

A. Appendix 1: LVA Methodology

A.1 Introduction

- A.1.1 *"Landscape and Visual Impact Assessment is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and people's views and visual amenity."* (GLVIA3, paragraph 1.1). Wherever possible, identified effects are quantified, but the nature of landscape and visual assessment requires interpretation by professional judgement. In order to provide a level of consistency to the assessment, the prediction of magnitude and assessment of significance of the residual landscape and visual effects have been based on pre-defined criteria.
- A.1.2 The Guidelines for Landscape and Visual Assessment (Third Edition) (GLVIA3) states that *"professional judgement is a very important part of the LVIA"* (paragraph 2.23) and that *"in all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others."* (paragraph 2.24).
- A.1.3 Landscape and Visual Assessments are separate, though linked processes which GLVIA3 notes are "related but very different considerations". The assessment of the potential effect on the landscape is carried out as an effect on the environmental resource (i.e. the landscape). Visual effects are assessed as an inter-related effect on people.
- A.1.4 Landscape effects derive from changes in the physical landscape elements which may give rise to changes in its distinctive character and how this is experienced, including consideration of aesthetic and perceptual aspects.
- A.1.5 Visual effects relate to changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes and to the overall effects with respect to visual amenity.

A.2 Establishing the Baseline

- A.2.1 The **baseline** for consideration of landscape and visual effects is evaluated through desk study and site work and is the current situation at the time of the assessment, unless noted otherwise. Any other existing developments including those under construction are considered as part of the baseline and included as part of the assessment of landscape and visual effects.
- A.2.2 The **future baseline** is considered to be changes to the landscape which are considered certain or likely to happen – including consented proposals which are not yet present in the landscape but are expected to be constructed. These may or may not be included as part of the landscape and visual baseline depending on individual project circumstances and the approach and reasoning is set out within the assessment.

A.3 Landscape Effects

- A.3.1 The starting point for any assessment is a desk based assessment of published landscape studies, which may include landscape character assessments, sensitivity and capacity studies and/or landscape designation reviews. These documents are listed in the LVA and relevant extracts included where this is judged appropriate.
- A.3.2 The landscape effects of the proposed development are considered against the key characteristics of the receiving landscape. The degree to which the proposed development changes *‘distinct and recognisable patterns of elements, or characteristics, in the landscape that make one landscape different from another, rather than better or worse’* (‘An Approach to Landscape Character Assessment’, Natural England, 2014), enables a judgement to be made as to the significance of the effect in landscape character terms.
- A.3.3 Direct and indirect landscape effects are defined in GLVIA3. Direct effects may be defined as resulting *“directly from the development itself”* (paragraph 3.22). An indirect (or secondary) effect is one that results *“from consequential change resulting from the development”* (paragraph 3.22) and is often produced away from the site of the proposed development or as a result of a complex pathway or secondary association. The direct or physical landscape effects of the proposed development would generally be limited to within the planning application boundary. The indirect landscape effects are concerned with the visual effects and relate to effects associated with the introduction of the development seen in the context of the existing landscape and visual character of the view.
- A.3.4 In order to reach an understanding of the effects of development upon the landscape resource it is necessary to consider different aspects of the landscape baseline including:
- **Landscape Fabric/Elements:** The individual features of the landscape, such as hills, valleys, woods, hedges, tree cover, vegetation, buildings and roads for example which can usually be described and quantified.
 - **Landscape key characteristics:** The particularly notable elements or combinations of elements which make a particular contribution to defining or describing the character of an area, which may include experiential characteristics such as wildness and tranquillity.
- A.3.5 The **sensitivity** (high, medium, low) of the landscape to a particular development is considered on a case by case basis and considers the susceptibility of the landscape, which varies depending on the type of development proposed and the particular site location, and the landscape value (identified as national, regional, or community). As stated in GLVIA3, *‘LVIA sensitivity is similar to the concept of landscape sensitivity used in the wider arena of landscape planning, but is not the same’*.
- A.3.6 **Landscape value:** The importance attached to a landscape, often used as a basis for designation or recognition which expresses national or local authority consensus, because of its special qualities/attributes. The factors which are considered in landscape include aesthetic or perceptual aspects such as scenic beauty, tranquillity or wildness or cultural associations as well as recreational/community value, conservation interests, landscape character and condition and representativeness/rarity.

A.3.7 **Landscape susceptibility** according to GLVIA3 means “*the ability of the landscape to accommodate the proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies*”. Judgements on landscape susceptibility (high, medium, low) include references to both the physical and aesthetic characteristics and the potential scope for mitigation.

A.3.8 Susceptibility of landscape character areas are influenced by their characteristics and are often considered (though often recorded as ‘sensitivity’ rather than susceptibility) within landscape character assessments and capacity studies.

A.3.9 Susceptibility of designated landscapes is influenced by the nature of the special qualities and purposes of designation and/or the valued elements, qualities or characteristics, indicating the degree to which these may be unduly affected by the development proposed.

A.3.10 The criteria and the detailed judgements regarding susceptibility and value of landscape receptors are identified within the sensitivity tables included within Appendix 3 to this assessment.

A.3.11 Sensitivity is judged taking into account the component judgments about the value and susceptibility of the receptor as illustrated by the table below. Where sensitivity is judged to lie between levels, an intermediate assessment will be adopted.

		Susceptibility		
		High	Medium	Low
Value	National	High	High/Medium	Medium
	Regional	High/Medium	Medium	Medium/Low
	Community	Medium	Medium/Low	Low

A.3.12 The **magnitude of landscape change** arising from the proposed development at any particular location is assessed in terms of its size or scale, geographic extent of the area or receptor that is influenced and its duration and reversibility.

