequently dealt with mainly through ‘residential amenity assessments’.* Residential visual amenity means visual amenity from residential properties including their gardens. It is a subset of residential amenity, which may include aspects, such as noise, light, vibration and shadow flicker and traffic. RVAA is a stage beyond LVIA, focussing on private views and private visual amenity.

12.4.53 The Landscape Institute (LI) has published specific guidance on RVAA: Technical Guidance Note 2/19 (15 March 2019)⁶⁰. This guidance is not intended to be prescriptive but provides advice on the approach to RVAA. The Residential Visual Amenity Assessment, which will form an appendix to the LVIA, will be prepared based on the LI Technical Guidance Note.

12.4.54 The LI Technical Guidance Note sets out the ‘steps’ to be followed when undertaking a RVAA and highlights how it should be informed by the principles and processes of the Guidelines for Landscape and Visual Impact GLVIA3. It explains the purpose of RVAA as follows:

“The purpose of RVAA is to provide an informed, well-reasoned answer to the question: ‘is the effect of the development on Residential Visual Amenity of such nature and / or magnitude that it potentially affects ‘living conditions’ or Residential Amenity’? In this guidance this is referred to as the Residential Visual Amenity Threshold.”

12.4.55 RVAA is intended to inform the planning process. It is in this context that the Technical Guidance Note makes the following statement:

“It is not uncommon for significant adverse effects on views and visual amenity to be experienced by people at their place of residence as a result of introducing a new development into the landscape. In itself this does not necessarily cause particular planning concern. However, there are situations where the effect on the outlook / visual amenity of a residential property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before.”

Limitations and Assumptions

12.4.56 Photographs and other graphic material such as wirelines and photomontages used in the assessment are for illustrative purposes only and, whilst useful tools in the assessment, are not considered to be completely representative of what will be apparent to the human eye. The assessment itself is carried out from observations in the field and therefore may include elements that are not visible in the photographs. A worst-case scenario of a bright clear day is also assumed when making judgements.

Zone of Theoretical Visibility

12.4.57 There are limitations in the theoretical production of ZTVs, and these should be borne in mind in their consideration and use:

⁶⁰ Landscape Institute (2019), Residential Visual Amenity Assessment (RVAA) – Technical Guidance Note 02/19. Available: <https://www.landscapeinstitute.org/technical-resource/rvaa/>

- A Digital Terrain Model (DTM) based on OS Terrain 5 has been used to generate the ZTVs within the study area. The analysis is based on visibility at points on a 5m grid and does not take into account local, small-scale landform changes in analysing theoretical visibility;
- The ZTVs illustrate the 'bare ground' situation, and do not take into account the screening effects of vegetation, buildings, or other local features that may prevent or reduce visibility;
- The ZTVs do not indicate the reduction in visibility that occurs with increased distance from the Proposed Development. The nature of what is visible from 3km away will differ markedly from what is visible from 10km away, although both are indicated on the ZTVs as having the same level of visibility; and
- It is important to remember that there is a wide range of variation within the visibility shown on the ZTV. For example, an area shown on the blade tip ZTV as having visibility of all of the turbines may gain views of the smallest extremity of blade tips, or of full turbines. This can make a considerable difference in the scale of effect of the Proposed Development on that area.

12.4.58 These limitations mean that while the ZTVs are used as a starting point in the assessment, providing an indication of where the Proposed Development will theoretically be visible and where there would be no visibility, the information drawn from the ZTVs is not completely relied upon to accurately represent visibility of the Proposed Development.

Visualisations

12.4.59 Limitations associated with the visualisations are set out in full in **Technical Appendix 12-1** and summarised here. **Technical Appendix 12-2** contains preliminary wireline visualisations of the proposed wind turbines. Further work in relation to visualisations, including the preparation of photomontages showing all aspects of the Proposed Development (where relevant) will be undertaken for the ES.

12.4.60 The visualisations are based on theoretical visibility from 1.5m above ground level (agl). There are limitations in these theoretical productions, and these should be borne in mind in the consideration and use of the wireline images. Firstly, the wireline illustrates the 'bare ground' situation, not taking into account the screening effects of vegetation, buildings or other local features that may prevent or reduce visibility. Secondly, the wireline is based on OS Terrain 5 DTM, so there may be local, small-scale landform variations that are not reflected in the wireline but may alter the actual visibility of the Proposed Development, either by screening theoretical visibility or revealing parts of the Proposed Development that are not

theoretically visible. Thirdly, the levels of the turbine bases have not yet been established in detail as this will be determined through detailed ground investigations and detailed engineering design. This factor may alter the base and therefore the tip heights of the turbines above ground level from those that are assumed in the assessment and shown in **Technical Appendix 12-2**. Such variation may also affect ZTVs. However, an assessment of the likely significant effects of the Proposed Development can be made.

- 12.4.61 Where descriptions within the assessment identify the numbers of turbines visible this refers to the theoretical illustrations generated and therefore the reality may differ to a degree from these impressions. These factors are unlikely to make a material difference to the outcome of the assessment.
- 12.4.62 Not all areas of the study area are publicly accessible, and this has limited the specific assessment of views from residential and other properties, for example. Notwithstanding these limitations, the assessors consider that there is sufficient information available, from publicly accessible viewpoints, to form a robust assessment of the likely significant effects.

12.5 Baseline Conditions

Overview

- 12.5.1 This section identifies landscape and visual receptors that have potential to be significantly affected by the Proposed Development. It provides a description of the existing landscape and visual receptors in the area that may be affected and this is referred to as the landscape and visual baseline. The established baseline will form the basis for the identification and description of landscape and visual effects.
- 12.5.2 The tip height and blade height ZTVs (see **Figures 12-5-1, 12-5-2, 12-5-3 and 12-5-4**) assist in the identification of landscape and visual receptors with potential to be significantly affected.
- 12.5.3 A preliminary assessment has identified the landscape and visual receptors that may have the potential to experience significant effects as a result of the Proposed Development.

Existing Baseline

- 12.5.4 The Turbine Area is located within the Calderdale Council local authority area. The Turbine Area is located on a series of elevated moors, forming a large-scale sweeping plateau. It is largely an unenclosed landscape, with occasional gritstone walls and post and wire fences. This openness contributes to a strong sense of remoteness and exposure, which is a defining quality of the local landscape character of the Turbine Area. The moorland plateau is valued locally for recreation,

walking, and panoramic views and has associations, particularly with the Brontë Sisters. Built-up conurbations are located around Burnley to the west of the Proposed Development and Bradford to the east. This area is described in greater detail within the landscape character assessments below.

12.5.5 Key visual receptors include:

- Residents of nearby rural properties and farmsteads scattered across the moorland fringe;
- Recreational users of Public Rights of Way (PRoW) and Open Access Land across the plateau;
- Road users on elevated routes crossing the moors;
- Communities in Burnley to the west, Pendle to the northwest, Bradford to the east and other surrounding settlements where turbines may be visible on the skyline; and
- Visitors to designated landscapes, tourist attractions and focal points in the landscape.

12.5.6 Potential landscape and visual effects arising from the Proposed Development include:

- Introduction of vertical turbine structures that would contrast with the horizontal landform and open character of the plateau;
- Alteration of the perceived remoteness and wildness of the moorland through the presence of large-scale infrastructure;
- Visual intrusion into key views from surrounding settlements and transport corridors, particularly where turbines break the skyline; and
- Cumulative effects when considered alongside existing or consented wind energy developments in the wider Pennine uplands.

Landscape Character

12.5.7 Landscape character information has been informed by the Landscape Character Assessments published by local authorities within the 45km study area. The relevant character areas have been verified onsite, and refined where considered appropriate, particularly in proximity to the Proposed Development.

12.5.8 The English landscape is classified at the national level by National Character Areas (NCAs). The 159 NCAs are defined at a broad landscape scale, each with

descriptive character profiles. The NCAs within the study area are shown in **Figure 12-2-1**.

12.5.9 At a national level, the Turbine Area lies entirely within National Character Area (NCA) 36: Southern Pennines⁶¹. On the Natural England website, the Southern Pennines NCA is described as follows:

“The Southern Pennines are part of the Pennine ridge of hills, lying between the Peak District National Park and the Yorkshire Dales National Park. This is a landscape of large-scale sweeping moorlands, pastures enclosed by drystone walls, and gritstone settlements contained within narrow valleys. The area contains internationally important mosaics of moorland habitats that support rare birds such as merlin, short-eared owl and twite. The peat soils, including blanket bog, store significant volumes of carbon. With its high rainfall and impervious rocks it is an important area for water supply, with many reservoirs supplying water to nearby conurbations. The Southern Pennines are also important for recreation due to the extensive open access areas and footpaths, and the sense of escapism they offer, along with the ease of access from large towns. This dramatic landscape has inspired many, such as the Brontës and Ted Hughes. Future challenges for the area include managing the land to reduce downstream flooding, restore blanket bog and improve water quality, and managing increased recreational demand.”

12.5.10 There are a further 14 NCAs located within the 45km study area. These are summarised in **Table 12-6**.

Table 12-6: NCAs

NCA	Relationship with the Turbine Area	Summary
21: Yorkshire Dales	Approximately 15km to the north of Turbine Area	<i>“The Yorkshire Dales National Character Area (NCA) is situated in the Pennine uplands. It is a landscape of high, exposed moorland dissected by sheltered valleys or dales, each with their own character. The south-west of the area is geologically outstanding because of its ‘karst’ (limestone) landforms. Rocks of the Carboniferous period are visible, with cave systems underground. Over two-thirds of the area is within the Yorkshire Dales National Park. 17 per cent of the area is within the Nidderdale Area of Outstanding</i>

⁶¹ Natural England (2014) National Character Area Profile – 36: Southern Pennines.

NCA	Relationship with the Turbine Area	Summary
		<p><i>Natural Beauty. The landscape is characterised by the contrast between the dales below and the moors above. The sheltered dales have intricate patterns of walled fields, which contain meadow grasses and wild flowers. Small villages and farmsteads, built of local stone, are tucked into sheltered corners. They are often protected from the worst of the weather by clumps of trees. The network of walls continues on the dale sides. Scattered stone field barns are distinctive features. The steepest slopes often have sparse woodlands or sometimes open rock scree. There are large areas of managed grouse moorlands in the north and the east of the NCA. Grouse moorlands make a significant contribution to the landscape character of Nidderdale and Swaledale.”</i></p>
<p>22: Pennine Dales Fringe</p>	<p>Approximately 21km northeast of Turbine Area</p>	<p><i>“The Pennine Dales Fringe National Character Area (NCA) lies between the uplands of the Pennines to the west, and the Magnesian Limestone ridge and arable lowlands to the east. Almost 23 per cent of the area falls within the Nidderdale Area of Outstanding Natural Beauty (AONB) and almost one per cent in the North Pennines AONB. The land has a varied topography of exposed upland moorland fringes and plateaux dropping to lower foothills, separated by major river valleys and incised by numerous minor tributary valleys. It is underlain by Yoredale rocks in the north (limestone, sandstone and mudstone) and Millstone Grit in the south. It is a transitional landscape between upland and lowland. Drystone walls are common in the west while hedges, often thick and tall with frequent hedgerow trees, are more prevalent at lower elevations in the east. Broad valleys, widening to the east, with</i></p>

NCA	Relationship with the Turbine Area	Summary
		<i>their more fertile soils support arable crops, while steeper, higher land in the west supports predominantly livestock farming.”</i>
30: Southern Magnesian Limestone	Approximately 37km east of Turbine Area	<i>“The Southern Magnesian Limestone National Character Area (NCA) is mainly defined by the underlying Permian Zechstein Group, formerly known as the Magnesian Limestone. It creates a very long and thin NCA that stretches from Thornborough in the north down through north Derbyshire to the outskirts of Nottingham further south. The limestone creates a ridge, or narrow belt of elevated land, running north-south through the NCA, forming a prominent landscape feature. The geology has influenced many aspects of the landscape, from use of its limestone resource as a local building material to the specialised limestone grasslands associated with limestone areas.”</i>
32: Lancashire and Amounderness Plain	Approximately 31km west of Turbine Area	<i>“The Lancashire and Amounderness Plain is an area of high-grade agricultural land, bounded by Morecambe Bay in the north and Liverpool in the south. The eastern boundary is contained by the Bowland Fringe. The plain is made up of a series of low-lying landscape types: in the east, undulating lowland farmland on the highly productive coastal plain, and in the west, the former mosslands and their remnant sites, and the coastal marshes and dunes.”</i>
33: Bowland Fringe and Pendle Hill	Approximately 14km to the northwest of Turbine Area	<i>“The Bowland Fringe and Pendle Hill National Character Area (NCA) is a transitional landscape that wraps around the dramatic upland core of the Bowland Fells, underpinned by Carboniferous geology. Over half of this NCA, along with the Bowland Fells, makes up the Forest of Bowland Area of Outstanding Natural</i>

NCA	Relationship with the Turbine Area	Summary
		<p><i>Beauty. This is a diverse landscape of herbrich hay meadows – several of which are nationally and internationally designated – lush pastures, broadleaved woodland, parkland and waterbodies (including rivers and streams supporting nationally and internationally protected species). The numerous river valleys and associated woodlands are a major component of the area. To the west, this NCA includes part of the Bowland Fells Special Protection Area (SPA), designated for its important populations of hen harrier, merlin and lesser black-backed gull. The influence of human habitation and activity, and the area’s long farming history, contribute significantly to its character. In contrast to the predominantly rural feel of the area, this NCA includes several relatively urban areas including Clitheroe, Bentham and Longridge.”</i></p>
34: Bowland Fells	Approximately 23km northwest of Turbine Area	<p><i>“The Bowland Fells form a distinctive upland block on the boundary between north Lancashire and the Yorkshire Dales. The landscape is wild and windswept, with steep escarpments, upland pasture and expansive open moorland. The National Character Area is within the Forest of Bowland Area of Outstanding Natural Beauty and also contains areas of moorland, designated as a Special Protection Area due to its international importance for breeding hen harrier, merlin and lesser black-backed gull. It also provides for other important species such as peregrine, ring ouzel and breeding waders. The peat soils of the fells, including the deep columns of peat associated with blanket bog, store significant volumes of carbon. Blanket bog habitat is also important for water storage. High-quality species-rich meadows can be found in the limestone areas to the east.</i></p>

NCA	Relationship with the Turbine Area	Summary
		<p><i>There are also a large number of important waterbodies throughout the area. Extensive conifer plantations occur to the south-east and east of the area, with fragmented broadleaved woodland largely in the cloughs.</i></p>
<p>35: Lancashire Valleys</p>	<p>Approximately 5km to the west of Turbine Area</p>	<p><i>“The Lancashire Valleys run north-east from Chorley through Blackburn and Burnley to Colne. The National Character Area (NCA) lies mainly in east Lancashire and is bounded to the north-west by the Bowland Fells fringe and the Millstone Grit outcrop of Pendle Hill, and to the south by the Southern Pennines. A small proportion of the area (5 per cent) lies in the Forest of Bowland Area of Outstanding Natural Beauty.”</i></p>
<p>37: Yorkshire Southern Pennine Fringe</p>	<p>Approximately 7km east of Turbine Area</p> <p>Bradford West Cable Corridor located within this NCA</p>	<p><i>“The Yorkshire Southern Pennine Fringe National Character Area (NCA) is a transitional landscape from the upland areas of the Southern Pennines NCA in the west through to the low-lying land of the Nottinghamshire, Derbyshire and Yorkshire Coalfield NCA to the east. The most striking aspect of the landscape is the mingling of predominantly ‘gritstone’ industrial towns and villages with the strong valley forms and pastoral agriculture of the Pennine foothills. The gritstone industrial buildings and settlements bring a sense of visual unity to the landscape. The landscape is dominated by industrial buildings and structures such as factories, chimneys, railways and canals. Travellers crossing the NCA from west to east experience a change from pastoral treeless hill tops, where drystone walls are the predominant field boundary, to wooded valleys, where large urban settlements such as Bradford, Huddersfield and Sheffield are focused in the valleys and were built up around the former industries such as coal mining,</i></p>

