voltalia

Chapter 6: Landscape and Visual

Department: ERM
Project: Springfield Solar Farm and BESS
Document Code: 0733745

May 2025

INDEX

6 LANDSCAPE AND VISUAL

6.1 Introduction

6.1.1 Background

6.1.1.1 This assessment defines the landscape and visual baseline environments and any known future changes; assesses their sensitivity to change; describes the key features and design rationale of the Proposed Development in relation to the mitigation of landscape and visual effects; describes the nature of the anticipated changes to the landscape and views and assesses the effects arising during all stages of development.

6.1.2 The Application Site and Proposed Development

6.1.2.1 **Figure 6.1** places the Proposed Development within its local context. The Application Site is mostly comprised of agricultural land and is crossed by a network of minor roads. A minor burn crosses the Application Site in a narrow, incised valley and Oldhamstocks Mains Farmhouse and Oldhamstocks Mains Cottages are located along the burn near the centre of the Application Site. An overhead power line crosses the north-eastern end of the Application Site and follows the eastern boundary.

6.1.2.2 The Application Site is located within a transitional landscape of undulating small hills between the north-eastern end of the Lammermuir Hills and the sea. There are scattered properties and small settlements near the Application Site, including Oldhamstocks, Hoprig and Cockburnspath. Winding minor roads provide local access, whilst the A1 and East Coast Main Line railway facilitate major transport connections approximately 0.9 km to the north-east. There are small wind farms located within 2 km to the south of the Application Site, and larger schemes on the Lammermuir Hills beyond 3km to the south-west. Torness Nuclear Power Station is located 2.5 km north. A network of Core Paths links inland and coastal settlements, with one path crossing the southern part of the Application Site, while the Southern Upland Way and Berwickshire Coast Path route from the south-east, ending at Cockburnspath.

6.1.2.3 The Proposed Development is described fully within **Chapter 3: Development Description**. In summary, it is comprised of solar panel areas, a Battery Energy Storage System (BESS) and a substation compound.

6.1.3 Competence

6.1.3.1 This chapter has been prepared by Chartered Landscape Architects at Abseline. Key individuals working on this project have over 20 years of experience as chartered landscape architects. The Practice is a Landscape Institute registered practice and all work is prepared and reviewed internally by senior highly experienced landscape planners with Public Inquiry experience.

6.1.3.2 To inform the assessment, site visits were made to locations including representative viewpoints, the Application Site, homes included in the residential visual amenity assessment and wider study area by the assessment team.

6.1.4 Stakeholder Consultation

6.1.4.1 A scoping report was submitted to the Energy Consents Unit (ECU) in August 2024, which set out the proposed scope of the LVIA.

6.1.4.2 The ECU issued their Scoping Opinion in January 2025, with formal responses from statutory consultees appended to the Scoping Opinion. This included requests for the following additional viewpoints from East Lothian Council (ELC):

- Rail crossing at junction opposite Thorntonloch access. Revisions to the scheme design post scoping mean that there would be almost no visibility at this location, and it is therefore not included as an additional viewpoint.
- Northwest corner of site within Special Landscape Area. This viewpoint is not materially different to Viewpoint 7, which has more open views towards the coast, and it is therefore not included as an additional viewpoint.
- Edge of Special Landscape Area at road junction and field entrance on main egress from Oldhamstocks. The field entrance gap in the hedgerow would be infilled as part of the Proposed Development, and it is therefore not included as an additional viewpoint.
- Entrance to Oldhamstocks at field entrance. This location is included as Viewpoint 9.
- Setting of Conservation Village of Oldhamstocks, special feature of Special Landscape Area. Revisions to the scheme design post scoping mean that as shown by **Figures 6.1 and 6.2** there would be no visibility at this location, and it is not included as a viewpoint.

TABLE 6.1 SUMMARY OF STAKEHOLDER CONSULTATION

ISSUE	HOW THIS IS ADDRESSED
ECU	
The scoping report identified viewpoints at **Table 5.1** to be assessed within the landscape and visual impact assessment. The planning authority has referenced additional viewpoints. The Company should agree viewpoints with the Planning Authority prior to submission of an application.	See Response to ELC requests above.
ELC	
It would be useful to have individual bare ground and woodland and building screening ZTVs produced for development within each individual field.	The development is to be considered as a whole and thus 'field by field' visibility analysis is not relevant. Visualisations provide information about which parts of the development would be visible from certain parts of the study area.