A.3.13 The **scale** of the change takes account of:

- degree of loss or alteration to key landscape features/elements; characteristics; and for designated areas – special qualities and/or purposes of designation;
- distance from the development;
- landscape context to the development;

A.3.14 The approach to assessing effects on landscape character is to consider the key characteristics for the Landscape Character Type (LCT) within which the proposed development is located (host) and the adjacent LCT’s (non-host) and identify which of these the proposed development would affect. For the host LCTs, a large scale change in landscape character is likely to occur where key characteristics would be lost or substantially changed. Where particular views are a key characteristic of a landscape type, large or medium scale landscape character effects may occur where the proposed development becomes a key feature of those views. A similar approach applies to designated landscapes, for which the effects on the defined purposes of designation and special qualities are considered.

A.3.15 Having established the size/scale of change (large, medium, small, negligible) to the landscape baseline, the geographic **extent** of the change can be identified (wide, intermediate, localised or limited) and a judgement made as to the degree of change for each landscape receptor.

A.3.16 **Duration** and reversibility can be linked depending on the nature of the development. Reversibility is a judgement about the ability and practicality of the proposed development to be reversible (such as solar farms which are predominantly reversible), partially reversible to something similar (such as mineral extraction¹) or a permanent change in the landscape (such as housing). Duration reflects how long the change will last. The duration of the change would be considered short term when lasting less than 2 years; medium term when lasting between 2 and 10 years; or long term when lasting between 10 and 40 years, and permanent when the effect lasts in perpetuity.

A.3.17 Magnitude is considered taking into account the three contributory factors as illustrated by the diagrams included at section A.5 below.

A.4 Visual Effects

A.4.1 In order to identify the significance of a visual effect it is necessary to establish the relative sensitivity of the viewers and the magnitude of the change they experience. In this case sensitivity is a combination of both susceptibility of the viewer to the proposed development and the value of the views obtained.

A.4.2 Those living within view of the scheme are usually regarded as the highest susceptibility group as well as those engaged in outdoor pursuits for whom landscape experience is the primary objective. The susceptibility of potential visual receptors will also vary depending on the activity of the receptor. For visual receptors susceptibility and value are closely linked - the most valued views are also likely to be those where viewer's expectations will be highest.

A.4.3 The **value** of public views, which is the focus of GLVIA3, is identified as national, regional or community and will vary depending on the nature, location and context of the view and the recognised importance of the view. Considerations include cultural associations; designation or policy protection; views of or from landmarks; and/or the scenic quality of the view. The value attributed relates to the value of the view, e.g. a National Trail is nationally valued for access, but not always for the available views from every section.

A.4.4 Visual receptor **susceptibility** is defined as high, medium, or low in accordance with the criteria below.

- High - Local residents; users of outdoor recreation focussed on the appreciation of views including footpaths, beauty spots and picnic areas; people experiencing views to or from important features of physical, visual, cultural or historic interest.

¹ GLVIA3 page 91, paragraph 5.52

- Medium - Local road users and travellers on trains. People engaged in outdoor recreation with some appreciation of the landscape e.g. road cycling, nature conservation, golf and water based recreation.
- Low - Workers, users of facilities and commercial buildings (indoors) experiencing views from buildings. Road and rail users on fast moving commuting or trunk routes. Visual receptors where views are incidental to the activity and/or location.

A.4.5 Sensitivity is judged taking into account the component judgments about the value and susceptibility of the receptor as illustrated by the table below. Where sensitivity is judged to lie between levels, an intermediate assessment will be adopted.

		Susceptibility		
Value		High	Medium	Low
	National	High	High/Medium	Medium
	Regional	High/Medium	High/Medium	Medium/Low
	Community	High/Medium	Medium	Low

A.4.6 The **magnitude of visual change** arising from the proposed development at any particular location is assessed in terms of its size or scale (large, medium, small, negligible), geographic extent of the area or receptor that is influenced (wide, localised, limited) and its duration (short, medium, long, permanent).

A.4.7 The representative viewpoints are used as 'samples' on which to base judgements of the scale of effects on visual receptors. The wider extent of the effect and its duration are not captured in the viewpoint analysis (as a viewpoint cannot capture these factors for an entire route or area). As duration and extent are necessary considerations in determining magnitude of change; magnitude and significance judgements are provided for visual receptors and not for all representative viewpoints. The exceptions to this are specific viewpoints – where people visiting that location to look at the view are assessed as a visual receptor group.

A.4.8 With the exception of specific viewpoints, each route and receptor group will encompass a range of possible views, which might vary from no view of the development to very clear, close views. Therefore effects are described in such a way as to identify where views towards the development are likely to arise and what the scale and duration and **extent** (wide, intermediate, Localised, Limited) of those views are likely to be. In some cases this will be further informed by a nearby viewpoint and in others it will be informed with reference to ZTV studies, aerial photography and site visits. Each of these individual effects are then considered together in order to reach a judgement of the effects on the visual receptors along that route, or in that place.

A.4.9 The **scale of effect** arising from the proposed development at any particular viewpoint reflects the degree to which the nature of the views from that location would be changed and is taking into account:

- The distance of the viewpoint from the development;
- the degree to which the development is visible or screened;

- the angle of view in relation to main receptor activity or main focus of the view;
- the horizontal and vertical field of view occupied by the development; and
- the extent and nature of other built development visible.

A.4.10 The approach to assessing effects on views is to consider the full 360 degree view from any given receptor – not just those towards the development and/or shown in visualisations. It is assumed that the change would be seen in clear visibility and the assessment is carried out on that basis. Where there are other operational (and consented) developments considered as part of the baseline, the visual effects consider the effects of adding the proposed development to that baseline. Where appropriate, comment may be made on lighting and weather conditions.