NCA	Relationship with the Turbine Area	Summary
		<p><i>steelmaking and the woollen industry. The World Heritage Site of Saltaire stands as an example model town built with the wealth produced by the industries prevalent in this area. In the east, settlements are separated by areas of arable farming with hedgerows and lowland meadows.</i></p>
38: Nottinghamshire, Derbyshire and Yorkshire Coalfield	Approximately 14km to the east of Turbine Area	<p><i>“The Nottinghamshire, Derbyshire and Yorkshire Coalfield is an area that has seen great change over the past few centuries. Deposits of coal and iron, along with the water supply, brought large scale industry to the area. The impact on the landscape and settlement pattern is clear. So too is the influence on the visual and ecological landscape. It is a generally low-lying area, with hills and escarpments above wide valleys. The landscape embraces major industrial towns and cities as well as villages and countryside. Over half of the NCA (64 per cent) is green belt, maintaining distinction between settlements. Green belt areas are often under pressure for development and changes in land use.”</i></p>
51: Dark Peak	Approximately 21km to the south of Turbine Area	<p><i>“The Dark Peak is a landscape of large-scale sweeping moorlands, in-bye pastures enclosed by drystone walls, and gritstone settlements, within the Pennine chain. It falls almost entirely within, and forms a large part of, the Peak District National Park. Approximately 57 per cent of the area has been designated as a Special Protection Area and Special Area of Conservation, both being the highest forms of environmental protection afforded by European Law. Some 46 per cent of the National Character Area (NCA) has also been designated as Sites of Special Scientific Interest (SSSI) and the range of different SSSI, from the Eastern Peak District Moors to Chatsworth Old Park and</i></p>

NCA	Relationship with the Turbine Area	Summary
		<i>clough woodlands to geological formations, demonstrates the variation of important characteristics and landscapes within the NCA.”</i>
54: Manchester Pennine Fringe	Approximately 17km to the south of Turbine Area	<i>“The Manchester Pennine Fringe occupies the transitional zone between the open moorlands of the Dark Peak and Southern Pennines, and the densely populated urban conurbation of Manchester. The area wraps around Manchester from Bolton in the north-west to the edge of Hazel Grove in the east, and includes the industrial towns of Bury, Bolton, Rochdale, Oldham, Dukinfield and Glossop.”</i>
55: Manchester Conurbation	Approximately 30km to the south of Turbine Area	<i>“The Manchester conurbation is formed of a number of cities, towns and villages which have grown and come together. These include Manchester, Salford, Stockport, Sale, Ashton-under-Lyne, Swinton, Altrincham, Stretford, Prestwich, Cheadle Hulme, Denton and Droylsden. The area is dense with urban and industrial development. This includes commercial, financial, retail and administrative centres and commuter suburbs. A network of green infrastructure runs through the area.”</i>
56: Lancashire Coal Measures	Approximately 35km to the southwest of Turbine Area.	ZTV predicts no theoretical visibility of wind turbines.
60: Mersey Valley	Approximately 38km to the southwest of Turbine Area	ZTV predicts no theoretical visibility of wind turbines.

12.5.11 The Turbine Area is located within the administrative area of Calderdale Council. There are a further 28 Local Authorities located within the 45km study area. County or district level landscape character assessments have been carried out for these areas. The assessment scope will continue to be reviewed during the preparation of the LVIA and a pragmatic or proportionate approach will be taken in relation to

the level of detail applied, ensuring likely significant effects are identified for the Turbine Area, Access Routes and the Bradford West Cable Corridor. This may involve a focus on local landscape character areas close to the Proposed Development and using National Character Areas at greater distances. The landscape characters areas and descriptions are outlined in **Table 12-7**.

Table 12-7: Local Character Areas

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
Calderdale District Landscape Character Assessment and Review of Special Landscape Area Designation, October 2016⁶²	
LCA A1: South Pennine Moors	Turbine Area is located within this LCA. ZTV shows visibility of up to 34 turbines throughout the majority of the character area.
LCA D1: Calder Terrace	Northern parts of the LCA are located within the Turbine Area. Ridges to the south have theoretical visibility of 29-34 turbines.
LCA D2: Blackwood Common	Theoretical visibility predicted of 29-34 turbines from Blackwood Common in the northwest of the LCA, Norland Common in the northeast of the LCA, Ringstone Edge Moor east of LCA and Topster Hill south of LCA. Majority of LCA is predicted to have no theoretical visibility, fragmented theoretical visibility predicted around Ripponden in the centre.
LCA D4: Scout Moor and Shore Moor Fringe	Theoretical visibility predicted of 1-7 or 8-14 turbines from, the slopes to the west of Todmorden. Theoretical visibility of 29-34 turbines predicted from the lower slopes of Ramsden Hill and Noon Hill in the south of the character area.
LCA D7: Peak Fringe Upland Pastures	Theoretical visibility predicted of 29-34 turbines from the land to the south of the M62 (Moseldon Height).
LCA E2: Barkisland - Holwell Green	No theoretical visibility predicted from settlements of Barkisland and Greetland. Fragmented theoretical visibility from western part of Holywell Green and car park at Stainland. 29-34 turbines predicted to be theoretically visible from the settlements of Sowood Green and Old Lindley and the nearby minor roads.

⁶² Noting that urban (U) are not included as local landscape character areas.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
LCA E8: Batley - Dewsbury Rural Fringes	Up to 8-14 turbines theoretically visible from the northern half of the LCA including from Kirklees Way, limited theoretical visibility predicted from the south.
LCA F2: Calder (Todmorden Hebden Bridge Mytholmroyd)	Fragmented theoretical visibility predicted of 1-7 turbines from scattered areas of the character area, parts of Elland in the southeast and from the upper slopes above Siddal (including Calderdale Way).
LCA F3: Ryburn (Sowerby Bridge Ripponden)	Very limited theoretical visibility of 1-7 turbines around Turner Wood in the south of the character area and along the upper slopes in the eastern parts of the character area.
LCA G1: Luddenden Dean	Very limited theoretical visibility of 1-7 turbines on the roads to the east of Luddenden and to the west of Booth leading up to Corw Hill Nook.
LCA G2: Hebden Dale and Crimsworth Dean	Predicted intervisibility of 1-7, 8-14 turbines through the valley, including around Hebden Bridge. Special features include Lumb Hole Waterfall, Crimsworth Dean
LCA G3: Cliviger Gorge	ZTV predicts no theoretical visibility.
LCA G4: Cragg Vale	Theoretical visibility of 29-34 turbines from the northeast of the character area. Includes PRoW and scattered dwellings Hall Bank, Hollin Hey.
LCA G12: Shibden Valley	ZTV predicts no theoretical visibility of wind turbines.
LCA G13: Clifton Beck	ZTV predicts no theoretical visibility of wind turbines.
LCA K1: Thornton – Queensbury	29-34 turbines predicted to be visible from existing turbines at Soil Hill in northwest of character area. Fragmented visibility from roads in the centre of LCA west of settlement of Shelf. 29-34 turbines predicted to be visible from higher areas in south of LCA around Siddal Top.
LCA M1: Calder Valley Floor	ZTV predicts limited/no theoretical visibility of wind turbines.
<p>City of Bradford Metropolitan District Council, Draft Landscape Character Assessment SPD, November 2025.</p> <p>This document supersedes the Landscape Character SPD, October 2008. While the newer character assessment comprises a draft, is assumed it will replace the older character assessment.</p>	

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
A1: Rombalds Moor	Predicted theoretical visibility of 29-34 turbines across the southern slopes of Rombalds Ridge.
A2: Haworth Moorland Plateau	Edge of character area runs parallel with the northern boundary of the Turbine Area. Bradford West Cable Corridor crosses the LCA to the south. Predicted theoretical visibility varies between 1-7 turbines around the settlement of Haworth and 29-34 turbines across Stanbury Moor in the west and Oxenhope Moor in the east.
B1: Keighley Moorland Fringe	Predicted theoretical visibility of 29-34 turbines across the southern slopes of Steeton Moor, the northwest area of settlement of Steeton and the high point at Branshaw Moor.
B2: Cullingworth and Haworth Moorland Fringe	Predicted theoretical visibility of 29-34 turbines in the northern part of the character area to the west of Harden Moor. Further south in the LCA 1-7 turbines visible over settlement of Cullingworth and its surroundings including Cullingworth Moor to the west.
B3: Silsden and Baildon Moorland Fringe	Predicted theoretical visibility of 29-34 turbines across these moorlands to the south of Rombalds Ridge.
C1: North Beck Upland Wooded River Valley	Majority of LCA predicts no theoretical visibility of the turbines. Limited theoretical visibility of 1-7 turbines from the northern sections including Todley Hall Road.
C2: The Worth Upland Wooded River Valleys	Theoretical visibility varies between 1-7, 8-14 and 15-21 turbines across the LCA, including settlement of Oxenhope, Mytholme and the surrounding roads. Small areas with 29-34 turbines predicted to be visible.
C3: Harden Upland Wooded River Valleys	Bradford West Cable Corridor crosses through the LCA. Theoretical visibility varies between 1-7, 8-14 and 15-21 turbines and largely along roads. Theoretical visibility from Harden limited to southern parts. Small areas with 29-34 turbines predicted to be visible.
D1: Bingley and Baildon Steep Valley Sides	Predicted theoretical visibility of 29-34 turbines across the slopes and the settlements of Riddlesden, Bingley and Baildon.
D2: Thwaites Brow Steep Valley Sides	Predicted theoretical visibility of 29-34 turbines from the eastern edge of Keighley.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
D3: Hollins Bank Steep Valley Sides	Majority of character area predicts no theoretical visibility. In the southeast, the western area of Keighley has theoretical visibility between 1-7, 8-14, 15-21, 22-28 and 29-34 turbines.
D4: Middleton Woods Steep Valley Sides	ZTV predicts no theoretical visibility of wind turbines.
E1: Thornton Mixed Upland Pasture	Bradford West Cable Corridor crosses and terminates in this LCA. Fragmented theoretical visibility across the LCA, with predicted theoretical visibility of 29-34 turbines from land to the west and east of settlement of Wilsden.
F1: Silsden Bowl Rolling Enclosed Pasture	Predicted theoretical visibility of 29-34 turbines from land to the northwest of Silsden.
F2: Wharfedale Rolling Enclosed Pasture	ZTV predicts no theoretical visibility of wind turbines, with the exception of small areas to the west of Addingham.
F3: Tong Valley Rolling Enclosed Pasture	Fragmented theoretical visibility of 22-28 turbines from land west of settlement of Tong.
G1: Upper Airedale Settled Valley Floor	ZTV predicts no theoretical visibility of wind turbines.
G2: Central Airedale Settled Valley Floor	Predicted fragmented visibility of 1-7, 8-14 and 15-21 turbines from Keighley, parts of Bingley and Saltaire. Small areas with theoretical visibility of 22-28 or 29-34 turbines.
G3: Esholt Settled Valley Floor	Predicted theoretical visibility of 29-34 turbines from high points north of Shipley and southwest of Yeadon.
G4: Wharfedale Settled Valley Floor	ZTV predicts no theoretical visibility of wind turbines.
G5: South Bradford Settled Valley Floor	Majority of character area is predicted to have no theoretical visibility of turbines. Theoretical visibility of 1-7 turbines from southern industrial edge of Bradford in the north of the LCA.
H1: Cottingley Urban Edge	Predicted theoretical visibility of up to 29-34 turbines from the ridge to the southeast of Cottingley.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
Wooded Valleys and Slopes	
H2: Clayton Urban Edge Wooded Valleys and Slopes	Majority of character area is predicted to have no theoretical visibility of turbines. Predicted fragmented visibility of 1-7 turbines from hillside to the north of Clayton.
H3: Royds Hall Urban Edge Wooded Valleys and Slopes	Majority of character area is predicted to have no theoretical visibility of turbines. Predicted fragmented visibility of 1-7 turbines on southern edge of Bradford at Lower Wyke.
North Yorkshire and York Landscape Characterisation, 2011	
6: Magnesian Limestone Ridge	Theoretical visibility is fragmented and limited to 1-7 turbines east and south of Knaresborough and a section of Station Lane, west of Burton Leonard, and north of North Deighton
7: Yoredale Moors and Fells	Majority of character area is predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from higher elevation, Ingleborough, Pen-y-ghent. Plover Hill, Darnbrook fell, Haw Fell, Tor Mere Top (North Moor).
8: Limestone Moors/Scar	ZTV predicts theoretical visibility of 29-34 turbines from areas of higher ground including Kilnsey Moor and Scosthrop High Moor. Also contains viewpoint 31.
9: Farmed Dale	Majority of character area predicts no intervisibility of the Proposed Development. Fragmented visibility with up to 29-34 turbines from the upper slopes of the valley in the north of the character area, west of Conistone Moor. 29-34 turbines will be theoretically visible from slopes in the south of the character area around Carncliff Top and properties at Hazelwood.
11: Broad Valleys	ZTV predicts theoretical visibility of 29-34 turbines throughout majority of this character area.
13: Moors Fringe	ZTV predicts theoretical visibility of 29-34 turbines from southern facing slopes of moors such as Newton Moor, Hellifield Moor and Otterburn Moor.
14: Rolling Upland Farmland	ZTV predicts theoretical visibility of 29-34 turbines across majority of character area.
24: River Floodplain	Majority of character area is predicted to have no theoretical visibility of turbines. Limited theoretical visibility from small areas of land in the east of the character area near dwellings

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	at Ox Close Ho and north of character area on unnamed road between Goldsborough and Knaresborough.
29: Undulating Lowland Farmland	Majority of character area is predicted to have no theoretical visibility of turbines. Fragmented theoretical visibility of 29-34 turbines from higher ground, High Snape, west of settlement Kirkby Overblow in the centre of the character area and from higher elevations in the west of the character area around existing turbines at Rigton High Moor.
31: Settled, Industrial Valleys	Majority of character area is predicted to have no theoretical visibility of turbines. Fragmented visibility from south of character area closest to Turbine Area from high points along Ickornshaw Moor such as Cat Stone. Also contains viewpoints 14, 19 and 22 – 27.
32: Drumlin Valleys	ZTV predicts theoretical visibility of 29-34 turbines from higher elevations such as Swinden Moor head, Coniston Moor and within Ribbles Dale, including settlement of Long Preston.
34: Gritstone High Moors and Fells	ZTV predicts theoretical visibility of 29-34 turbines from southern slopes of Embsay Moor and areas of high ground such as Thorpe Fell Top, Carncliff Top and Hazelwood Moor.
35: Gritstone Low Moors and Fells	Scattered theoretical visibility between 1-7 turbines and up to 29-34 turbines from higher ground. Such as Denton Moor, High Bradley Moor and Captain Moor.
36: Gritstone Valley	No predicted theoretical visibility of the turbines, with the exception of small areas on the eastern edge.
37: Siltstone and Sandstone High Moors and Fells	Majority of character area is predicted to have no theoretical visibility of turbines. Fragmented visibility from higher elevations at Burn Moor Fell and John Fell. Also, contains viewpoint 32.
38: Siltstone and Sandstone Low Moors and Fells	Theoretical visibility of 29-34 turbines from higher elevations, including Kelbrook Moor, Glusburn Moor and Carleton Moor.
39: Siltstone and Sandstone Valley	ZTV predicts no theoretical visibility of wind turbines.
Forest of Bowland National Landscape, Landscape Character Assessment, July 2025	