ISSUE	HOW THIS IS ADDRESSED
	Bareground ZTV studies greatly exaggerate the likely visibility of solar farms, as these are often even less visible than a ZTV which includes woodland and buildings due to screening by hedges. It is not likely that all (or substantial areas of) woodland and buildings in the study area would be removed. It is only required to consider likely significant effects as part of EIA.
A 2 km study area would be acceptable within East Lothian, however Scottish Borders Council may wish a wider study area given the potential for significant visibility of the proposals to the south up to 3 km.	No response has been received from Scottish Borders Council, therefore the 2 km study area has been retained.
TGN 05/23 (draft) was replaced by LITGN-2024-01 in August 2024.	The new guidance is referred to in this assessment.
ELC agreed with the viewpoint selection but would like the inclusion of additional viewpoints (see above).	See list at the start of **Section 6.1.4.**
The cumulative study area should be wider than 2 km. There are a number of wind farms that the development could have a cumulative impact with including those at Hoprigshiels just beyond 2km and Aikengall beyond 3 km. Cumulative assessment should also include any developments at planning and scoping stage.	The existing wind farms have been given consideration as part of the baseline as recommended by guidance (see **Section 6.1.7 and Technical Appendix 6.1**). A review of assessments in planning and at the scoping stage has been undertaken, but schemes at the scoping stage may not proceed to application with the same design as scoped, and may not become applications before the Proposed Development is determined and are t certain enough to be included in the cumulative assessment.
Requested a RVAA for at least the properties surrounded by the development (those at Oldhamstocks Mains and Oldhamstocks Mains Cottages).	Design changes since scoping have removed solar panels from the fields north of these properties and they would not be surrounded, however, a RVAA has been undertaken for the residential properties at Oldhamstocks Mains and Oldhamstocks Mains Cottage on a precautionary basis.
Visual assessment should not place reliance on existing trees unless they are within the applicant's control or are under a Tree Preservation Order.	This LVIA considers the current and anticipated future baseline. Where there are existing trees and woodland in the landscape outside of the Application Site, it is generally assumed these would remain unless there is a specific reason to assume otherwise. In this case, the study area does not include large areas of commercial forestry and much of the tree/woodland cover is associated with Conservation Areas or Gardens and Designed

ISSUE	HOW THIS IS ADDRESSED
	Landscapes with policy requirements to retain the trees and woodland.
If lighting (other than during the construction phase) is included night-time visual amenity should be considered.	Permanent, continuous lighting will not be included as part of the Proposed Development, though there will be motion activated security lighting. **Section 6.1.6** sets out why detailed consideration of night-time visual amenity is not required.
East Lammermuir Community Council	
The EIA must take account of the cumulative impact with the following planned and or consented developments: • Eastern Green Link 1 • Branxton Substation • Closure and restoration of Valencia Landfill at Oxwellmains • Quarrying at Dryburn (Tarmac Cement) • Defuel and decommission of Torness Nuclear Power Station • Branxton BESS • Lawfield BESS • Braxbess BESS • Island Green UK Solar & BESS • Aikengal BESS (called Redstone) • 132 kw connection contracted at Branxton Substation for Rabbit Marketing Ltd • Onshore works for Berwick Bank Offshore Wind Farm • Repower of Crystal Rig 1 Windfarm • Crystal Rig Solar • Newlands Hill Windfarm and Energy Hub This cumulative impact assessment must explicitly include traffic on the A1, which will be increased by each and every one of the above listed developments.	The following projects are consented and are considered as part of the future baseline insofar as they are relevant: • Eastern Green Link 1 – the landfall will be on Thorntonloch Beach, more than 1.5 km from the Proposed Development, with the cable route underground and the convertor station will be located beyond the 2km study area for this LVIA. • Branxton Substation – the substation will be located at Thornton Bridge to the northwest of the Proposed Development. • Branxton BESS will be located at Thornton Bridge to the northwest of the Proposed Development and adjacent to the Branxton Substation. • The onshore works for Berwick Bank Offshore Wind Farm. The following projects are not considered for the reasons set out below: • The 132 kw connection contracted at Branxton Substation for Rabbit Marketing Ltd would not have any landscape or visual effects of relevance to this assessment. • The Screening Request for Lawfield BESS has been withdrawn and this project is therefore not considered. • Island Green UK solar and BESS – It has not been possible to locate publicly available information about this project. • The remaining projects listed by the Community Council are outwith the 2 km study area for this assessment.
In addition to the properties within or at the very edge of the development at Oldhamstocks Mains, there is a clear risk of visual impact on residents at Ferneylea, Cocklaw, Hoprig, Woollands and other high settings. In addition to these dwellings the visual impact on	Visual effects are considered within this LVIA for visual receptors at these locations, where the Zone of Theoretical Visibility studies indicate there is potential for visibility.

ISSUE	HOW THIS IS ADDRESSED
residents of Oldhamstocks as a whole must be considered, as the access routes for exercise, leisure, employment or tasks of daily living will generally require those residents to pass through the proposed solar farm. Visual Impact on all of these residents must be assessed within the EIA.	
The enclosed map shows other path LE235 as recorded in the National Catalogue of Rights of Way (CROW) crosses or is close to the Site as shown on **Figure 1.1** Site Location Plan. The above noted LE235 is a route that is signposted by ScotWays and sits within the Site. We are aware of local concerns with regard to the effect this proposal will have on the continued use of the route so would draw that to the attention of the applicant.	Viewpoint 6 is located on LE235 and visual effects of the Proposed Development on users of this route are considered within this assessment.