A.4.11 **Duration** reflects how long the change will last and are rated in the same way as described above for landscape effects. The duration of the change would be considered short term when lasting less than 2 years; medium term when lasting between 2 and 10 years; or long term when lasting between 10 and 40 years, and permanent when the effect lasts in perpetuity. For visual receptors moving through the landscape (e.g. road and rail users), the length of their journey during which they would see the development is reflected in the judgement of the geographic extent of effects.

A.4.12 Magnitude is considered taking into account the three contributory factors as illustrated by the diagrams included at section A.5 below.

A.5 Magnitude of Landscape and Visual Change

A.5.1 Scale of effect is the first factor in determining magnitude; which may be higher if the effect is particularly widespread and/or long lasting, or lower if it is constrained in geographic extent and/or timescale. The tables below illustrate how this judgement is considered as a two-step process. Firstly, scale and extent are considered, for which the outcomes are illustrated by the first part of the table; the second part of the table illustrates the influence of duration on this initial judgement. Where magnitude is judged to lie between levels, an intermediate assessment will be adopted.

Scale / extent		Large	Medium	Small	Negligible
	Wide	Substantial			
	Intermediate		Moderate		
	Localised			Slight	
	Limited				Negligible

Stage 1 Result/ Duration		Substantial	Moderate	Slight	Negligible
	Permanent	Substantial			
	Long-term		Moderate		
	Medium-term			Slight	
	Short-term				Negligible

A.6 Significance of Landscape and Visual Effects

- A.6.1 The significance of any identified landscape or visual effect is assessed as major, moderate, minor or negligible. These categories are based on the consideration of sensitivity with the predicted magnitude of change. The table below is not used as a prescriptive tool and illustrates the typical outcomes, allowing for the exercise of professional judgement. In some instances a particular parameter may be considered as having a determining effect on the analysis.

Receptor Sensitivity	Magnitude of Change				
		Substantial	Moderate	Slight	Negligible
	High	Major	Major/ Moderate	Moderate	Minor
	Medium	Major/ Moderate	Moderate	Moderate/ Minor	Minor/ Negligible
	Low	Moderate	Moderate/ Minor	Minor	Negligible

A.7 Beneficial/Adverse

- A.7.1 Landscape and visual effects can be beneficial or adverse and in some instances may be considered neutral. Neutral effects are those which overall are neither adverse nor positive but may incorporate a combination of both. Whether an effect is beneficial, neutral or adverse is identified based on professional judgement. GLVIA 3rd edition indicates at paragraph 2.15 that this is a “*particularly challenging*” aspect of assessment, especially in the context of a changing landscape.

ANNEX 1: GLOSSARY OF TERMS

Term	Definition
CLVIA	Cumulative Landscape and Visual Impact Assessment.
Cumulative Effects	Cumulative effects are the additional effects arising from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.
Direct Effect	A direct (or primary) effect may be defined as an effect that is directly attributable to the development. ²
GLVIA3	<i>'Guidelines for Landscape and Visual Impact Assessment, Third Edition'</i> , published jointly by the Landscape Institute and Institute of Environmental Management and Assessment 2013.
Indirect Effect	An indirect (or secondary) effect is an effect that results indirectly from the proposed project as a consequence of the direct effect, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects. ³
Key Characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
LVIA	Landscape and Visual Impact Assessment.
Landscape Capacity	The amount of change which a particular landscape character type or area is able to accommodate without significant detrimental effects on its character. Capacity is likely to vary according to the type and nature of change proposed.
Landscape Character	The distinct and recognisable pattern of elements in the landscape that makes one landscape different from another, rather than better or worse. ⁴
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape type. ⁵
Landscape Character Types	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur, they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
Landscape Effects	Effects on the landscape as a resource in its own right. ⁶
Landscape Elements	Individual components which make up the landscape such as trees and hedges.
Landscape Features	Particularly prominent or eye-catching elements, like tree clumps, church towers or wooded skylines.

² The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p155

³ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p156

⁴ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p156

⁵ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

⁶ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

Landscape Quality or Condition	This is a measure of the physical state of the landscape. It may include the extent to which a typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements. ⁷
Landscape Receptor	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Landscape Resource	The combination of elements that contribute to landscape context, character and value.
Landscape Value	The relative value or importance attached to different landscapes by society on account of their landscape qualities. ⁸
Level of Effect	Determined through the combination of sensitivity of the receptor and the proposed magnitude of change brought about by the development.
Magnitude (of effect)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.
Mitigation	Measures including any process, activity or design to avoid, reduce, remedy or compensate for adverse environmental impact or effects of a development.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.
Residential Visual Amenity	A collective term describing the views and visual amenity from a residential property, relating to the type, nature, extent and quality of views that may be experienced from the property and its 'domestic curtilage' including gardens and access driveway. Residential Visual Amenity is only one component of the overall Residential Amenity, others being for example noise, shadow flicker and access amongst others.
Residual Effects	Potential environmental effects remaining after mitigation.
Sense of Place	The essential character and spirit of an area: <i>genius loci</i> literally means 'spirit of the place'.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor. ⁹
Significant Effects	It is a requirement of the EIA Regulations to determine the likely significant effects of development on the environment which should relate to the level of an effect and the type of effect. Where possible significant effects should be mitigated. The significance of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and sensitivity of the receptor) that should be attached to the impact described. Whether an effect should be considered significant is not absolute and requires the application of professional judgement.
Type or Nature of Effect	Whether an effect is direct, indirect, temporary or permanent, positive (beneficial), neutral or negative (adverse) or cumulative.
Visual amenity	Value of a particular place in terms of what is seen by visual receptors taking account of all available views and the total visual experience.