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
A1: Ward's Stone	Predicted theoretical visibility of 29-34 turbines from higher ground within this character area, such as Ward's Stone and Brown Syke Hill.
A2: Brown Berry Plain and Holdron Moss	Predicted theoretical visibility of 29-34 turbines from higher ground within a limited part of the southern section of this character area around Brown Berry Plain.
A3: Baxton Fell	Predicted theoretical visibility of 29-34 turbines from higher ground, approximately 50% of this character area.
A4: White Hill	Predicted theoretical visibility of 29-34 turbines from White Hill itself and the slopes to the south.
A5: Pendle Hill	Predicted theoretical visibility of 29-34 turbines from limited areas of this LCA, largely the eastern and southern edges.
B1: Black Fell to Mallowdale	ZTV predicts no theoretical visibility of wind turbines.
B2: Abbeystead Fell to Harrisend Fell	Majority of character area has no theoretical visibility. Fragmented visibility of 29-34 turbines predicted from land east of White Crag in the northeast of the LCA.
B3: Burn Moor Fell	Majority of character area has no theoretical visibility. Fragmented visibility of 29-34 turbines predicted from southeast of character area, Giggleswick Common, and west of character area, land west of John Fell and Burn Moor.
B4: Pendle Hill Moorland	Fragmented visibility of 29-34 turbines from north of character area, east of Pendle Hill and southwest of character area.
B5: Bleasdale	Predicted visibility of 29-34 turbines from one very small part of the LCA in the southeast corner along Blindhurst Fell.
B6: Parlick to Totridge	Fragmented predicted visibility of 29-34 turbines from slopes of Wolf Fell in southwest of character area.
B7: Hareden and Langden	Majority of character area has no theoretical visibility. Predicted visibility of 29-34 turbines from small area in centre of character area around Whins Brow and Staple Oak Fell.
B8: Croasdale to Lythe	Much of the character area has no theoretical visibility. Predicted visibility of 29-34 turbines from southeast of character area broadly south and east of White Hill.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
B9: Goodber Common	ZTV predicts no theoretical visibility of wind turbines.
C1: Claughton Moor and Whit Moor	ZTV predicts no theoretical visibility of wind turbines.
C2: Crutchenber	Predicted visibility of 29-34 turbines from Catlow Fell and Crutchenber Fell.
C3: Easington	Predicted visibility of 29-34 turbines from Harrop Fell.
C4: Beacon Fell	No theoretical visibility predicted
C5: Longridge Fell	Predicted visibility of 29-34 turbines from majority of character area.
C6: Twiston Moor	Predicted visibility of 29-34 turbines from majority of character area.
C7: Craggs Dole to Sadlers Height	Predicted visibility of 29-34 turbines from central part of character area, slopes of Wood House Dole.
C9: Newton to Birkett	Majority of character area has no theoretical visibility. Predicted theoretical visibility of 29-34 turbines from eastern part of character area, Waddington Fell.
C10: Downham Moor	Majority of character area has no theoretical visibility. Predicted theoretical visibility of 22-28 turbines from centre of character area, slopes of Downham Moor.
D2: Tatham	ZTV predicts no theoretical visibility of wind turbines.
D3: Kettlebeck	ZTV predicts no theoretical visibility of wind turbines.
D4: Hare Appletree	ZTV predicts no theoretical visibility of wind turbines.
D5: Dunsop Bridge to Gisburn Forest	Predicted visibility of 29-34 turbines from northern half of character area, Dunsop Fell and Low Fell.
D6: Nicky Nook	ZTV predicts no theoretical visibility of wind turbines.
D7: Moorcock	Theoretical visibility of up to 29-34 turbines from south facing slopes such as Simpshey Hill, south of Grindleton Fell.
D8: Pendleton	Majority of character area has no theoretical visibility.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	Predicted theoretical visibility of 29-34 from easternmost section of character area at Annel Cross Moor.
D9: Wheathead	Predicted visibility of 29-34 turbines from land around properties Higher Wheathead in the east and Pendle Ho in the west.
D10: Bleasdale to Oakenclough	Majority of character area has no theoretical visibility. Predicted visibility of 8-14 or 15-21 turbines from southeast of character area around Fell Foot.
D11: Longridge Slopes	Predicted visibility of 29-34 turbines from west and south of character area, lower slopes of Longridge Fell, Longridge Golf Club and Cutler's Hill.
D12: Upper Sabden Valley	Predicted visibility of 29-34 turbines from higher slopes in the northeast of character area, Saddlers Height.
D13: Park House	ZTV predicts no theoretical visibility of wind turbines.
D14: Catshaw Fringe	ZTV predicts no theoretical visibility of wind turbines.
D15: Wolfen and Stanley Common	Limited theoretical visibility predicted, with small areas of 1-7 turbines from the fringes of the LCA.
E1: Whitechapel	Majority of character area has no theoretical visibility. Limited predicted visibility of 1-7, 8-14 turbines from small part in the north of character area around Lingey Hill.
E3: Forest of Mewith	ZTV predicts no theoretical visibility of wind turbines.
E4: Twiston	ZTV predicts no theoretical visibility of wind turbines.
E5: Bleasdale	Majority of character area has no theoretical visibility. Predicted visibility of 1-7, 8-14 or 15-21 turbines from southeast (land in the vicinity of dwelling named Windy Harbour) and west of character area (Peacock Hill).
F1: Calder Vale and Brock Valley	Majority of character area has no theoretical visibility. Very small areas have predicted theoretical visibility of 1-7 turbines, high point at Sullom Hill and Wood Top.
F2: Waddington to Bolton-by-Bowland	Majority of character area has no theoretical visibility. Limited predicted visibility of 1-7, 8-14, or 15-21 turbines particularly in the parts of LCA.
G1: Wyresdale	ZTV predicts no theoretical visibility of wind turbines.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
G2: Little Bowland	Majority of character area has no theoretical visibility. One very small area predicted theoretical visibility of 1-7 turbines from land south of Peacock Hey Farm.
G3: Newton and Slaidburn	Majority of character area has no theoretical visibility. One very small area predicted theoretical visibility of 1-7 turbines from Tenter Hill.
G4: Hurst Green	Predicted visibility of up to 29-34 turbines from west of character area near Carlinghurst.
G5: Downham	ZTV predicts no theoretical visibility of wind turbines.
G6: Sabden	Limited visibility of 1-7 or 8-14 turbines near Sabden.
G7: Browsholme	ZTV predicts no theoretical visibility of wind turbines.
G8: Dinkling Green and New Laund	ZTV predicts no theoretical visibility of wind turbines.
H2: Roeburndale	ZTV predicts no theoretical visibility of wind turbines.
H3: Hindburndale	ZTV predicts no theoretical visibility of wind turbines.
H4: Keasden	ZTV predicts no theoretical visibility of wind turbines.
H5: Abbeystead and Over Wyresdale	ZTV predicts no theoretical visibility of wind turbines.
H6: Upper Hodder	ZTV predicts no theoretical visibility of wind turbines.
H7: Lower Hodder	ZTV predicts no theoretical visibility of wind turbines.
H8: River Ribble	ZTV predicts no theoretical visibility of wind turbines.
I2: Ribble Valley	ZTV predicts no theoretical visibility of wind turbines.
J3: Lawkland and Eldroth	No theoretical visibility from much of the LCA, but with small areas of theoretical visibility around the fringes. Fragmented visibility of up to 29-34 turbines from the southern part of the LCA near Lawkland Green.
K1: Harrop Fold and Stephen Moor	Areas with theoretical visibility of up to 29-34 turbines, including around Threap Green and Ling Hill and Holden Moor further north.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
L1: Gisburn Forest and Stocks	Areas with theoretical visibility of up to 29-34 turbines, but typically associated with areas of forestry.
L2: Barley	Theoretical visibility of up to 29-34 turbines across much of the LCA.
M2: The Heights	Theoretical visibility of up to 29-34 turbines along the ridgeline, including Black Hill, The Height, Height Top.
A Landscape Strategy for Lancashire Landscape Character Assessment, December 2000	
1a: South Pennine Moors	Southern boundary adjacent to the Turbine Area. Predicted theoretical visibility of 29-34 turbines from southern section of Broad Head Moor.
1b: High Bowland Plateaux	Fragmented theoretical visibility of 8-14 turbines from northern section of character area. Theoretical visibility of 29-34 turbines parts of character area e.g. south of Brown Berry Plain.
2a: West Pennine Moors	Fragmented theoretical visibility of 29-34 turbines from areas of Darwen Moor, Withnell Moor, Winter Hill and Counting Hill and from existing wind turbine farm at Oswaldtwistle Moor.
2b: Central Bowland Fells	Majority of character area has no theoretical visibility. Theoretical visibility of 29-34 turbines at higher elevations in the southeast of character area, including White Hill and Catlow Fell.
2c: Longridge Fell	Theoretical visibility of 29-34 turbines across character area.
2d: Waddington Fell	Majority of character area predicted no theoretical visibility. Theoretical visibility of 29-34 turbines from east of character area around Waddington Fell, Harrop Fell and Bradford Fell.
2e: Pendle Hill	Theoretical visibility of 29-34 turbines to the east and south of Pendle Hill. Also contains viewpoint 28
2f: White Moor/ Burn Moor	Theoretical visibility of 29-34 turbines from Burn Moor and White Moor.
2g: Beacon Fell	ZTV predicts no theoretical visibility of wind turbines.
3a: Rossendale Hills	Theoretical visibility of 29-34 turbines from higher ground including Hameldon Hill and Swinshaw Moor. Also contains viewpoint 23.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
4a: Trawden Fringe	Theoretical visibility of 1-7 or 8-14 turbines over the north of the character area. Fragmented visibility in the south of the character area. Also contains viewpoint 14.
4b: Rossendale Moorland Fringe	Theoretical visibility of up to 29-34 turbines along the northern edge of the LCA.
4c: Blackburn Moorland Fringe	Majority of character area predicted to have no theoretical visibility. Theoretical visibility increases from 1-7 turbines to 29-34 from the land rising towards properties at Belthorn.
4d: Bowland Gritstone Fringes	Fragmented theoretical visibility of up to 29-34 turbines.
4e: Bowland Limestone Fringes	Theoretical visibility of 29-34 turbines from areas around Low Fell and Merrybent Hill.
4f: Longridge Fell Fringes	Theoretical visibility of 29-34 turbines from southern slopes to the south of Longridge Fell.
4g: South Pendle Fringe	Theoretical visibility of 29-34 turbines from White Moor in the north of the character area. Theoretical visibility reduces to 15-21 and 8-14 turbines visible as elevation decreases towards settlements of Colne and Barrowford.
4i: North Pendle Fringe	Limited theoretical visibility, restricted to a small area on the edge of Downham Moor.
4j: West Pennine Fringes	ZTV predicts no theoretical visibility of wind turbines.
5a: Upper Hodder Valley	Majority of character area predicted to have no theoretical visibility. Fragmented theoretical visibility predicted from areas of high ground to the northwest of settlement of Slaidburn.
5b: Lower Hodder and Loud Valley	Majority of character area predicted to have no theoretical visibility. Fragmented theoretical visibility predicted from areas of high ground around the settlement of Chipping in the northwest of the character area.
5c: Lower Ribble	Theoretical visibility of 29-34 turbines predicted from the land to the north of the River Ribble between Longridge and Hurst Green.
5d: Samlesbury-Withnell Fold	Much of character area predicted to have no theoretical visibility. Fragmented theoretical visibility of 1-7, 8-14, 15-22 turbines predicted from higher ground north of Woodfold

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	Hall. Theoretical visibility of 29-34 turbines predicted from Witton Country Park in southeast of character area.
5e: Lower Ribblesdale (Clitheroe to Gisburn)	Majority of character area predicted to have no theoretical visibility. Fragmented theoretical visibility of 1-7, 8-14, 15-22 turbines predicted from higher ground around Dinckley.
5f: Lower Ribblesdale (Gisburn to Hellifield)	Theoretical visibility of 29-34 turbines predicted from high ground around Paythorne Moor and on the slopes to the west of Hellifield.
5g: South Bowland Fringes	Majority of character area predicted to have no theoretical visibility.
5h: Goosnargh-Whittingham	Theoretical visibility of up to 29-34 turbines across the southern part of the LCA in the vicinity of Goosnargh and Whittingham.
5i: West Bowland Fringes	ZTV predicts no theoretical visibility of wind turbines.
5j: North Bowland Fringes	ZTV predicts no theoretical visibility of wind turbines.
5k: Cuerden-Euxton	Majority of character area predicted to have no theoretical visibility. Fragmented theoretical visibility 1-7 or 8-14 turbines predicted from the land around the A582.
6a: Calder Valley	Fragmented theoretical visibility predicted across the character area varying from 1-7 turbines around the settlement of Trawden in the east and up to 29-34 turbines from the settlement of Great Harwood in the west. Also contains viewpoints 19 and 24.
6b: West Pennine Foothills	Much of character area predicted to have no theoretical visibility. Theoretical visibility of 8-14 turbines from high ground southwest of Blackburn and 29-34 turbines from Darwin Golf Course.
6c: Cliviger Gorge	Majority of character area predicted to have no theoretical visibility. Valley sides south of Holme Chapel predicted to have 1-7, 8-14, 15-21 and 22-28 turbines visible depending on elevation.
6d: Adlington-Coppull	ZTV predicts no theoretical visibility of wind turbines.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
7a: Mellor Ridge	Theoretical visibility of 29-34 turbines from settlement of Great Harwood and slopes to the west and from Mellor Moor.
7b: Upholland Ridge	No theoretical visibility predicted on the very edge of 45km study area.
8a: Irwell	Majority of character area predicted to have no theoretical visibility. One small area in the north of the character area on slopes of Nutshaw Hill, north of Clowbridge Reservoir, predicted to have theoretical visibility with 29-34 turbines.
9a: Rivington	ZTV predicts no theoretical visibility of wind turbines.
9b: Turton-Jumbles	ZTV predicts no theoretical visibility of wind turbines.
9c: Haslingden Grane	Majority of character area predicted to have no theoretical visibility. Theoretical visibility of up to 29-34 turbines in south of character area at Tor Hill.
9d: Belmont	ZTV predicts no theoretical visibility of wind turbines.
9e: Roddlesworth	ZTV predicts no theoretical visibility of wind turbines.
10a: Wyre Valley	ZTV predicts no theoretical visibility of wind turbines.
10b: North Bowland Valleys	ZTV predicts no theoretical visibility of wind turbines.
11a: Lower Ribble Valley	Majority of character area predicted to have no theoretical visibility. Theoretical visibility, of typically 1-7 turbines, from settlement of Ribchester and land to the south and west.
11b: Long Preston Reaches	Theoretical visibility of 29-34 turbines from south of character area.
11c: Aire Valley	Majority of character area predicted to have no theoretical visibility. Theoretical visibility of typically 1-7 turbines from areas around Low Bradley and Skipton.
13a: Gargrave Drumlin Field	Fragmented visibility of up to 29-34 turbines from the hill tops across the character area. 8-14 or 15-21 turbines theoretically visible from settlement of Barnoldswick.
13b: Bentham-Clapham	Majority of character area predicted to have no theoretical visibility. Fragmented visibility of up to 29-34 turbines from the southeast of the character area and north of the character area, north of A65.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
14a: Slaidburn-Giggleswick	Theoretical visibility of up to 29-34 turbines from high ground around Town Moor and Holden Moor.
14b: Lothersdale and Cringles	Theoretical visibility of up to 29-34 turbines from high ground around Bleara Moor, Elsack Moor, Carleton Moor and Skipton Moor.
15b: Longton-Bretherton	Theoretical visibility from 1-7 turbines to 22-28 turbines across much of LCA.
15c: Croston-Mawdesley	ZTV predicts no theoretical visibility of wind turbines, with the exception of a small part in the north of the LCA.
15d: The Fylde	Theoretical visibility of up to 29-34 turbines from settlements of Cottam, Woodplumpton, Broughton and the surrounding land.
15e: Forton-Garstang-Catterall	ZTV predicts no theoretical visibility of wind turbines.
16g: Hoole and Farington Mosses	Theoretical visibility varies between 1-7 turbines and 15-21 turbines south of settlement of New Longton.
17a: Clifton and Hutton Marsh	Majority of character area falls outside 45km study area. 1-7 turbines theoretically visible from land around River Ribble.
<p>Greater Manchester Landscape Character and Sensitivity Assessment, August 2018</p> <p>Note: no theoretical visibility is predicted for multiple character areas within Grater Manchester. To avoid duplication, only character areas with predicted theoretical visibility are included below.</p>	
22: Holcombe to Greenmount and Higher Summerseat	Majority of character area is predicted to have no theoretical visibility of turbines. Theoretical visibility of 8-14 turbines from Peel Tower. Theoretical visibility of 22-28 turbines from Harcles Hill. Theoretical visibility of 29-34 turbines from land around Bull Hill, Tor Hill and Musden Head Moor.
24: Knowl and Rooley Moors, Fringes and Foothills	Majority of character area is predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from the eastern edge of the character area on the northern slopes of Rooley Moor.
28: Rochdale and Oldham South Pennine Foothills	Theoretical visibility of turbines limited to areas of higher elevation within the character area. Theoretical visibility of 29-34 turbines from high point around Moss Gate Hill which

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	reduces to 1-7 turbines from the slopes to the north. Theoretical visibility of up to 8-14 turbines from land around Thornham.
29: Rough Hill to Brun Moor	Majority of character area is predicted to have no theoretical visibility of turbines. Fragmented theoretical visibility of 29-34 turbines from the northern edge of the character area around the existing turbines at Shore Moor, from the eastern edge of the character area around Clegg Moor, Blackstone Edge and White Hill and from the south of the character area around Crompton Moor.
30: Shore Edge to Dove Stones Reservoir	Majority of character is predicted to have no theoretical visibility of turbines. Limited theoretical visibility of 1-7 turbines from high point at Wharnton near existing telecommunications tower. Fragmented visibility between 1-7 turbines up to 22-29 turbines from land south of Hill Top Lane and west of Edge Lane.
32: White Gate to Mottram	Majority of character area is predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from high point at Wild Bank Hill in the south of the character area. Scattered theoretical visibility from the centre and north of the character area from the northern facing slopes around Slatepit Moor and White Gate.
35: Ludworth Moor and Dark Peak Foothills	Majority of character area is predicted to have no theoretical visibility of turbines. Visibility varies from 1-7 turbines to 15-21 turbines from the north of the character area around Werneth Low, including the panoramic view at Werneth Low Country Park.
36: River Tame	Majority of character area is predicted to have no theoretical visibility of turbines. Fragmented visibility from the northern facing slopes on the southern valley edge of up to 15-21 turbines from northern settlement edges of Woodley and Brimington.
37: River Goyt	Majority of character area is predicted to have no theoretical visibility of turbines. Fragmented theoretical visibility of up to 34 turbines from Woodbank Memorial Park on the northern edge of Stockport.
38: Offerton to High Lane	Majority of character area is predicted to have no theoretical visibility of turbines. Fragmented theoretical visibility of up to 21 turbines from western edge of Stockport Golf Club.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
45: River Mersey	Fragmented theoretical visibility of 1-7 and 8-14 turbines from upper valley Slopes including Sale Golf Club, Withington Golf Club and Didsbury Golf Course.
Kirklees District Landscape Character Assessment, July 2015	
A1: South Pennine Moors	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from high point at Cupwith Hill and along Way Stone Edge.
A2: North Peak (Wessenden & Meltham Moors)	Theoretical visibility of 29-34 turbines from northern facing slopes of Wessenden Moor, including Black Hill, and Meltham Moor.
D7: Peak Fringe Upland Pastures	Much of character predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from localised areas of higher elevation such as Wholestone Moor in the north, Harden Hill south of Meltham and the hills south of Holmfirth.
D9: Low Common Royd Moor & Whitley Common	Theoretical visibility of 29-34 turbines from localised areas of higher elevation around Brown Hill, Dearne House and Denby Delf.
E1: Holmfirth - Meltham	Scattered theoretical visibility of 1-7 turbines, 8-14 or 15-21 turbines from slopes south of Honley, up to 34 turbines theoretically visible from ridge to the south of Hepworth.
E2: Barkisland - Holwell Green	Theoretical visibility of 29-34 turbines from localised areas of higher elevation around Nettleton Hill, Haigh House Hill, Upper Cote Farm and Bradley Park Golf Club.
E6: Fenay Beck Valley Rural Fringes	Theoretical visibility of 29-34 turbines from areas of higher elevation around Castle Hill, hills east of Shepley and Hills east of Highburton and Oakroyd.
E7: Emley Moor Northern Fringes	Theoretical visibility of 29-34 turbines from areas of higher elevation around North Moor, Dewsbury District Golf Club and Gawthorpe.
E8: Batley - Dewsbury Rural Fringes	Scattered theoretical visibility of 1-7 turbines and 8-14 turbines, with smaller areas of theoretical visibility of 15-21 turbines, 22-28 turbines and 29-34 turbines from higher ground around settlements of Gomersal, Liversedge, Dewsbury and Batley.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
F4: Colne (Slaithwaite Marsden)	Majority of character area predicted to have no theoretical visibility of turbines. Very limited area of theoretical visibility of 1-7 turbines from land near Crosland Heath Golf Course.
F5: Holme and Hall Dike (Holmfirth and Meltham)	Majority of character area predicted to have no theoretical visibility of turbines. Very limited, fragmented area of theoretical visibility of 1-7 to 29-34 turbines from upper slopes on the settlement edge of Holmfirth.
G8: Holme River Valley	Theoretical visibility of 29-34 turbines from areas of higher elevation around settlements of Thongsbridge, New Mill, Scholes and Hepworth.
G9: Fenay Beck Valley and Tributaries	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from areas of higher elevation on upper valley slopes, such as on the edges of Highburton and Kirkburton.
G10: River Dearne Valley	ZTV predicts no theoretical visibility of wind turbines.
G11: Batley Fringe Incised Valleys	Limited theoretical visibility of wind turbines around the edge of the LCA.
K1: Thornton - Queensbury	Areas of theoretical visibility of 1-7 to 29-34 turbines from higher elevations around Hartshead Moor Top and East Bierley Golf Club.
M1: Calder Valley Floor	Majority of character area predicted to have no theoretical visibility of turbines. Fragmented areas of theoretical visibility of 1-7 turbines, 22-28 turbines from central and eastern parts of character area.
N1: Emley Moor	Theoretical visibility of 29-34 turbines from higher ground around Emley Moor, Grange Moor and Lepton Edge.
N2: Cawthorne Park & West Barnsley Rolling Wooded Farmland	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from higher ground around Pool Hill.
Leeds Landscape Assessment, February 1994	
ELB1: East Garforth	Theoretical visibility of 29-34 turbines from elevated ground to the east of Garforth and Kippax.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
ELB2: East Bramham	Limited theoretical visibility within study area of 1-7 turbines from higher ground around Bramham Moor.
ELB3: Boston Spa, Clifford and Bramham	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of 29-34 turbines from land around A1(M) near Beilby Wood.
ELB4: Bramham Park	Majority of character area predicted to have no theoretical visibility of turbines. Limited theoretical visibility of 1-7 to 15-21 turbines from western edge of Bramham Park.
ELB5: West Bramham	Fragmented theoretical visibility of 1-7 to 29-34 turbines across higher ground in the character area, including around Dalton Hill and Holme Farm.
ELB6: Aberford	Fragmented theoretical visibility of 1-7 to 29-34 turbines across higher ground in the character area from land north of A1(M) in the south of the character area and from land west of A1(M) in the north of the character area.
ELB7: Ledsham to Lotherton	Fragmented theoretical visibility of 29-34 turbine from higher ground to the north, east and south of settlement of Ledston.
ELB8: Wetherby Gorge	Majority of character area predicted to have no theoretical visibility of turbines. Limited theoretical visibility of up to 29-34 turbines from northern valley slopes.
LCM1: Gildersome Fringe	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 22-28 turbines from higher ground near Farnley Wood (dwelling), west of New Farnley (settlement) and west of Gildersome (settlement).
LCM2: Bradford Fringe	Theoretical visibility of up to 29-34 turbines from high ground around Woodhall Road.
LCM3: East Leeds	Theoretical visibility of up to 29-34 turbines from higher ground around the settlement of Scholes.
LCM4: Kippax and Swillington Fringe	Theoretical visibility of up to 29-34 turbines from high ground to the north and east of Swillington.
LCM5: Rothwell Fringe	Majority of character area predicted to have no theoretical visibility of turbines. Fragmented theoretical visibility from higher ground around Royds Green and Thorpe on the Hill.
LCM6: East Ardsley Fringe	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	turbines from land east of Ardsley Reservoir and north of East Ardsley.
LCM7: East Morley Fringe	Majority of character area predicted to have no theoretical visibility of turbines. Fragmented theoretical visibility of up to 22-28 turbines from south of character area around the A653 and north of the character area around South Leeds Golf Club.
LCM8: South Morley Fringe	Theoretical visibility of up to 22-28 turbines from land around Howley Hall Golf Club.
LCM9: Roundhay Park	Theoretical visibility of up to 29-34 turbines from eastern part of LCA, in the vicinity of Leeds Golf Club.
LCM10: Temple Newsam	Theoretical visibility of up to 29-34 turbines from LCA, including Temple Newsam Golf Club.
LCM11: Middleton	Much of character area predicted to have no theoretical visibility of turbines. Theoretical visibility varies between 22-28 turbines to 29-34 turbines from playing fields west of Middleton Wood.
LCM12: Meanwood Valley	Majority of character predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from allotments on western edge of Meanwood.
LCM13: Kirkstall Valley	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from recreation ground on western edge of Hawksworth.
LCM14: Wyke Beck Valley	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from western edge of settlement of Halton Moor.
LCM15: Barwick to Garforth	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from Barnbow Common in the south of the character area and the land around Lower Barnbow Farm.
LCM16: Rawdon Plateau	Theoretical visibility of 29-34 turbines from land around high points of Plane Tree Hill, Billing Hill and land southwest of Leeds Trinity University College.
LCM17: Methley Park	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility is fragmented, from 1-7 turbines to 22-28 turbines from land around Oulton Park and 1-7 and 8-14 turbines near Clumpcliffe.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
LCM18: Calverley Valley	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from northern slopes of character area, south of Rawdon.
LCM19: Cockersdale	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from slopes to the west of settlement of Pudsey.
LCM20: Lower Aire Valley	Theoretical visibility is variable, between 1-7 turbines up to 29-34 turbines, including from Rothwell Country Park and land around St Aidan's Nature Reserve.
MGP1: Hollin Hall Plateau	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility is fragmented, varying between 1-7 turbines from land around New Laithe Farm up to 29-34 turbines from land around Lumby Lane.
MGP2: Hawksworth Plateau	Much of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from land around Goose Lane, Hillings Lane and Odda Lane.
MGP3: Guiseley Plateau	Theoretical visibility of up to 29-34 turbines from majority of character area, including scattered dwellings and settlement of East Carlton.
MGP4: Eccup Plateau	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from higher ground such as high point at Bowshaws Ash.
MGP5: Wike Ridge to East Rigton	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility is fragmented of up to 29-34 turbines visible from Alwoodley Golf Club, Leeds Golf Centre and Blackmoor Farm.
MGP6: Hawksworth Moor	Theoretical visibility is variable, between 1-7 turbines from lower slopes of Hawksworth Moor up to 29-34 turbines visible from higher elevations including Reva Hill.
MGP7: Hawksworth Gill	Majority of character area predicted to have no theoretical visibility of turbines. Limited visibility from higher elevations in north of character area, near Jum Bridge.
MGP8: Moseley Beck	ZTV predicts no theoretical visibility of wind turbines, with the exception of a small area in the north of the LCA.

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
WHF1: Linton Hills	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility of up to 29-34 turbines from higher ground in west of character area around Devonshire Wood.
WHF2: West Harewood Escarpment	ZTV predicts no theoretical visibility of wind turbines, with the exception of small areas in the southern part of the LCA.
WHF3: East Harewood Escarpment	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility is fragmented, varying between 8-14 turbines from up to 22-28 turbines from land around Harewood Avenue.
WHF4: The Chevin	ZTV predicts no theoretical visibility of wind turbines, with the exception of small areas in the southern part of the LCA.
WHF5: Harewood	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility varies of up to 29-34 turbines visible from southeast of character area around Sugar Hills.
WHF6: Otley to Pool Floodplain	ZTV predicts no theoretical visibility of wind turbines.
WHF7: Arthington Floodplain	ZTV predicts no theoretical visibility of wind turbines.
WHF8: Linton - Collingham Floodplain	Majority of character area predicted to have no theoretical visibility of turbines. Theoretical visibility varies as the land slopes up to the north of the River Wharfe, with 1-7 to 29-34 turbines visible.
VOY1: East Wetherby	The LCA is located on the edge of the study area. Theoretical visibility within the study areas is limited to southeast of character area of up to 29-34 turbines visible from land around Walton Road.
Peak District Landscape Strategy 2022-31	
Dark Peak	Theoretical visibility of 29-34 turbines is fragmented and associated with areas of high ground such as Wessenden Moor, Black Hill, Bleaklow, Featherbed Moss, Pike Low and Fairbrook Naze.
Dark Peak Western Fringe	Majority of character area predicted to have no theoretical visibility of turbines. Limited theoretical visibility of 1-7, 8-14,

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	15-21 turbines from higher ground such as around Cown Edge and Mellor Moor.
Dark Peak Yorkshire Fringe	Limited theoretical visibility overall, although up to 29-34 turbines are predicted to be visible from land around the settlement of Hade Edge and the upper slopes of Whitwell Moor.
Sheffield Landscape Character Assessment, 2011	
37: Moorland Ridge	Limited theoretical visibility within the character area, up to 29-34 turbines visible from a small area called 'The Height' at Whitwell Moor.
39/40: Pastoral Hills and Ridges	Majority of character area predicted to have no theoretical visibility of turbines. Limited theoretical visibility of 1-7, 8-14, 15-21 and 22-28 turbines visible as slopes increase in elevation from Wind Hill Knoll to Barnside Cote Farm in the southwest of the character area.
51: Upland River Valleys with Reservoirs	ZTV predicts no theoretical visibility of wind turbines.
62: Upland Valley Sides above Urban and Industrial Areas	ZTV predicts no theoretical visibility of wind turbines.
Landscape character assessment of Wakefield District, 2004	
A: Went River Basin	Majority of character area is located outside the 45km study area. Limited theoretical visibility, but with up to 29-34 turbines theoretically visible from higher ground around sections of Huntwick Lane.
B: South West Coalfield	Theoretical visibility is fragmented across the character area. Theoretical visibility of up to 29-34 turbines predicted from higher ground such as Woolley Edge, land around Wakefield Golf Club, land to the south and west of settlements of Crofton and north and west of Ryhill, settlement of Overton and the land to the southwest and the settlements of Midgley and Netherton, together with the road linking them.
C: South East Coalfield	Majority of character area is located outside the 45km study area. Land to the south of Havercroft and northwest of South