⁷ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

⁸ The Landscape Institute; Technical Guidance Note 02/21 Assessing Landscape Value Outside National Designations

⁹ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

Visual Effect	Effects on specific views and on the general visual amenity experienced by people. 10
Visual Receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visualisation	Computer simulation, photomontage or other technique to illustrate the appearance of a development. 11
Wildness	A quality of appearing to be remote, inaccessible and rugged with little evidence of human influence.
Wireframe or Wireline	A computer generated line drawing of the DTM (Digital Terrain Model) and the proposed development from a known location.
Zone of Theoretical Visibility (ZTV)	Area within which a proposed development may have an influence or an effect on visual amenity. 12

¹⁰ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

¹¹ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

¹² The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

A. Appendix 2: Viewpoint Analysis

A.1 Introduction

- A.1.1 Viewpoint analysis has been carried out from a selection of representative viewpoint locations to inform the assessment of landscape and visual effects arising as a result of the Proposed Development.
- A.1.2 Ten viewpoints have been used for analysis in the LVA. An initial selection of 8 viewpoints was set out in a consultation letter submitted to Staffordshire Moorlands District Council (SMDC) on 19th July 2021. The initial selection of viewpoints was based on analysis of the ZTV and desk studies. Comments on the viewpoints were received from Steve Massey at SMDC on 28th July. Two additional viewpoints were subsequently included in the assessment; one from Rownall Road by the Proposed Development's main site entrance and one from a section of Footpath Cheddleton 53 at the south west corner of the site.
- A.1.3 The location of the selected viewpoints is shown on Figures 4 and 5. Details for each viewpoint are provided below. Annotated panoramic photographs are provided to illustrate the existing view at each viewpoint location and the likely extent of the Proposed Development within the view. A summary of the viewpoint analysis is provided in the main LVA chapter.
- A.1.4 This viewpoint assessment considers the nature of the predicted view and the scale of change. The wider extent of the effect (beyond the individual viewpoint considered), and its duration, are not captured in the viewpoint analysis (as a single viewpoint cannot capture extent or duration) and are considered in the LVA chapter. Extent and duration are factors in the overall judgement on magnitude of change, therefore judgements on magnitude of change and overall level of effect and significance are also provided in the main assessment.
- A.1.5 The method of assessment used for the viewpoint analysis, which is described in Appendix 1, accords with current best-practice guidance for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Management, 2013). Observations are made of the baseline landscape and visual characteristics at each of the representative viewpoints. Observations and professional judgement are applied to determine the scale of change attributable to the Proposed Development (**Large, Medium, Small and Negligible**) upon landscape character and visual amenity at each individual viewpoint in order to determine the scale of effect.
- A.1.6 The visual assessment takes into account the screening effect of intervening landform, vegetation and built form. It assumes excellent clear weather conditions; although the influence of different seasons, weather, sunlight and visibility conditions have been considered, where relevant.