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	Hendle is predicted to have theoretical visibility of up to 29-34 turbines.
D: Northern Coalfield	Majority of the character area not predicted to have theoretical visibility of the turbines. Fragmented theoretical visibility with up to 29-34 turbines predicted to be seen from parts of the built up areas within Wakefield.
E: Calder Valley	Much of the character area not predicted to have theoretical visibility of the turbines. Fragmented visibility with up to 29-34 turbines predicted to be seen from upper slopes in west of character area, south of Horbury and west of Ossett. Varying theoretical visibility with 1 up to 29-34 turbines visible from slopes to the west of Normanton and south of Wakefield.
F: Northern Coalfield	Fragmented theoretical visibility of up to 29-34 turbines from the settlement of Castleford, around the M62 in the north and centre of the character area, from Normanton, and the land in the southwest of the character area.
Barnsley Borough Landscape Character Assessment, 2016 Review	
A1: Thurlstone and Laggsett Enclosed Moorland	Theoretical visibility of 29-34 turbines is predominantly limited to higher elevations within the character area including Snailsden and Upper Dead Edge in the north and Langett Moors and Harden Moor in the south.
B1: Upland Don River Valley	ZTV predicts no theoretical visibility of wind turbines.
C2: Lower Dearne Lowland River Floor	Majority of character area located outside the study area. Theoretical visibility 29-34 turbines from a small area which rises towards Gander Hill.
C3: Upper Dearne Lowland River Floor	Much of character area located outside the study area. Small area of theoretical in the southeast around Burton Road on the southern edge of the settlement of Monk Bretton, which has theoretical visibility of 1-7 turbines.
C4: Dove Lowland River Floor	Majority of LCA outside the study area and ZTV predicts no theoretical visibility of wind turbines.
D1: North East Barnley Settled Arable Slopes	Majority of the character area has no theoretical visibility of the proposed turbines. Theoretical visibility of 29-34 turbines limited to isolated areas of higher elevation, the northwest

Local Character Area	Relationship with Proposed Development / Potential Visibility of Proposed Turbines
	area of the settlement of Staincross, the centre of Monk Bretton and the northern edge of Royston.
E1: West Barnsley Settled Wooded Farmland	Majority of the character area has no theoretical visibility of the proposed turbines. Theoretical visibility of 29-34 turbines limited to Hoylandswaine and its surroundings, land southwest and northeast of Silkstone Common and a section of Eastfield Lane and Bagger Wood Road.
E2: Barnsley Settled Wooded Farmland	Majority of the character area has no theoretical visibility of the proposed turbines. Fragmented visibility from 1-7 turbines up to 29-34 turbines from higher elevations within Barnsley.
F1: Ingbirtchworth Upland Farmland	Majority of the character area has no theoretical visibility of the proposed turbines. Fragmented theoretical visibility of 29-34 turbines from higher elevations around the existing wind turbines at Spicer Hill and from Upper Whitley Edge.
F2: Penistone Upland Farmland	Majority of the character area has no theoretical visibility of the proposed turbines. Theoretical visibility of 29-34 turbines from higher elevations near the existing telecommunications towers at Hartcliff Hill and from the north facing slopes leading up to Snowden Hill.

Landscape Designations

12.5.12 A landscape designation is an area of landscape identified as being of importance at international, national or local level, either defined by statute or identified in development plans or other documents. The landscapes are designated in relation to their special qualities or features which warrant special consideration through the planning system.

12.5.13 There are three ways in which such designations are relevant:

- The presence of a designation can provide an indication of a recognised value that may increase the sensitivity of a landscape character receptor, viewpoint or visual receptor, and may therefore affect the significance of the effect on that receptor;
- The presence of a relevant designation can lead to the selection of a representative viewpoint within the designated area, as the viewpoint will provide a representative outlook from that area; and

- Designated areas may be included as landscape character receptors so that the effects of the Proposed Development on the landscapes that have been accorded particular value can be specifically assessed.

12.5.14 Key landscape designations which occur within 45km of the Turbine Area are shown in **Figures 12-3-1, 12-3-2 and 12-3-3**.

12.5.15 The Calderdale Special Landscape Area (SLA), a local landscape designation, covers the full extent of the Turbine Area and extends to the south.

12.5.16 A number of national landscape designations also lie within the 45km study area, comprising the Yorkshire Dales National Park, the Peak District National Park, the Forest of Bowland National Landscape and Nidderdale National Landscape.

12.5.17 The qualifying elements of these designated landscapes which are within the ZTV and with the potential to incur significant effects will be subject to detailed assessment as part of the ES. This will be drawn from published sources and will assess the effects of the Proposed Development against the special qualities of these designated landscapes. This will have regard to likely actual visibility taking account of local landform and vegetation, with the designated areas considered likely to incur effects.

12.5.18 **Table 12-6** provides an overview of landscape designations within the 45km study area. This outlines the potential visibility of the proposed wind turbines, based on the bare earth ZTVs. It also identifies the distance and direction of the designated landscape from the Turbine Area and whether it is likely to be included in the LVIA.

Table 12-8: Landscape Designations

Landscape designation	Potential for visibility of the Proposed Development (based on the ZTV)	Approximate distance and direction from the Turbine Area (km)	Inclusion in the Assessment?
Yorkshire Dales National Park	Intermittent theoretical visibility is predicted from parts of the National Park, predominantly from summits and higher land, including Captain Moor and Embsay Moor.	17km north	Yes – there is the potential for significant effects due to the elevated views obtained from this national designation towards the Proposed Development.

Landscape designation	Potential for visibility of the Proposed Development (based on the ZTV)	Approximate distance and direction from the Turbine Area (km)	Inclusion in the Assessment?
Peak District National Park	Limited theoretical visibility primarily associated with the summits of Black Hill and West Nab.	22km south	Yes – there is the potential for significant effects due to the elevated views obtained from this national designation towards the Proposed Development.
Forest Of Bowland National Landscape	Theoretical visibility is predicted from summits, including Pendle Hill.	10km northwest	Yes – there is the potential for significant effects due to the elevated views obtained from this national designation towards the Proposed Development.
Nidderdale National Landscape	Theoretical visibility is limited to the moors in the southwestern areas of the landscape. The majority of the designation has no intervisibility with the Proposed Development.	18km northeast	Yes – to be included due to the national value associated with this landscape. However, the potential for significant effects is likely to be limited by the restricted theoretical visibility of the Proposed Development.
Calderdale SLA, including the following areas of the SLA:			

Landscape designation	Potential for visibility of the Proposed Development (based on the ZTV)	Approximate distance and direction from the Turbine Area (km)	Inclusion in the Assessment?
1: Northern Calderdale Moorlands and Fringes	Theoretical visibility predicted from summits within the SLA (Grey Stone Hill, Heather Hill, Withins Height, etc.) Theoretical visibility would be intermittent within SLA 1 to the south.	1: Within Turbine Area	1: Yes – there is the potential for significant effects due to wind turbines being located within the SLA.
2: Hardcastle Craggs, Hebden Water and Colden Water	SLA 2 Theoretical visibility limited as follows valley, 1-3 and 4-10 turbines visible.	2: Adjacent to Turbine Area	2: Yes – there is the potential for significant effects due to wind turbines visible from the SLA at close range.
3: Luddenden Dean	SLA 3: No intervisibility predicted	3: 2.5 km Southeast	3: No – there is no intervisibility with the Proposed Development.
4: Shibden Valley	SLA 4: No intervisibility predicted	4: 9 km Southeast	4: No – there is no intervisibility with the Proposed Development.
5: Ringstone Edge and Norland Moor Fringes	SLA 5: Theoretical visibility predicted from summits such as Gallows Pole Hill	5: 10 km Southeast	5: Yes – there is the potential for significant effects due wind turbines visible from the SLA.
6: Southern Calderdale Moorlands and Fringes	SLA 6: Theoretical visibility predicted from summits such as Knowle Hill, Lodge Hill, etc.	6: 4 km South	6: Yes – there is the potential for significant effects due to wind turbines visible from the SLA.

Landscape designation	Potential for visibility of the Proposed Development (based on the ZTV)	Approximate distance and direction from the Turbine Area (km)	Inclusion in the Assessment?
7: Cragg Vale	SLA 7: Theoretical visibility, particularly from the west facing slopes of the vale.	7: 6 km South	7: Yes – there is the potential for significant effects due to wind turbines visible from the SLA at close range. May not be visible due to vegetation.

12.5.19 The eastern part of the Turbine Area also lies within the Liverpool, Manchester and West Yorkshire Green Belt within Calderdale. The extents of Green Belt in relation to the PEIR Boundary are shown on **Figure 12-3-3**.

Visual Receptors

12.5.20 The landscape surrounding the Proposed Development contains a wide range of visual receptors. **Figure 12-4** highlights a range of key visual receptors, with others such as settlements and roads forming part of the map backdrop. Key potential visual receptors include residents of rural properties, farmsteads and communities/settlements, users of PRow and Open Access Land, visitors to local/tourist attractions and users of transport infrastructure, including roads and railways.

Settlements

12.5.21 The 45km study area encompasses a diverse range of settlements, from large urban centres to smaller market towns and rural villages. Major conurbations include Bradford to the east and Burnley to the west, both of which form significant population hubs with extensive residential, commercial and industrial land uses. To the southeast, Halifax and Huddersfield provide further concentrations of settlement, while to the south, smaller towns such as Todmorden, Hebden Bridge, Mytholmroyd, Sowerby Bridge, Elland and Brighouse occupy the valleys and lower slopes of the Pennines. Numerous dispersed villages and hamlets are scattered across the moorland fringes.

12.5.22 Settlements within the 45km study area have been reviewed in relation to potential visibility to inform further detailed assessment work. This analysis focusses on settlements within 10km of the wind turbines but also identifies key settlements

between 10km and 45km where the wind turbines are predicted to be visible. The analysis is summarised in **Table 12-9** and was informed by the ZTVs included in **Figures 12-5-1 to 12-5-4**, together with fieldwork undertaken to date for the Proposed Development.

Table 12-9: Settlements

Settlement	Approximate Distance from Turbine Area	Theoretical Visibility
North		
Cowling	7km	No visibility predicted.
Sutton-in-Craven	9km	No visibility predicted.
Cross Hills	10km	No visibility predicted.
Lothersdale	10km	No visibility predicted.
Eastburn	10km	No visibility predicted.
Steeton	10km	No visibility predicted.
Silsden	12km	Small area of theoretical visibility of 1-7 turbines, on the western edge of Silsden.
Skipton	14.5km	Areas of theoretical visibility of 1-7 turbines or 8-14 turbines, from the northern and eastern parts of settlement.
Northeast		
Stanbury	3km	Small linear village west of Haworth, up to 14 turbines theoretically visible.
Oxenhope	3km	Typically 1-3 turbines theoretically visible, with up to 14 turbines theoretically visible from the northern edges of the settlement.
Haworth	4km	Limited intervisibility due to intervening landform, 1-3 turbines may be visible from western, northern and eastern edges.
Oakworth	5km	Variable theoretical visibility predicted, with up to 28 turbines in elevated northern parts of the settlement, reducing to 1-7 turbines in lower parts.
Cullingworth	6km	1-7 turbines theoretically visible.

Settlement	Approximate Distance from Turbine Area	Theoretical Visibility
Lees / Cross Roads	5km	Up to 21 turbines theoretically visible.
Keighley	7km	No theoretical visibility across most of the western part of the town. 1-7 turbines theoretically visible across the eastern part of Keighley, increasing to up to 28 turbines on the eastern and western edges.
Goose Eye	7km	No visibility predicted.
Laycock	7km	Up to 14 turbines theoretically visible.
Wilsden	8km	Limited intervisibility, may be some views from the eastern parts of the village with up to 7 turbines theoretically visible.
Harden	8km	Limited intervisibility, may be some views with up to 7 turbines theoretically visible from small areas.
Bingley	11km	No visibility from core of the town. However, theoretical visibility of up to 7 turbines in southern parts of the town and up to 28 turbines on elevated west facing slopes.
Baildon	14km	Theoretical visibility from the southwestern parts of Baildon, particularly elevated part of the settlement, north of Baildon Bank.
Guisley	18km	Small areas of theoretical visibility of 1-7 turbines on the eastern edges of Guisley.
Yeadon	20km	Theoretical visibility across the settlement, with up to 34 turbines theoretically visible from the eastern edge of the Yeadon.
Rawdon	23km	Theoretical visibility across the settlement, with up to 34 turbines theoretically visible from the eastern edge of Rawdon.
East		
Denholme	5km	Largely no theoretical visibility but small areas where up to 7 turbines would be theoretically visible.

Settlement	Approximate Distance from Turbine Area	Theoretical Visibility
Ogden	6km	No intervisibility predicted
Mountain	8km	1-7 turbines theoretically visible.
Thornton	8km	Generally no or limited intervisibility, although up to 21 turbines theoretically visible from the western edge at Hill Top.
Queensbury	9km	Areas of theoretical visibility of 1-7 turbines.
Bradford	14km	Fragmented visibility of up to 7 turbines from the western side of Bradford. The land rises to the east and number of turbines visible increases to up to 28 between Bradford and Pudsey.
Shipley	14km	No visibility predicted in the town centre. However, visibility of up to 28 turbines on the eastern side of Shipley, and also up to 14 turbines in the western part of the town around Moorhead.
Pudsey	16km	No visibility for much of the settlement. However, predicted visibility of up to 28 turbines from parts of Pudsey, particularly the western edge.
Southeast		
Wainstalls	5km	No visibility predicted.
Booth	6km	No visibility predicted.
Mixenden	6km	No visibility predicted.
Mount Tabor	7km	1-7 turbines theoretically visible.
Halifax	9km	No intervisibility predicted across much of the urban area. Small areas where 1-7 or up to 14 turbines may be visible, particularly on the eastern edge.
Sowerby Bridge	9km	1-7 turbines theoretically visible from the western edge of the settlement.
South		
Pecket Well	2km	Visibility varies between up to 34 turbines to 1-7 turbines.

Settlement	Approximate Distance from Turbine Area	Theoretical Visibility
Slack	3km	29-34 turbines theoretically visible throughout majority of settlement.
Heptonstall	3km	1-7 turbines theoretically visible throughout settlement.
Old Town	3km	Up to 34 turbines theoretically visible.
Chiserley	4km	No visibility predicted.
Blackshaw Head	4km	Limited or no visibility from the majority of the settlement, although up to 34 turbines theoretically visible from Brown Hill on the northern edge of Blackshaw Head.
Hebden Bridge	3km	Limited intervisibility, typically 1-7 turbines theoretically visible from the edges of the town, largely from valley sides.
Mytholmroyd	6km	No visibility from the majority of the settlement. Notable exception is valley to the south, towards Hoo Hole and Gragg Vale, from which 1-7 turbines would be theoretically visible.
Midgley	7km	No visibility predicted.
Todmorden	7km	No visibility predicted.
Luddenden	8km	No visibility predicted.
Southwest		
Worsthorne	4km	No visibility predicted.
Cornholme	7km	No visibility predicted.
Walk Mill	7km	No visibility predicted.
Southward Bottom	7km	No visibility predicted.
Holme Chapel	7km	No visibility predicted.
Portsmouth	7km	No visibility predicted.
Weir	10km	No visibility predicted.