Viewpoint 1	Footpath Cheddleton 19
Distance/ Direction from Development	0.5km North
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	Public Right of Way (PROW) users
Existing View	Elevated view from a section of footpath as it traverses through undulating arable farmland on an east to west orientation. The site is located to the south of the viewpoint, within the middle-distance view and is partially screened by mature, hedgerow trees located along the site's northern boundary and within the central tree belt of the site. Views into the site itself are mainly filtered by the trees. Trees and woodland blocks within adjacent fields combine to create a well vegetated buffer which contains the majority of longer-range views, although distant views of the hills on the opposite side of the Churnet Valley are possible to the southeast. In the foreground of the view a large agricultural outbuilding and small stable block, introduce built form into the landscape. This is further accentuated by the cluster of electricity transmission pylons, overhead cables and infrastructure within the electricity substation to the southwest of the view.
Predicted View & Scale of Visual Change	The battery storage would be contained to the western part of the site with existing boundary vegetation supplemented by additional shrub and tree planting along the site's northern edge. It is anticipated that the proposed closed board timber acoustic fence would be partially visible albeit heavily filtered and softened by the existing vegetated northern boundary. The proposed access road will be screened by the boundary hedgerows. The scale of change in the view from this viewpoint would be Medium initially (in winter months only – Small in summer months) reducing to Negligible once the mitigation planting along the northern boundary of the site, and the access road, has established to 4m in height. No long distance views would be interrupted by the new development and mitigation planting. During Construction there would be a large scale of change in the view due to the presence of cranes and moving machinery.
Scale of Change to Landscape Character	The battery storage facility would initially form a notable but not prominent feature of the wider landscape as experienced at this viewpoint. The character of the landscape would continue to be predominantly influenced by a mosaic of open arable fields and arable fields bounded by mature, outgrown hedgerow trees. The presence of the pylons, cables and substation infrastructure already introduce an element of infrastructure into the landscape and the new development would not be out of character in this context. The scale of change in landscape character from this viewpoint would be Medium initially reducing to Negligible once the mitigation field margin planting along the northern boundary of the site has established to 4m in height. During Construction there would be a medium scale of change in landscape character due to the presence of cranes and moving machinery.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 2	Rownall Road
Distance/ Direction from Development	0.15km North, northeast
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	Recreational and minor road users
Existing View	View from minor road, where a gap in hedgerow field boundaries and roadside vegetation, permits a view towards the northern boundary of the site. The foreground of the view is dominated by a large, open arable field which gives way to the mature, hedgerow trees located along the site's northern boundary. Views into the site itself are mainly filtered by these trees. Longer range views are contained by both localised landform, field boundary trees and woodland blocks. Views along Rownall Road are limited due to roadside vegetation and the undulating nature of the road. A single electricity transmission pylon with overhead cables is visible to the west of the site but in winter months the Cellarhead Substation is likely to be visible to some degree.
Predicted View & Scale of Visual Change	The battery storage would be contained to the western side of the site with existing boundary vegetation and the tree belt through the centre of the site supplemented by additional screening planting along the site's northern edge. It is anticipated that initially the proposed 4m acoustic fence would be partially visible and screen the new internal infrastructure. The proposed access road will enter the site from the east, off Rownall Road, with proposed new hedgerow screening adjacent to the access road. The scale of change in the view from this viewpoint would be Medium initially reducing to Small once the mitigation planting along the northern boundary of the site has established to 4m in height. During Construction there would be a large scale of change in the view due to the presence of cranes and moving machinery and activity in the eastern field of the site.
Scale of Change to Landscape Character	The battery storage facility would initially form a notable feature in the adjoining fields as experienced at this viewpoint. The character of the landscape would continue to be predominantly influenced by a mosaic of open arable fields and arable fields bounded by mature, outgrown hedgerow trees. The presence of the pylons, cables and winter views of the substation infrastructure already introduce an element of infrastructure into the landscape and the new development would not be particularly out of character in this context. The scale of change in landscape character from this viewpoint would be Medium initially reducing to Negligible once the mitigation field margin planting along the northern boundary of the site, and the hedgerow adjacent to the access road, have established to 4m in height. During Construction there would be a large scale of change in landscape character due to the presence of cranes and moving machinery.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 3	Rownall Road by the proposed site entrance
Distance/ Direction from Development	0.0km Northeast (Adjacent to site entrance)
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	Recreational and minor road users
Existing View	View from minor road by the main field entrance located on the east of the site which will serve as the main access for the Proposed Development. The arable field within the site is open although the landform rises slightly in height as it runs from the road towards the west. The localised topography and the trees within and around the site restrict longer range views to the south and west although a short break in the tree line allows a glimpse of infrastructure within the existing electricity substation. Views along Rownall Road are framed by field boundary hedgerow on both sides of the road and extend into the middle distance as far as the group of mature trees within the curtilage of Rownall Hall Farm.
Predicted View & Scale of Visual Change	The battery storage will be sited in the western part of the site, beyond the tree line which runs across the middle of the site (from south to north); this tree line would be supplemented by additional screening planting. The acoustic barrier on the eastern edge of the storage compound will be visible initially although in the intervening period before construction the boundary hedgerow will be allowed to grow such that it will partially obscure the fence. Additional tree planting and shrubs will be planted in gaps between the existing trees on this boundary. Views of the fence will therefore be heavily filtered and softened by boundary vegetation from the outset. It is anticipated that the proposed acoustic fence would screen the battery storage infrastructure as well as obscuring the view of the existing electricity substation. The proposed access road, which will be a sealed road approximately 3m wide, will enter the site through the existing field gate. The access road will align itself closely with that of the northern boundary without impacting on the root protection zones of the existing trees. Within a matter of 5-10 years new hedgerow planting along the access road will prevent any view of the storage compound and integrate the new road into the landscape. The scale of change in the view from this viewpoint would be Large initially reducing to Small in 5-10 years as the compound become fully screened by vegetation and the access road becomes assimilated into the landscape by the maturing adjacent hedgerow. During Construction there would be a large scale of change in the view due to the presence of cranes and moving machinery and activity in the eastern field of the site.
Scale of Change to Landscape Character	The battery storage facility would initially form a notable feature in the adjoining fields of the wider landscape as experienced at this viewpoint. The character of the landscape would change from open arable field and contain greater areas of native hedgerow and field trees as part of the proposed mitigation. The field entrance would also change as a more defined access road is installed and more robust access gates installed. Signage for the battery storage facility is also likely to be installed. The infrastructure within the existing electricity substation would be obscured from view by the acoustic fence still exerts a degree of urban influence in the landscape, which the Proposed Development will be associated with. The scale of change in landscape character from this viewpoint would be Large initially reducing to Small in 5-10 years as the compound become fully screened by vegetation and the access road becomes assimilated into the landscape by the maturing adjacent hedgerow.

	During Construction there would be a large scale of change in character due to the presence of cranes and moving machinery and activity in the eastern field of the site.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable
Viewpoint 4	Rownall Road, near Rownall Hall Farm
Distance/ Direction from Development	0.0km East, southeast (Adjacent to site)
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	Recreational and minor road users
Existing View	View from Rownall Road towards the southeastern corner of the site. In the foreground is a small pastoral field bounded by a timber post and rail fence, in varying condition which has been supplemented by strained wire mesh fencing. The boundary between this field and the larger arable field beyond is defined by strained wire mesh fencing and hedgerow. Views into the eastern field of the site are open and extend as far as the site's tree lined northern boundary, although a line of trees between the pastoral and arable fields provides some filtering of the view. The change in landform between the site and the road is distinct, typified by the raised embankment edge immediately adjacent to the road. The western part of the site is largely screened by existing trees. The arable land continues to rise to both the north and west and in conjunction with the tree line contains longer range views in these directions. Views along Rownall Road are limited due to roadside vegetation and the winding nature of the road at this location.
Predicted View & Scale of Visual Change	The battery storage facility would be contained to the western part of the site inside a line of closed board timber acoustic fencing, approximately 4m high but this would be largely screened from this location by existing vegetation. The proposed access road will enter the site from Rownall Road to the east. The facility and much of the access road will be screened due to localised landform and interim existing field trees and boundary vegetation. This will be further screened due to the proposed mitigation woodland planting in the foreground pastoral field. In the early years of establishment for the woodland during periods of bare leaf views of the facility would be heavily filtered. The scale of change from this viewpoint would be Small initially becoming Medium due to the mitigation woodland planting within the foreground pastoral field. During Construction there would be a large scale of change in the view due to the presence of cranes and moving machinery and activity in the eastern field of the site.
Scale of Change to Landscape Character	The agricultural landscape within the view is well treed with views foreshortened and longer range views to the north are contained by landform and vegetation. The majority of the battery storage facility would not be visible with only limited view of the access road anticipated. Once established the new woodland would complement the existing well treed landscape surrounding the viewpoint. The scale of change would be Small reducing to Negligible once the woodland planting has established. During Construction there would be a large scale of change in character due to the presence of cranes and moving machinery and activity in the eastern field of the site.

Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 5	Footpath Cheddleton 53
Distance/ Direction from Development	0.0km North / East / West (Adjacent to site)
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	PROW and minor road users
Existing View	View along the southern boundary of the site from the footpath which is very close to the junction with Rownall Road. Foreground views to the north and northeast are of a small pastoral field with longer range views contained or heavily filtered by the mature, field trees along the field boundaries. The neighbouring arable field to the north, which is within the site, is visible beyond the hedgerow line. Views around to the northwest and west show the same pastoral field in the foreground. Views are filtered by the field trees and the western field of the site is more visible. The central tree line across the arable field, orientated south to north, is also visible.
Predicted View & Scale of Visual Change	Initially the new acoustic barrier around the proposed storage compound would be visible alongside the footpath although a series of standard trees are proposed within the foreground pastoral field and immediately surrounding the fence line. These will filter and soften the new structure with immediate effect. The barrier itself would obstruct any view of the infrastructure within the compound. The access road would fall just across the ridge of the eastern field and therefore not be visible. New tree and shrub planting would be notable within the adjoining fields and surrounding the new acoustic barrier. As new vegetation establishes, the view to the north would be filtered by the introduction of mitigation woodland planting in the foreground pastoral field and within 5-10 years this would become a view of woodland with a foreground hedgerow. Views southwards would remain open and no long distance views would be interrupted by the new planting. The scale of change in the view would be Large although the nature of this effect would transition for adverse to neutral as the mitigation planting establishes. During Construction there would be a large scale of change in the view due to the presence of cranes, moving machinery and activity in the eastern field of the site.
Scale of Change to Landscape Character	The agricultural landscape within the view is well treed and new planting will be in character with the established vegetation. Where the battery storage facility and access road are visible initially this would introduce a built influence within the landscape character experienced from this view, albeit softened by mitigation planting. The proposed mitigation woodland planting in the foreground would screen the development over time. The scale of change would be Large, as views northwards are foreshortened. This would reduce to Small once the woodland has established to create a small woodland block. During Construction there would be a large scale of change in character due to the presence of cranes and moving machinery and activity in the eastern field of the site.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 6	Footpath Cheddleton 53 (section within field)
Distance/ Direction from Development	0.1km West
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	PROW users
Existing View	View east along the footpath towards the western edge of the site boundary. A medium sized pastoral field is in the foreground of the view with a post and wire fence delineating a neighbouring pastoral field to the south. Views into the site are filtered by the line of mature, field trees on the western edge. Views to the northeast and southeast are contained by the layering effect of further mature trees on the site's northern and southern boundary as well as by the central tree line orientated south to north, which runs across the arable field within the site. To the immediate rear of the view Cellarhead Substation and pylons are dominant.
Predicted View & Scale of Visual Change	As the battery storage facility will be contained to the western side of the site, inside a timber acoustic fence, approximately 4m high, the development will introduce new notable built development into the view but in the context of an existing large agricultural shed and Cellarhead Substation immediately behind. The scale of change from this viewpoint would be Large initially (in winter months only – Medium in summer months) reducing to Negligible once mitigation planting along the western boundary has established. During Construction there would be a large scale of change in the view due to the presence of cranes and moving machinery.
Scale of Change to Landscape Character	The agricultural landscape within the view is well treed and foreshortened by the vegetation along the western boundary of the site. The battery storage facility will introduce a built influence into the landscape character experienced from this view although this needs to be viewed in the context of Cellarhead Substation immediately behind the view. The scale of change would be Medium. This would reduce to Negligible once mitigation planting along the western boundary has established. During Construction there would be a large scale of change in landscape character due to the presence of cranes and moving machinery.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 7	Footpath Cheddleton 53
Distance/ Direction from Development	0.0km Southwest (Adjacent to site)
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	PROW users
Existing View	Views from the footpath on the southwestern corner of the site, towards the north, northeast and east, are across the arable field within the site. Views into the site are open with no established boundary vegetation on this western section of the site boundary. Longer range views beyond the site are glimpsed to the north but are heavily filtered foreshortened in all other directions by the more established boundary vegetation and mature field trees as well as by the central tree line orientated south to north, which runs across the arable field within the site. Views to the southeast are across a neighbouring pastoral field, on the southern side of the footpath route. Beyond this pastoral field, and on the opposite side of Rownall Road, are agricultural outbuildings and storage associated with Home Farm and the residential property at Dove Cottage.
Predicted View & Scale of Visual Change	The battery storage facility will all be contained to this western side of the site, inside a line of timber acoustic fencing approximately 4m high and will be in close proximity the site boundary. Views across the adjoining field will be obscured by the fence but significantly softened by new standard tree planting around the perimeter of the fencing. The scale of change from this viewpoint would be Large. Mitigation planting around this more open section of the boundary would reduce this to Small once established. During Construction there would be a large scale of change in the view due to the presence of cranes and moving machinery.
Scale of Change to Landscape Character	The fencing surrounding the battery storage facility would introduce a prominent built feature within the immediate landscape experienced at this location. It would however be experienced in the context of a large agricultural shed and Cellarhead Substation nearby. The scale of change in the view from this viewpoint would be Large. Mitigation planting around this more open section of the boundary would reduce this to Small once established. During Construction there would be a large scale of change in landscape character due to the presence of cranes and moving machinery.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 8	Footpath Cheddleton 60
Distance/ Direction from Development	0.45km South
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	PROW users
Existing View	View from footpath north across undulating arable farmland. Field boundaries are a mix of low clipped, occasionally gappy, hedgerow and mature, well maintained hedgerows with large field trees. Longer range views are predominantly contained by the localised topography and vegetation. Towards the northwest a line of electricity transmission pylons and overhead cables create an opening in the tree line which allows filtered views north of the distant undulating hills.
Predicted View & Scale of Visual Change	The battery storage facility would not be visible within this view and would be filtered by the intermittent trees and localised landform. The scale of change from this viewpoint would be Negligible. During Construction there would be a small scale of change in the view due to glimpses of cranes and moving machinery.
Scale of Change to Landscape Character	There would be no discernible change to the landscape character as experienced from this location. The scale of change from this viewpoint would be Negligible. During Construction there would be a small scale of change in character due to glimpses of cranes and moving machinery.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 9	Roadside seating adjacent to A520 at Wetley Rocks
Distance/ Direction from Development	1.5km East
Landscape Character Type	LCT Ancient slope and valley farmlands
Visual Receptors	Residential, Recreational and major road users
Existing View	This elevated view over the Churnet Valley is across a mosaic of agricultural fields, in mixed use and condition, bounded by hedgerows, mature field trees and small woodland blocks. Cumulatively this creates a well wooded landscape both in the valley bottom and on the rising slopes towards the west. Farmsteads, large agricultural outbuildings and residential properties, of varying construction materials, are interspersed across the landscape of mixed materials. A line of high voltage pylons and overhead cables create an incongruous backdrop as they run across the view from north to south with a low voltage timber pylons and cables present in the foreground of the view. There are glimpses of the eastern field within the development site.
Predicted View & Scale of Visual Change	The battery storage facility will be almost entirely screened by multiple layers of vegetation in the intervening landscape. Very minor glimpses may be possible in winter months. Glimpsed views of the proposed access road for the facility, will be possible although it is more likely to be infrequent vehicular movement along it, rather than the road itself. The scale of change in the view from this viewpoint would be Small reducing to Negligible once the mitigation planting along the eastern boundary establishes to a height of 4m. During Construction there would be a small scale of change in the view due to glimpses of cranes and moving machinery.
Scale of Change to Landscape Character	There would be no discernible change to the landscape character as experienced from this location. The scale of change would be Negligible. During Construction there would be a small scale of change in character due to glimpses of cranes and moving machinery.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