Settlement	Approximate Distance from Turbine Area	Theoretical Visibility
Accrington	17km	Majority of town experiences no intervisibility, area where up to 21 turbines would be theoretically visible in the northern part of Accrington.
Rishton	21km	Up to 21 turbines theoretically visible across the settlement.
Blackburn	23km	Much of the town has no theoretical visibility. However, there are fragmented areas of predicted theoretical visibility, particularly in the northwest part of the town, with up to 21 turbines predicted to be seen.
West		
Brierfield	7km	1-7 turbines theoretically visible on eastern edge.
Burnley	7km	Up to 14 turbines theoretically visible in the eastern part of the settlement, increasing to up to 28 turbines in western parts.
Wheatley Lane	11km	1-7 turbines theoretically visible throughout settlement.
Fence	11km	1-7 turbines theoretically visible throughout settlement.
Higham	13km	Fragmented theoretical visibility. However, up to 14 turbines theoretically visible from the eastern edge of Higham.
Padiham	12km	Fragmented theoretical visibility. However, up to 14 turbines theoretically visible from parts of the settlement.
Hapton	14km	Up to 14 turbines theoretically visible across the settlement.
Altham	17km	Up to 14 turbines theoretically visible across the settlement.
Read/Simonstone	17km	Up to 14 turbines theoretically visible across the settlement.

Settlement	Approximate Distance from Turbine Area	Theoretical Visibility
Huncoat	16km	Limited theoretical visibility across the majority of the settlement, but with up to 21 turbines theoretically visible from parts of the eastern edge.
Clayton-le-Moors	18km	Up to 34 turbines theoretically visible from parts of the settlement.
Great Harwood	18km	Up to 34 turbines theoretically visible across the settlement.
Longridge	32km	No visibility predicted for the majority of the town. However, theoretical visibility is predicted for up to 28 turbines on the eastern edge of Longridge.
Northwest		
Trawden	4km	Up to 7 turbines visible throughout the settlement.
Wycoller	4km	Up to 7 turbines visible throughout the settlement.
Laneshaw Bridge	6km	Up to 7 turbines visible throughout the settlement.
Colne	6km	Up to 7 turbines visible from parts of the settlement.
Nelson	7km	No visibility across much of the settlement, with up to 7 turbines theoretically visible from southwestern parts of Nelson.
Foulridge	8km	Up to 7 turbines visible throughout the settlement.
Barrowford	9km	Up to 7 turbines theoretically visible from northwestern parts of the settlement.
Kelbrook	10km	No intervisibility predicted.
Beverley/Blacko	10km	Up to 7 turbines visible throughout the settlements.
Barley	12km	Limited to no theoretical visibility. Up to 7 turbines theoretically visible from the edge of the settlement.

Settlement	Approximate Distance from Turbine Area	Theoretical Visibility
Barnoldswick	12km	Fragmented theoretical visibility, with up to 7 turbines predicted to be visible.
West Marton	15km	Up to 7 turbines visible throughout the settlement.
Horton	17km	Up to 14 turbines theoretically visible.
Hellifield	23km	1-7 turbines or 8-14 turbines predicted to be visible throughout Hellifield, with the greater number of turbines predicted to be seen from the northern part of the settlement.
Long Preston	25km	Up to 28 turbines theoretically visible throughout the settlement.

Transport Routes

- 12.5.23 Primary transport routes are typically located within the valleys throughout the surrounding landscape, although there are exceptions to this. The closest primary road is the A6033 between Oxenhope and Hebden Bridge, which lies adjacent to the Turbine Area.
- 12.5.24 The 45km study area is served by a well-developed transport network comprising strategic road, rail, and local route corridors. The M62 motorway forms the principal east–west connection across the Pennines, passing to the south of the Turbine Area and linking Manchester and Leeds. Regionally important A-roads include the A646 through the Calder Valley, the A58 between Halifax and Rochdale, and the A629 connecting Halifax northwards to Keighley and Skipton. To the west, the A681 and A671 provide access to Burnley and the Rossendale Valley. In addition, minor moorland roads such as the B6138 at Cragg Vale, together with rural lanes, traverse the upland fringes and provide access to dispersed settlements.
- 12.5.25 A number of railway lines cross the study area providing connections between the major settlements of Manchester, Preston, Blackburn, Burnley, Halifax, Bradford and Leeds as well as towns and villages. These include the railway lines through the Calder valley, Aire valley, Ribblesdale, Lancashire valleys in the context of Blackburn, Burnley and Clitheroe, and the connection between Manchester and Huddersfield.

Recreational Receptors

- 12.5.26 Recreational walking and cycling routes are found within the 45km study area, including areas of Open Access Land and Common Land within the landscape. The Pennine Way, a National Trail, crosses directly through the Turbine Area and affords elevated views in most directions within 5–10 km of the Turbine Area. Similarly, the Pennine Bridleway runs along the southern boundary of the Turbine Area, at Ridehalgh Lane.
- 12.5.27 A number of long-distance paths are located nearby, including the Brontë Way (2km northwest of the Turbine Area), the Burnley Way (2.5–3km west and southwest of the Turbine Area), and the Calderdale Way (2km south of the Turbine Area near Hebden Bridge), all of which experience theoretical visibility of multiple turbines. Further afield, the Rossendale Way (9km southwest of the Turbine Area) has more limited visibility, restricted to higher elevations such as Cowpe Low. The Millennium Way, crossing Penistone Hill Country Park 2.2 km northeast of the Turbine Area, also contains viewpoints where maximum turbine visibility is anticipated. In addition, the Calder Aire Link passes directly through the Turbine Area, resulting in close-range views of the wind turbines and other infrastructure.
- 12.5.28 There are also several country parks within 45km of the Turbine Area. The closest of which are Wycoller Country Park (2km northwest of the Turbine Area), Langroyd Country Park (7.5km northwest of the Turbine Area), and Penistone Hill Country Park (2.8km northeast of the Turbine Area), which all experience visibility of between 1–10 turbines. Oakwell Hall Country Park (21km east of the Turbine Area) also has partial visibility from its eastern extents, while the Saltaire World Heritage Site and buffer zone, and Bradford Pennine Gateway National Nature Reserve (12km northeast of the Turbine Area) contain elevated viewpoints such as Hope Hill and Baildon Hill where the maximum number of turbines may be visible. In contrast, Ogden Water Country Park (4.6km east of the Turbine Area), Otley Chevin Country Park (21km northeast of the Turbine Area), and Lotherton Hall Estate Country Park (43km east of the Turbine Area) are predicted to have no intervisibility. Walton Country Park (37km southeast of the Turbine Area) theoretically experiences visibility of 11–20 turbines.

Local Attractions and Focal Points

- 12.5.29 There are a range of cultural associations, tourist attractions and focal points within the local landscape including the associations with the Brontë sisters, noting there are several specific points of interest in the landscape near the Turbine Area, including Top Withens and Brontë Waterfalls, together with Haworth and the Brontë Parsonage Museum to the north/northeast.

- 12.5.30 The Worth Valley Railway, as a preserved/heritage railway running between Keighley and Oxenhope, lies to the northeast of the Turbine Area. There are also multiple focal points in the landscape such as The Atom, the Singing Ringing Tree, Stoodley Pike Monument and Lund's Tower.
- 12.5.31 There are multiple National Trust properties in the 45km study area, with the closest to the Turbine Area being Hardcastle Crags and Pecket Well Clough within 5km to the south. In addition, the landscapes of the National Parks and National Landscapes (as described above) are key areas that draw visitors and local residents.

Further Data Collection

- 12.5.32 Further field survey work will be undertaken throughout the 45km study area and presented in the ES. This will include additional viewpoint photography to supplement the work already undertaken and presented as part of this PEIR. Additional viewpoint photography may also be required in response to consultation dialogue and feedback through Statutory Consultation.
- 12.5.33 Further detailed assessment of landscape character will be undertaken. This will include further development and appraisal of the ZTVs in the field, allowing a more detailed assessment of the potential effects of the Proposed Development to be presented in the ES.
- 12.5.34 The full RVAA will be undertaken alongside the preparation of the ES. This will involve specific assessment of individual properties and groups of properties to understand their local context and relationship with the Proposed Development.
- 12.5.35 Further field survey will be undertaken in relation to the Bradford West Cable Corridor and the Access Routes to further understand the potential effects of these elements of the Proposed Development. This will include analysis of arboricultural surveys in relation to potential for tree loss along the routes.

Future Landscape and Visual Conditions

Collection of Predicted Data

- 12.5.36 A desk study has been undertaken to identify the future baseline conditions, considering policy documents referenced in **Section 12.2**.

Future Baseline

- 12.5.37 The baseline character of the landscape in the study area is likely to change in the future as a result of the effects of climate change, land use policy, environmental improvements and development pressures, regardless of whether the Proposed Development progresses.

12.5.38 A range of policies in the documents referenced in **Section 12.2** impact on the management of the landscape, ranging from international obligations, national policy and regulation, through to community strategies and development frameworks. Landscape planning policies covering landscapes within the 45km study area, such as the National Parks and National Landscapes, generally seek to conserve and enhance the natural beauty of the area, while recognising the need to adapt to inevitable change over time, including the potential need to respond to development pressures that reflect the changing needs of society. With specific relevance to the Turbine Area, the Walshaw Moor Estate has worked with Natural England on the preparation of the Walshaw Moor Estate Catchment Restoration Plan⁶³.

12.5.39 There is overwhelming evidence that global climate change, influenced by the human use of fossil fuels, raw materials and intensive agriculture, is occurring⁶⁴. Any notable change in climate has the potential to result in changes to the landscape of the study area, such as woodland cover or settlement pattern.

12.5.40 Further development pressures which may change the baseline conditions include suburbanisation and increased tourist development influence, which have potential to increase the developed influence and reduce perceived naturalness of the landscape.

12.6 Environmental Measures

12.6.1 This section describes details of the landscape and visual related environmental measures which have been included within the design of the Proposed Development (as presented in **Chapter 4: The Proposed Development**). These measures are an inherent part of the design of the Proposed Development and have been included to benefit landscape and visual receptors and achieve positive effects where possible, as well as avoid, reduce or compensate for the adverse environmental effects of the Proposed Development.

Construction

12.6.2 The environmental measures included within the design of the Proposed Development, during the construction phase, include:

- Routeing and siting of elements of the Proposed Development to avoid notable landscape features, such as gullies/valleys, mature trees and woodlands, where practicable;

⁶³ Walshaw Moor Estate, with Natural England (December 2017) Walshaw Moor Estate Catchment Restoration Plan 2017 – 2042. Available at: [Walshaw Moor Estate Catchment Restoration 2017-2042 Plan - MRP002](#)

⁶⁴ IPCC (2014) Fifth Assessment Report (AR5 Synthesis Report).

- Habitat creation to be consistent with the local landscape character;
- Native grass/moorland species to be planted around the internal site access tracks to assist in blending the track into the surrounding moorland context; and
- Careful consideration of any planting proposals within the Turbine Area and along the Access Routes and the Bradford West Cable Corridor to complement the local landscape character.

12.6.3 The environmental measures include the objectives of management plans to be adhered to during the construction of the Proposed Development; to achieve positive effects and/or avoid or reduce adverse effects, such as the use of the following plans:

- Preparation and adoption of an oCEMP to reduce potential environmental effects; and
- An oLEMP will be prepared which will set out short term and long-term landscape and ecological objectives for the Proposed Development, including the proposed restoration measures following construction taking account of the surrounding local landscape character.

Operation and Maintenance

12.6.4 The environmental measures currently included within the design of the Proposed Development, during the operational and maintenance phase, include:

- Consideration of the layout of wind turbines, including the reduction in the number of wind turbines and substation to reduce landscape and visual effects where possible, including consideration of separation between key receptors and wind turbine locations, and the overall composition of turbines when viewed from locations surrounding the Proposed Development;
- The proposed colour of the upper parts of the turbine would be selected to blend with the predominant colour of the sky and have a semi matte finish to minimise reflectivity; and
- The Export Cables would be buried, avoiding overhead transmission cables.

12.6.5 The environmental measures include the objectives of management plans to be adhered to during the operation and maintenance of the Proposed Development; to achieve positive effects and/or avoid or reduce adverse effects, such as the use of the following plans:

- An oLEMP will be prepared, as described above;

- An oOEMP; and
- A Habitat Management and Monitoring Plan (HMMP).

Decommissioning

12.6.6 The environmental measures included within the design of the Proposed Development, during the decommissioning phase, include:

- Further consideration of retaining buried elements and use of reinstatement in situ to limit disturbance to vegetation and landscape elements.

12.6.7 The environmental measures include the objectives of management plans to be adhered to during the decommissioning phase of the Proposed Development; to achieve positive effects and/or avoid or reduce adverse effects, such as the use of the following plans:

- An oDEMP will be prepared and adopted to reduce potential environmental effects associated with this phase of the Proposed Development.

12.7 Potential Effects Scoped Out

12.7.1 This section lists the effects which are scoped out of the landscape and visual impact assessment as they are not considered likely to be significant. This includes the evidence that justifies this approach, as shown in **Table 12-10**.

Table 12-10: Potential Effects Scoped Out

Effects Scoped Out	Justification	Phase
LCTs/LCAs outside the ZTV	If there is no theoretical visibility of the Proposed Development from a particular LCT/LCA, no significant effects would arise in respect of this receptor.	Construction, operation and maintenance and decommissioning
Visual receptors outside the ZTV	If there is no theoretical visibility of the Proposed Development from a particular visual receptor, no significant effects would arise in respect of this receptor.	Construction, operation and maintenance and decommissioning

12.7.2 Where effects are scoped in, please refer to the scoped in effects section in the Preliminary Environmental Assessment below.

12.8 Preliminary Environmental Assessment

- 12.8.1 The Preliminary Environmental Assessment will detail the effects that are considered to be likely significant, including providing details of how and why such a conclusion has been reached.
- 12.8.2 This is a preliminary assessment of likely significant effects with the environmental measures in place, but without additional mitigation.

Construction Phase

Physical Effects on Physical Landscape Fabric

- 12.8.3 The principal effects on landscape receptors during this phase will comprise the physical effects on landscape features and elements resulting from the construction of the wind turbines and other infrastructure, including substation compound, internal site access tracks, hardstandings and borrow pits. In addition, the Proposed Development will result in changes away from Turbine Area, resulting from the construction of the Access Routes and Bradford West Cable Corridor.
- 12.8.4 The construction of the Proposed Development will result in the removal of ground cover vegetation and the localised removal of other landscape features, such as hedgerows and stone walls. The temporary construction facilities and plant, such as cranes, construction vehicles, construction compounds, laydown areas and delivery vehicles, required during the construction phase will also have effects on the landscape and visual resource. Details of the specific land take and associated habitat loss are included in **Chapter 8: Biodiversity**.
- 12.8.5 It is anticipated that construction of the Proposed Development will take approximately 30 months; the construction effects identified are therefore predicted to occur during this period and end at the start of the operational and maintenance phase. While the most widespread effects during the construction phase would relate to the tall cranes, it is anticipated that the cranes would be active for only a few months, making this a short-term effect. Further details will be provided in the ES.
- 12.8.6 The construction phase will result in changes across the Turbine Area. There will be disturbance to the moorland vegetation across the turbine area within the footprint of the wind turbines and associated foundations as well as other infrastructure, such as the internal site access tracks. The landscape of the Turbine Area lies within a locally designated SLA. It is also designated at a national and international level for its nature conservation value.
- 12.8.7 The footprint of the Proposed Development, within the Turbine Area and South Pennine Moors Landscape Character Area, will cover a relatively small area.