Viewpoint 10	Armshead Road, Werrington
Distance/ Direction from Development	1.7km South
Landscape Character Type	LCT Ancient plateau farmlands
Visual Receptors	Residential, Recreational and minor road users
Existing View	View from the footway adjacent to Armshead Road immediately in front of residential properties on the northern edge of Werrington. The view is a cluttered combination of agricultural fields in mixed use and condition, deciduous and plantation woodland blocks and built influences due to the electricity substation, high voltage pylons and transmission cables. The distant, higher ground offers longer range views.
Predicted View & Scale of Visual Change	The battery storage facility is entirely screened from this view. The scale of change in the view from this viewpoint would be Negligible.

	There would be no view of construction activities and hence there would be a negligible effect during construction.
Scale of Change to Landscape Character	The battery storage facility would not form a feature of the landscape character experienced from this location. The scale of change would be Negligible. There would be no view of construction activities and hence there would be a negligible effect during construction.
Scale of Change to Designated Area	Not applicable
Cumulative effects	Not applicable

A. Appendix 3: Landscape Sensitivity Assessment

- A.1.1 The sensitivity of the host landscape character type within the study area of the Proposed Development is assessed below. Landscape sensitivity is not absolute and can only be defined in relation to each development and its location. To assess the sensitivity of a particular landscape it is good practice to consider the value attached to the landscape and its susceptibility to the particular form of change likely to result from the proposed development. Assessment text relates to sensitivity of the landscape receptor as a whole, to the proposed development, with additional comments regarding the Site where relevant. In the main this has been taken from the Landscape and Settlement Character Assessment of Staffordshire Moorlands (quotes shown in *italics*) as well as from local sources and site assessment.
- A.1.2 It should be noted that the site is on the eastern edge of the Ancient Plateau Farmlands Landscape Character Type (LCT) and that the LCT itself extends westwards for approximately 3km far beyond the study area and therefore some of the descriptive text in the relevant published Character Assessment is therefore not specifically relevant to the site. The discussions of landscape sensitivity below specifically focuses on the tract of this LCT between Ivy House Farm in the north, Rownall Road to the east, Junction of Mill Lane / Rownall Road to the south and the Electricity Substation to the west.
- A.1.3 Rownall Road forms the eastern edge of the LCT beyond which it transitions into the neighbouring Ancient Slope and Valley Farmlands LCT. Site based observations show that the two LCTs are not intervisible around the site due to high, well maintained hedgerows along Rownall Road. As the Ancient Slope and Valley Farmlands LCT is not a host landscape it is not covered in this document.
- A.1.4 The table below is based on guidance provided within LI TGN 02/21 - specifically table 1 within that document.

Host Landscape: Ancient Plateau Farmlands Landscape Character Type

Factors affecting sensitivity Value attached to Landscapes	Lower Sensitivity to Battery Storage	Higher Sensitivity to Battery Storage	Explanation	Judgement
Designated scenic quality	No specific designation	National or regional designation	No national or local landscape designations within this LCT	Community
Natural Heritage	Landscape with little evidence of ecological, geological, geomorphological or physiographic interest which	Landscape with strong evidence of ecological, geological, geomorphological or physiographic interest which	The LCT <i>contains an extensive area of lowland heath including wet heath with rushes and some grasses, however these are not present within the site or in close proximity to it. Small woodlands of broadleaf</i>	Community

Factors affecting sensitivity	Lower Sensitivity to Battery Storage	Higher Sensitivity to Battery Storage	Explanation	Judgement
	contribute positively to the landscape.	contribute positively to the landscape.	and conifer are evident, although the latter is primarily to screen the substation. Mature, field boundary trees, of various species (Oak, Scots Pine, Horse Chestnut) are within and along the boundary of the site, complimented by occasional such specimens in adjacent fields. Hedgerows and trees are locally important.	
Cultural Heritage	Landscape with little evidence of archaeological, historical or cultural interest which contributes positively to the landscape.	Landscape with strong evidence of archaeological, historical or cultural interest which contributes positively to the landscape.	Remnant parkland railings but otherwise Rownall Hall and associated buildings are self contained behind mature vegetation. The Stables to Rownall Hall are grade II listed however the Hall itself is demolished. Other farm buildings locally have generally been converted to modern housing.	Community
Landscape condition/ quality	Landscape which is in a poor physical state both with regard to individual elements and overall landscape structure.	Landscape which is in a good physical state both with regard to individual elements and overall landscape structure.	Landscape condition varies even locally with some sections of field boundaries still well maintained hedgerow or dry stone wall. The majority of sections are defined by post and wire / timber fencing. Overall the landscape is of moderate quality and condition but of local value rather than regional. The LCT notes that <i>Power lines and electricity substation are dominant incongruous features within the landscape.</i>	Community
Associations	Landscape which has few recognised connections with notable people, events and the arts.	Landscape which has well recognised connections with notable people, events and the arts.	No specific associations identified	Community
Distinctiveness	Landscape that has a weak sense of identity.	Landscape that has a strong sense of identity.	The Landscape has a moderate sense of identity as a gently undulating landform which has a good presence of mature field trees with agriculture its primary use.	Regional
Recreational	Landscape offering few recreational opportunities where experience of landscape is important.	Landscape offering many recreational opportunities where experience of landscape is important.	There is a good network of footpaths as part of PROW network, including a route which runs along the southern and southwestern edge of the site. These are however of local value rather than of regional	Community

Factors affecting sensitivity	Lower Sensitivity to Battery Storage	Higher Sensitivity to Battery Storage	Explanation	Judgement
			interest. No long distance or promoted recreational routes.	
Perceptual (Scenic)	Landscape that has little that appeals to the senses, primarily the visual sense.	Landscape that appeals strongly to the senses, primarily the visual sense.	Landscape is pleasantly rural with a mix of open and enclosed views due to landform and vegetation but there is no dramatic landform or contrast which elevates the perceptual value. The electricity substation, transmission pylons and cables diminish the view.	Community
Perceptual (Wildness and Tranquility)	Landscape with a weak perceptual value notably wildness, tranquillity and/or dark skies.	Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies.	A moderately remote working agricultural landscape with associated activity evident in fields and scattered farmsteads. As previously referenced, the power lines and electricity substation are incongruous features in the landscape.	Community
Functional	Landscape which does not perform a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape.	Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape.	Agricultural land with a mix of dairy farming, stock rearing and arable use. Hedgerows and outgrown field trees provide some ecological connectivity but not a landscape which provides specific valuable function beyond food production.	Community
Overall Judgement of Value				Community
Susceptibility				
Scale	Landscapes where scale of development is similar to or smaller than scale of receiving landscape.	Landscapes where scale of development is larger than scale of receiving landscape.	A medium scale, rural landscape with medium to large scale fields used for both arable and dairy farming. Tree structure provides a smaller sense of scale locally. Maximum heights of structures are consistent with hedgerows, trees and nearby agricultural sheds.	Low
Landform	Smooth regular flowing, or uniform landscapes.	Dramatic and rugged landscapes.	Gently undulating topography typically between 215m and 221m AOD.	Medium/Low
Openness/enclosure	Enclosed and sheltered landscapes.	Open and exposed landscapes.	A varying degree of openness but the landscape is relatively well enclosed by hedgerow and mature hedgerow trees.	Medium

Factors affecting sensitivity	Lower Sensitivity to Battery Storage	Higher Sensitivity to Battery Storage	Explanation	Judgement
Land cover, complexity and patterns	Complex, intimate or mosaic cover or complex or irregular patterns.	Extensive areas of simple or regular landcover or simple and sweeping lines, linear feature and patterns.	Relatively regular field patterns bounded with hedgerows of varying condition, mature field trees and pockets of woodland.	Medium/Low
Built Environment	Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements	Established, traditional or historic built character	Scattered farmsteads with associated agricultural outbuildings of varying scale and materials. Electricity transmission pylons and cables and electricity substation contribute significantly to the human influences.	Low
Views and intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area with distant horizons.	When viewed from the east, across the Churnet Valley, the site is not distinguishable within the context of woodland blocks, individual trees, agricultural land, scattered farmsteads and farm buildings. In close proximity to the site, longer range views out of the site are filtered by the existing field boundary vegetation.	Low
Landscapes that form settings, skylines, backdrops, focal points	Generally low lying landscapes without distinctive landform or horizon.	Areas with strong features, focal points that define the setting or skyline.	Gently undulating landscape with a good presence of mature field trees. Electricity transmission pylons and cables influence the skyline.	Low
Overall Judgement of Susceptibility				Low
Overall Judgement of Sensitivity				Low