However, given the designations that apply to the landscape, there is potential for significant adverse effects to occur in relation to the physical effects of the Proposed Development.

- 12.8.8 A small part of the Eastern Access Route is located in the Calderdale SLA (Northern Calderdale Moorlands and Fringes). The Eastern Access Route also crosses the Haworth Moorland Plateau and Keighley Moorland Fringe Landscape Character Areas within Bradford District. The Western Access Route is routed across the South Pennine Moors, Trawden Fringe and Calder Valley Landscape Character Areas in Pendle Borough. The Western Access Route crosses Trawden Forest Conservation Area in the vicinity of Wycoller Country Park. It would result in new sections of track, together with local alterations to the existing road.
- 12.8.9 The Bradford West Cable Corridor crosses the Haworth Moorland Plateau, Keighley Moorland Fringe, Harden Upland Wooded River Valleys and Thornton Mixed Upland Pasture Landscape Character Areas within Bradford District. The Export Cable is intended to be undergrounded and therefore landscape effects would be primarily associated with the construction phase. Once the Export Cable is constructed the land would be restored to the current baseline use and condition. Landscape features or elements that would be removed during the construction phase, such as stone walls would be reinstated. Notable landscape features identified to date include the gulleys on the edge of the moorland plateau and the valley and disused railway near Denholme, in the vicinity of Meal Bridge, where trenchless techniques (such as horizontal directional drilling (HDD)) is proposed to be used to limit disturbance to the local landscape. There is potential for localised tree loss along the Bradford West Cable Corridor, and this will be reviewed in further detail in relation to an arboricultural survey that will be undertaken.
- 12.8.10 Given the potential sensitivities and designations that apply to the landscape where elements the Proposed Development would be located, the Applicant's preliminary assessment is that there is the potential for significant adverse effects to occur in relation to the physical effects. These are likely to be localised in extent and primarily associated with the Turbine Area and Access Routes. The temporary and reversible changes associated with the Bradford West Cable Corridor are less likely to result in significant adverse effects. However, these will be reviewed in more detail as part of the ES and in the context of an arboricultural assessment for the Cable Corridor.

Effects on Landscape Character and Visual Amenity

- 12.8.11 The effects on landscape character and visual amenity, arising as a result of the construction of the Proposed Development, are predicted to be no greater than those that would occur during operation and maintenance. The residual effects would be short-term and temporary, occurring during the length of this phase and

differing in nature from the operational effects mainly due the influence of the various construction activities and vehicles, which would not be present or result in effects during the operational and maintenance phase. Further detail will be provided as part of the ES.

Operational and Maintenance Phase

Physical Effects on Physical Landscape Fabric

- 12.8.12 The Applicant's preliminary assessment is that the physical effects on the landscape resource during the operational and maintenance phase is expected to be limited and not significant. There could be limited removal of vegetation as a consequence of maintenance operations, but such changes are expected to be small in extent and take place over a short duration.
- 12.8.13 Further detailed assessment of the direct effects on landscape features and elements and how any associated changes may continue into the operational and maintenance phase will be provided as part of the ES. The key consideration in this regard is likely to be potential for tree loss along the Bradford West Cable Corridor and Access Routes, which is under consideration. The design of these components of the Proposed Development is evolving to mitigate potential effects on landscape features and elements where practical and physical changes to the landscape will be restored, where practicable. The Export Cable will be buried along its length to reduce potential landscape and visual effects. As described in relation to potential effects relating to the construction phase, trenchless techniques (such as HDD) are proposed to be used in locations along the Bradford West Cable Corridor to reduce potential long-term landscape and visual effects, for example where a trenched cable could result in notable changes to local landform or vegetation. Further details will be provided within the ES.

Effects on Landscape Character

- 12.8.14 The presence of the Proposed Development in the landscape would have adverse effects on landscape character. Effects on landscape character would be widespread and occur across the 45km study area. The ZTVs show that visibility would be fragmented, but the relative elevation of the Turbine Area means that the wind turbines would be seen from multiple parts of the landscape. Theoretical visibility of the wind turbines occurs in all directions from the Turbine Area and from multiple LCAs throughout the study area. This is reflected in the analysis of landscape character areas included above. Theoretical visibility is concentrated on the higher ridges and plateaus, but also extends to lower lying landscapes such the southwest facing slopes of Airedale and the settled Lancashire valleys, around Colne and Burnley.

- 12.8.15 The most notable changes to landscape character are likely to occur within approximately 10km, where the wind turbines would form a more prominent element. Given this, the Applicant's preliminary assessment is that significant adverse effects are likely to occur in relation to multiple landscape character areas, particularly more elevated moorland and moorland fringe landscapes.
- 12.8.16 The Applicant's preliminary assessment is also that significant adverse effects are likely to occur in relation the South Pennine Moors LCA within Calderdale. This is the key local character area where the Turbine Area is located and the turbines would be visible across a large proportion of the South Pennine Moors. The presence of the Turbine Area within part of the character area and the extent of the wind turbines and associated infrastructure influences the size of the change. It is a landscape that already contains wind energy development, with Ovenden Moor Wind Farm located to the east of the Turbine Area. In addition, the Proposed Development would have a defined operational life (of approximately 35 years), requiring it to be removed and the footprint of the wind farm is intended to be restored, meaning it would be a reversible change (though underground infrastructure would be left in-situ). Overall, the Applicant's preliminary assessment is that the Proposed Development would result in significant adverse effects on this moorland landscape. Similar significant adverse effects would also occur in relation to the Haworth Moorland Plateau landscape character area in Bradford District and South Pennines Moor in Pendle District, which are continuations of the same moorland landscape.
- 12.8.17 The Applicant's preliminary assessment is that adverse effects are also predicted in relation to other occurrences of moorland and upland landscapes within the study area, which occupy the high ground that separate the valleys. These include Rombalds Moor, Ilkley Moor, Embsay Moor, Winterburn Moor, Scotthrop Moor, Hazelwood Moor, Beamsley Moor and Pendle Hill to the north, northeast and northwest, together with Saddleworth Moor, Wessenden Moor and Meltham Moor to the south. This selection of moors is not exhaustive and there are further occurrences of moorland within the study area. The open, elevated character of areas of moorland gives rise to views towards the Turbine Area and the ZTVs demonstrate theoretical visibility with the Proposed Development.
- 12.8.18 While there will be adverse effects on the character of the valleys surrounding the Turbine Area, the potential effects are likely to be less than those associated with the more elevated landscapes. The visibility of the operational wind turbines and associated infrastructure will be restricted by the landform, notably in relation to the steeply incised Calder valley in the vicinity of Hebden Bridge, Todmorden and Mytholmroyd. In the settled Airedale and Lancashire valleys to the north, northeast and northwest, the relative change associated with the Proposed Development will be influenced by extent of existing development/built form in the baseline

landscape. The turbines will result in changes to local character as the surrounding ridges form backdrops to the valley landscapes, but the baseline context will limit the degree of change.

- 12.8.19 There will be more notable changes to the less developed valleys closer to the Turbine Area, such as The Worth Upland Wooded River Valleys landscape character area to the north, where significant adverse effects are likely to occur in relation to the Proposed Development. This would result due to the proximity of Turbine Area and associated relative size of the turbines and the extent of theoretical visibility.
- 12.8.20 Valley landscapes further from the Turbine Area would be less influenced by the Proposed Development. In broad terms the ZTVs show reducing extents and more fragmented areas, of theoretical visibility. The increased separation distance would also reduce the relative size of the change.
- 12.8.21 Lesser effects on landscape character are also likely in relation to wider landscapes surrounding the Pennines, such as those in the vicinity of Wakefield, Barnsley, Manchester and Preston. While the proposed wind turbines are likely to be visible from certain locations, they will be seen as part of a broad backdrop of Pennine landscapes there influence over local character is likely to be limited. Therefore, significant adverse effects are not expected to occur in relation to such landscapes, but more detailed assessment will be provided in the ES.

Effects on Landscape Designations

- 12.8.22 The Applicant's preliminary assessment is that the Proposed Development has the potential to result in adverse effects on the perceived character of a number of landscape designations and their special qualities.
- 12.8.23 Significant adverse effects would occur in relation to the locally designated SLAs within Calderdale. This is the case for the Northern Calderdale Moorland and Fringes SLA, where the Turbine Area is located. Significant effects may also occur in relation to the Southern Calderdale Moorlands and Fringes SLA due to the extent of predicted visibility and its relative proximity (approximately 5km from the closest turbine). Potential effects are less likely to be significant in relation to the Hardcastle Crags, Hebden Water and Colden Water, Luddenden Dean, Shibden Valley, Ringstone Edge and Norland Moor Fringes and Cragg Vale SLAs due to a combination of factors including the local landform, woodland cover, intervening distances and theoretical visibility.
- 12.8.24 Local landscape designations will continue to be considered as part of the LVIA. Policies associated with local landscape designations typically relates to potential changes within the designation. Such designations will be taken into account in

relation to judgements on landscape value and how they inform sensitivity to the Proposed Development.

12.8.25 Four nationally designated landscapes lie within the study area:

- Yorkshire Dale National Park;
- Peak District National Park;
- Forest of Bowland National Landscape; and
- Nidderdale National Landscape.

12.8.26 None of the nationally designated landscape overlap with the footprint of the Proposed Development. In addition, the separation distance between the Access Routes and the Bradford West Cable Corridor means these elements of the Proposed Development are not likely to result in any adverse effects on these national designations. However, the ZTVs demonstrate the proposed wind turbines would be visible, with the potential for adverse perceptual effects.

12.8.27 The Yorkshire Dales National Park is located approximately 17km north of the closest proposed turbine. The ZTVs show theoretical visibility from the more elevated landscapes within the southern part of the National Park, particularly in the vicinity of Malham, Embsay Moor, Grassington Moor and Barden Fell. Further north, theoretical visibility becomes more fragmented though still associated with higher ground, such as Ingleborough and Pen-y-ghent. There is typically limited theoretical visibility in the lower parts of the Dales. The intervening distance will reduce the magnitude of change in relation to the landscapes of the Yorkshire Dales. However, the wirelines for Viewpoints 29 (on the boundary between the Yorkshire Dales and Nidderdale) and 31 in **Appendix 12-2** provide an indication of the potential views towards the Proposed Development from locations within the Yorkshire Dales National Park, with turbines predicted to be seen above the horizontal distant horizon.

12.8.28 The Peak District National Park is located approximately 22km south of the closest proposed turbine. The ZTVs show relatively limited and fragmented visibility from the northern part of the Peak District, in the vicinity of Saddleworth Moor, Wessenden Moor, Meltham Moor, Howden Moor and Bleaklow Hill. Visibility from lower lying landscapes is restricted by a series of ridges broadly orientated from east to west, both within the National Park and the intervening landscape to the north. The separation distance will influence the relative prominence of the proposed turbines, although the wireline for Viewpoint 30 demonstrates the array of turbines will be visible to the north.

- 12.8.29 The Forest of Bowland National Landscape comprises two discrete areas, a relatively small area focussed around Pendle Hill and a larger area to the northwest. The smaller area focussed around Pendle Hill is located just over approximately 10km to the northwest of closest proposed turbine. The larger area of the National Landscape is located approximately 18km to the northwest of the closest turbine. The outlying ridge of Pendle Hill comprises a distinctive landform in the landscape around Burnley and Clitheroe. The proposed turbines are predicted to be visible from the ridgelines and southeast facing slopes of Pendle Hill. Pendle Hill will truncate views toward the Turbine Area from parts of the National Landscape to the northwest, although the ZTV shows theoretical visibility from multiple locations including Eastington Fell, Ling Hill and Longridge Fell to the west and north of Clitheroe. In addition, there are further areas of fragmented visibility from higher ground further north and west, such as at Croasdale Fell, Catlow Fell and Wolf Fell. The wirelines, in **Appendix 12-2**, from Viewpoints 28 and 32 indicate the nature of views of the proposed turbines from the Forest of Bowland National Landscape.
- 12.8.30 Nidderdale National Landscape lies, at its closest point, approximately 18km to the northeast of the closest turbine. The ZTV shows that the higher landforms associated with Rombalds Moor and Ilkley Moor (outside of the designation), and also the Yorkshire Dales National Park restrict theoretical visibility from Nidderdale. The ZTVs show limited areas of theoretical visibility are dispersed across Nidderdale National Landscape. Areas from which the turbines are predicted to be seen are in the vicinity of Beamsley Moor (also see the wireline for Viewpoint 29, on the boundary between the Yorkshire Dales and Nidderdale, in **Appendix 12-2**), together with Heyshaw Moor and Heathfield Moor further north.
- 12.8.31 The Applicant's preliminary assessment is that there is potential for significant adverse effects to occur in relation to the nationally designated landscapes in the study area. This would be partly due to the high value, susceptibility and sensitivity of these landscapes. Further assessment of the effects on the nationally designated landscapes, including consideration of effects on their special qualities, will be included in the ES. The proposed turbines would be seen in the context of operational wind farms in the baseline landscape, with the Proposed Development adding to the field of view that would be occupied by wind energy developments. The highest levels of effect are likely to occur in relation to the Forest of Bowland National Landscape due to its closer proximity and the proposed turbines occupying the visible ridgeline to the southeast of Burnley. The Calder Valley to the south is steeply incised, giving rise to more limited visibility in and around Hebden Bridge, Mytholmroyd and Todmorden.

Effects on Visual Amenity

- 12.8.32 There is a high number of visual receptors located in the landscape context of the Proposed Development. This reflects the historical development of this landscape

and gives rise to a relatively settled landscape. The location of the Turbine Area on a moorland plateau in the South Pennine concentrates theoretical visibility on more elevated areas. However, theoretical visibility also extends into the settled surrounding valleys, including Airedale to the north and northeast, and the Lancashire valleys in which Colne and Burnley are located to the northwest.

- 12.8.33 In the Scoping Report, there were 32 proposed representative viewpoints. The viewpoint selection has evolved since the Scoping Report in response to the Scoping Opinion and associated commentary and this is anticipated to evolve further through comments provided during Statutory Consultation and further stakeholder engagement. A final list of viewpoints will be provided in the ES.
- 12.8.34 The viewpoints identified to date (which are the same as those in the Scoping Report) are shown on ZTVs Figures that support this Chapter, e.g. **Figure 12-5-1**. In addition, wireline visualisations have been prepared for these locations and are included in **Technical Appendix 12-2**. Viewpoint photography has been captured for a selection of these viewpoints and, where available, is presented alongside the wireline visualisations. Viewpoint photography is in the process of being obtained as part of the assessment process and will be included in the ES. It is acknowledged that additional viewpoints have been proposed as part of consultation feedback on the Scoping Report. It is anticipated that the viewpoint selection will further evolve through further consultation and engagement and in response to design refinement for the Proposed Development.
- 12.8.35 The settlement pattern is not limited to the valleys and, particularly at a local level, there are multiple settlements located at more elevated positions in the landscape. In closer proximity to the Turbine Area, these include Heptonstall, Slack, Pecket Well, Stanbury, Oldfield and Oakworth. This list is not exhaustive and a more comprehensive list of settlements in the study area, their proximity to the Turbine Area and the potential visibility of the proposed wind turbines is provided in **Section 12-5**. There is potential for significant visual effects to occur in relation to the residents of settlements surrounding the Turbine Area. This is particularly the case in relation to more elevated settlements, such as those identified above. This is demonstrated by the wireline visualisations for Viewpoint 12 at Slack and Viewpoint 13 at Stanbury, where the turbines would contrast with the baseline landscape. Significant effects are also likely to occur in relation to dispersed properties surrounding the Turbine Area.
- 12.8.36 Potential visibility from settlements within the valleys surrounding the Turbine Area is more restricted. The landform strongly influences the pattern of the ZTV and would reduce the theoretical visibility of the wind turbines. This is demonstrated by **Table 12-9**, which identifies that multiple settlements lie outside the areas of theoretical visibility. However, there are settlements within the valleys from which

the wind turbines would be visible. The wireline visualisations for Viewpoint 25 Riddlesden, Viewpoint 26 Crow Nest Bingley and Viewpoint 27 Western Edge of Baildon demonstrate views towards the Proposed Development from Airedale. Whilst Viewpoint 19 Colne, Viewpoint 24 Barrowford and Viewpoint 22 Burnley demonstrate the potential views from Lancashire valleys to the northwest and west. The Calder valley to south is steeply incised and limits the extent of theoretical visibility, although views from the southern edge of Hebden Bridge are represented by Viewpoint 16.

- 12.8.37 In addition to settlements, the Proposed Development is located in a landscape that contains dispersed properties. The density of such properties is low in the moorland areas, but increases on valley slopes, which have been enclosed and comprise farmland. This includes landscapes close to the Turbine Area, such as the Hebden Water and Crimsworth Dean valleys, the slopes of Crow Hill southeast of Hebden Bridge and the valleys between Haworth and Laneshaw Bridge to the north.
- 12.8.38 A number PRoW cross the study area. These are routed through a diverse range of contexts, including both the moorland plateaus and hill tops and the valley floors. Notable routes include the Pennine Way and Pennine Bridleway National Trails, together with multiple other promoted, waymarked paths such as the Brontë Way, Railway Children Walk, Millenium Way, Calder/Aire Link and Calderdale Way. These promoted routes cross the landscape within 5km of the Turbine Area, with concentrations in the Worth Valley to the north and Calder Valley to the south.
- 12.8.39 Several Viewpoints represent potential views likely to be seen from PRoW, including Viewpoint 3 on the Pennine Way at Top Withens, Viewpoints 5, 6 and 15 are also located on the Pennine Way and/or Pennine Bridleway. Viewpoint 11 is located at Penistone Country Park and Viewpoint 14 is located at the Atom in Wycoller Country Park. In the wider context, Viewpoints 29, 30, 31 and 32 represent locations in the Peak District National Park, Nidderdale National Landscape, the Yorkshire Dales National Park and the Forest of Bowland National Landscape.
- 12.8.40 The Applicant's preliminary assessment is that there are likely to be significant effect on people using these routes, especially within 5km of the Turbine Area. These include the Pennine Way and Pennine Bridleway, which run through or adjacent to parts of the Turbine Area. Potential effects on people using PRoW within the valleys surrounding the Turbine Area are likely to be reduced due to the way that landform influences theoretical visibility, an exception to this being the Worth valley to the north due to its relative proximity and topography. The intervening distance between the Turbine Area and locations in the surrounding nationally designated landscapes would reduce the magnitude of change. However, the sensitivity of routes through these landscapes is influenced by the national value of these landscapes.

- 12.8.41 Promoted Cycle Routes and canals are typically routed through valleys and lower lying landscapes, which limits theoretical visibility of the wind turbines. However, there is theoretical visibility from certain routes, particularly the Leeds Liverpool Canal and cycle routes within the Lancashire valleys and Airedale.
- 12.8.42 The road network is typically routed through the valleys surrounding the Proposed Development, which would restrict visibility of the turbines. However, there are notable departures from this pattern, including routes close to the Turbine Area. The A6033 crosses Oxenhope Moor immediately to the east of the Turbine Area (see Viewpoint 2). In addition, there are minor roads routed through the valleys and across the moorland within 5km of the wind turbines, such as Viewpoint 1 at the Pack Horse Inn, Viewpoint 12 at Slack and Viewpoint 13 at Stanbury. The Applicant's preliminary assessment is that it is likely that there will be significant adverse effects on the users of certain routes, particularly those within 5km of the Turbine Area.
- 12.8.43 Several railway lines are routed through the study area. These are routed through the valleys, and frequently through settled areas. A combination of landform and buildings are likely to restrict or prevent views of the Proposed Development for rail travellers. In addition, the sensitivity of rail travellers will be limited by the transient activity they are engaged in and the value associated with these routes and the landscapes they cross. Therefore, the Applicant's preliminary assessment is that potential effects on visual amenity for rail travellers are unlikely to be significant.
- 12.8.44 There are numerous local attractions and focal points in the landscape surrounding the Proposed Development, these are outlined in **Section 12-5** of this Chapter. The focal points often occupy elevated, open locations where the view contributes to the experience of visiting them. They also include Registered Parks and Gardens, shown in **Figure 12-3-2**, which certain properties being open to the public. Based on the ZTVs, the proposed wind turbines are likely to be visible from such locations. The closest focal point in the landscape surrounding the Turbine Area is Top Withens, which has associations with Emily Brontë and Wuthering Heights (see Viewpoint 3). The Applicant's preliminary assessment is that there are likely to be significant effect on people visiting local attraction and focal points, particularly within 10km of the Turbine Area, and potential effects on local attractions, landmarks and focal points in the landscape will be assessed in the ES.

Residential Visual Amenity

- 12.8.45 A detailed assessment of potential effects on residential visual amenity will be undertaken as part of the ES. Such effects are being considered as part of the design process and will continue to be considered as this is refined. The detailed assessment will consider potential effects on residential properties within 2km, which is the area identified in **Figure 12-5-5**. Calderdale Council suggested 5km in

their response to the Scoping Report (see **Table 12-3**). Guidance on the application of a 2km study area for Residential Visual Amenity Assessment (RVAA) is explained in Landscape Institute Technical Guidance Note 2/19⁶⁵, which recommends a preliminary study area of 1.5 to 2km. Based on this, and experience of other wind farm assessments, it is proposed that it is appropriate to focus on residential properties located within approximately 2km.

- 12.8.46 Detailed assessment of the potential effects on residential visual amenity will be undertaken for the ES. This section provides a preliminary assessment of the potential effects of the Proposed Development. It is anticipated that the detailed RVAA will group properties where they are in proximity to each other and have a similar context and outlook.
- 12.8.47 **Figure 12-5-5** shows residential properties within 2km of the proposed turbines. In addition, a series of wireline visualisations has been prepared for selected locations within 2km of the turbines. These locations are shown on **Figure 12-5-5** and are included in **Technical Appendix 12-3**. Properties within 2km of the turbines are concentrated within the Crimsworth Dean valley to the north of Hebden Bridge, and the upper parts of the Hebden Water valley (and associated tributaries) to the south of the Turbine Area. In addition, there are further properties within 2km to the northwest of the Turbine Area.
- 12.8.48 Properties to the northwest of the Turbine Area (see RVAA Viewpoint 1, **Technical Appendix 12-3**) are either close to the A6033 or more remote locations on the slopes of Haworth Moor. The immediate setting of each property varies, with vegetation surrounding certain properties to some degree. However, all the properties in this direction from the Turbine Area are located in an open moorland or upland pasture context.
- 12.8.49 The Crimsworth Dean valley (see RVAA Viewpoints 2, 3 and 4, **Technical Appendix 12-3**) comprises a rural valley with a dispersed pattern of farmsteads and individual residential properties. These properties are concentrated along Old Road, which is orientated roughly north – south, and comprises a ‘no through road’, accessed from the A6033. The landscape transitions from enclosed pastures on lower slopes to moorland, with moorland becoming prevalent above 300m to 400m AOD. The moorland plateau surrounding the valley rises to between approximately 422m and 452m AOD. The valley floor at Lumb Bridge (approximately mid-way up the valley) lies at approximately 250m AOD. The residential properties within the valley typically occupy an elevated, exposed position on the valley slopes. Vegetation provides a degree of enclosure around some properties. However, there are views over the surrounding landscape from most, if not all properties. Trees and

⁶⁵ Landscape Institute (2019), Residential Visual Amenity Assessment (RVAA) – Technical Guidance Note 02/19. Available: <https://www.landscapeinstitute.org/technical-resource/rvaa/>

shrubs around properties generally reduces with elevation (i.e. properties towards the head of the valley typically occupy an open, exposed position).

- 12.8.50 Properties to the south of the Turbine Area (see RVAA Viewpoints 5, 6 and 7, **Technical Appendix 12-3**) are typically close to the transition between the moorland that covers the majority of the Turbine Area and the more settled surrounding pastures. The context of the residential properties varies, but they are frequently open or have views to some degree in a northerly direction. While there is some vegetation around the residential properties, the effectiveness of this as a visual screen is likely to be limited by both the limited separation distance and the elevation difference between the properties and the bases of the turbines.
- 12.8.51 The separation distances between the turbines and the properties would be variable. However, turbines lie within 1km of certain properties. The turbines would also typically be visible from the roads or tracks leading to the properties, with these routes crossing landscapes that are open in character. The Applicant's preliminary assessment is that significant adverse effects would be identified in relation to effects on visual amenity for a number of residents within the 2km area. This is a consequence of the nature of the properties and characteristics of the local landscape, particularly where they occupy open, exposed positions. The number of turbines visible would be variable, as demonstrated by the ZTV in **Figure 12-5-5** and the wireline visualisations in **Technical Appendix 12-3**. The visibility of the proposed turbines would be more limited from certain properties, including some properties to the northwest of the Turbine Area. Further, detailed assessment in relation to the Residential Visual Amenity Threshold will be provided in the ES.

Assessment of 'Hours of Darkness' Visual Effects

- 12.8.52 The Civil Aviation Authority (CAA) requires that 'en-route obstacles' at or above 150m above ground level are lit with visible lighting to assist their detection by aircraft. As all turbines are over 150m in height, there will be a requirement for some or all of these turbines to display visible red lights at night and an hours of darkness assessment of effects is required. The lights will be placed on the nacelles (and potentially the towers) of the turbines.
- 12.8.53 A detailed assessment of turbine lighting will be undertaken and presented in the ES based on Guidance on Aviation Lighting Impact Assessment⁶⁶. It is intended this will determine the likely effects that the Proposed Development will have on the visual resource (e.g. it is an assessment of the effects of visible aviation lighting on views experienced by people during hours of darkness). The Applicant's preliminary assessment is that the turbine lighting is likely to result in significant adverse effects. These effects are most likely to occur in relation to the more remote landscapes in

⁶⁶ NatureScot (2024) Guidance on Aviation Lighting Impact Assessment.

the immediate context of the Turbine Area and upland landscapes in the study area. Significant effects are less likely to occur in relation to visual receptor in the settled valleys due to the baseline lighting context.

- 12.8.54 The assessment of hours of darkness effects will be informed by a ZTV of the turbine lights and night-time visualisations from up to five viewpoints, to be agreed with Natural England and key local authorities within the study area (based on the extent of the ZTV), that illustrate the proposed lighting effects. These viewpoints will represent locations from where people are most likely to experience the Proposed Development at night. It is anticipated the night-time specific viewpoints will be selected as the design of the Proposed Development is refined to ensure they are relevant to the assessment.

Decommissioning Phase

- 12.8.55 The effects associated with decommissioning for landscape and visual receptors would be comparable with, or less than, those associated with the construction phase. Therefore, the Applicant's preliminary assessment is therefore that the decommissioning of the Proposed Development has the potential to result in significant adverse landscape and visual effects, with these primarily associated with the decommissioning of the wind turbines. These are less likely to be significant than the construction phase effects as there will be less physical disturbance to the landscape, with certain elements left in situ rather than being removed. However, these effects will be assessed in more detail in the ES.
- 12.8.56 The residual effects associated the decommissioning phase would be short-term and temporary occurring during the length of the decommissioning phase. They would differ in nature from the operational effects mainly due the influence of the various decommissioning activities that would be seen, which will not be present or result in effects during the operational and maintenance phase. Further detailed assessment of the effects of the decommissioning phase will be presented in the ES.

Next Steps

- 12.8.57 In summary, the next steps include further detailed assessment, considering feedback through consultation and engagement, design refinement and further baseline data collection (e.g. arboricultural surveys).

12.9 Conclusions

- 12.9.1 The proposed wind turbines are not within or close to a nationally designated landscape. However, parts of the Yorkshire Dales National Park, Peak District National Park, Forest of Bowland National Landscape and Nidderdale National Landscape are located within the 45 km study area, the closest being the Forest of

Bowland National Landscape, approximately 10 km to the northwest at its closest point. The Turbine Area, together with parts of the Access Routes and Bradford West Cable Corridor, is located within a landscape that is locally designated a Special Landscape Area (SLA).

- 12.9.2 It is likely that there will be significant adverse effects on landscape character and designations as a result of the Proposed Development. The extent of these effects will be presented in further detail in the ES. At present, significant effects are likely to occur in relation to the Northern Calderdale Moorlands and Fringes Special Landscape Area in Calderdale. There is also potential for significant effects to occur in relation to surrounding nationally designated landscapes, such as the Forest of Bowland National Landscape.
- 12.9.3 In terms of potential effects on visual amenity, there are likely to be significant effects in relation to a range of visual receptors in the context of the Proposed Development. These effects are most likely to occur in relation to visibility of the proposed wind turbines. Key considerations include the closest settlements and dispersed properties, with significant adverse effects likely in relation to settlements such as Slack, Stanbury and Oakworth. In addition, there are likely to be significant adverse effects, associated with the operational and maintenance phase, on people using PRow in the context of the Turbine Area, including people using the Pennine Way and Pennine Bridleway National Trails. Cycle routes, canals, railway lines and the road network is generally focused within the valleys surrounding the Proposed Development, with landform likely to reduce potential adverse effects. However, significant adverse effects are likely to occur in relation to certain receptors, where there are close range, open views of the Proposed Development. There are many visual receptors within the 45km study area and more detailed assessment will be undertaken and presented in the ES.
- 12.9.4** In relation to the closest residential properties, there are multiple properties within the proposed 2km RVAA study area. There would be direct views of the turbines from the closest properties. While vegetation may filter some of these views, many of the properties are located in open, exposed locations with views over the surrounding landscape. It is considered the proposed turbines would result in significant adverse visual effects on residential amenity. Further detailed assessment regarding the Residential Visual Amenity Threshold will be provided in the ES.
- 12.9.5 **Table 12-11** presents a summary of the preliminary assessment of likely significant effects, with further information. It also includes the next steps to be undertaken as part of the EIA process.

Table 12-11: Summary of Preliminary Assessment of Likely Significant Effects

Component	Preliminary assessment of Likely Significant Effect	Additional Mitigation	Residual Effect	Next Steps
Turbine Area	Potentially significant effects on landscape and visual receptors	Refinement of turbine and associated infrastructure layout	Likely to remain significant	Further detailed assessment, considering feedback through consultation and engagement, design refinement and further baseline data collection (e.g. arboricultural surveys).
Western Access Route	Potentially significant effects on landscape and visual receptors.	Refinement of track routing, avoiding disturbance to landscape features and elements	Likely to remain significant	
Eastern Access Route	Potentially significant effects on landscape and visual receptors.	Refinement of track routing, avoiding disturbance to landscape features and elements	Likely to remain significant	
Bradford West Cable Corridor	Potentially significant effects during the construction phase, reducing during the operational and maintenance phase.	Routing, use of trenchless techniques (e.g. HDD) to limit effects on landscape features and elements	Potential to reduce to not significant	