6.1.5 Study Area and Scope

6.1.5.1 It is accepted practice that the extent of the study area for a development proposal is broadly defined by where it will be visible. In this case a study area of 2 km has been agreed with ELC, based on the main areas of visibility occurring within 1.5 km of the Application Site and views becoming more limited beyond 2 km (see **Figures 6.1** and **6.2**), beyond which point the Application Site would form a more minor feature within the wider view.

6.1.5.2 The final list of viewpoints agreed through consultation is provided in **Section 6.6.3**.

6.1.5.3 The following receptors have been agreed to be scoped out of assessment:

- Special Landscape Area (SLA) 36: Berwickshire Coast (1.6 km, E); and
- Landscape and visual receptors within the 2 km study area where there would be no visibility of the Proposed Development.

6.1.6 Night-time Assessment

6.1.6.1 The Proposed Development does not include continuous visible lighting. There will be motion activated security lighting, however this would not be expected to be regularly in use, or for long periods of time and no night-time assessment is provided.

6.1.7 Cumulative Assessment

6.1.7.1 Cumulative assessment relates to the assessment of the effects of more than one development (as set out within **Technical Appendix 6.1**). Operational developments are included in the baseline, consented development forms part of the future baseline, unless

there is some uncertainty regarding the future construction of consented developments in which case they may be considered as the first scenario of the cumulative assessment. That is not the case for the consented developments identified within the study area (see **Table 6.1** above), and so they are included in the future baseline and considered within the main assessment.

6.1.7.2 Given that the main LVIA is inherently a cumulative assessment of effects with operational and consented developments, the main focus of the cumulative effects assessment is on developments in planning. There are none within the study area which are likely to give rise to landscape and visual changes of relevance to this assessment, and so no cumulative effects assessment is provided.

6.1.8 Residential Amenity

6.1.8.1 Effects on private views are a separate matter not considered as part of LVIA, which focusses on public views; and is also subject to different guidance. As set out within LI TGN 02/19 'Residential Visual Amenity Assessment (RVAA)':

"Changes in views and visual amenity are considered in the planning process. In respect of private views and visual amenity, it is widely known that, no one has 'a right to a view.' …

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."

6.1.8.2 The methodology for and assessment of effects on residential visual amenity for the properties at Oldhamstocks Mains Farmhouse and Oldhamstocks Mains Cottages is included as **Technical Appendix 6.4**.

6.1.9 Assessment Scenarios and Potential Effects

6.1.9.1 Effects arising from the Proposed Development are considered at the following key stages. The nature of the potential effects relevant to this assessment are described for each stage:

Construction

6.1.9.2 The construction of the project would take place over approximately 10 months. It would involve the activities set out within **Chapter 3: Development Description**. Effects during construction on landscape fabric would arise from:

- Groundworks for the access tracks, substation, BESS and associated hard standing areas;
- the installation of solar panels, inverters, BESS, substation and other site infrastructure;
- the removal of small sections of vegetation for access tracks; and

- the creation of new planting and habitat areas.

6.1.9.3 Effects during construction on landscape character would arise from:

- Short term construction activity within the Application Site;
- changes to landscape fabric as described above; and
- changes to views towards the site which would include partially complete areas of solar panels.

6.1.9.4 Effects during construction on visual receptors would arise from:

- Short-term movement of vehicles and plant, within and travelling to and from the Application Site, to deliver and install the solar panels and other site infrastructure; and
- changes to views towards the Application Site which would include completed and partially completed areas of solar panels and inverters, with increasing similarity to the operational scheme as construction is completed.

6.1.9.5 Effects during construction on designated landscapes would arise from:

- Short-term changes to the special qualities as a result of construction activity taking place within designated areas and/or seen in views from designated areas.

Operation

6.1.9.6 The Proposed Development would be in operation for 40 years. Effects during operation on landscape fabric would arise from:

- The long-term presence of the solar panels, inverters, BESS and associated infrastructure; and
- changes to habitat management and the continued growth of new planting.

6.1.9.7 Effects during operation on landscape character would arise from:

- The presence of the solar panels, inverters, BESS and associated infrastructure within the Application Site.

6.1.9.8 Effects during operation on visual receptors would arise from:

- Changes to views towards the Application Site to include the presence of the solar panels, BESS, associated infrastructure, new areas of planting and changes to habitat management within the Application Site, both from static locations and when moving along routes.

6.1.9.9 Effects during operation on designated landscapes would arise from:

- Changes to the special qualities due to the presence of the Proposed Development within designated areas and/or seen in views from designated areas.

Decommissioning

6.1.9.10 Effects during decommissioning would be short-term and similar to those arising during construction except in reverse. After decommissioning, changes to the landscape fabric arising from planting as part of the Proposed Development would remain permanently.

6.1.10 Supporting information and terminology

6.1.10.1 Supporting appendices and figures have been prepared as listed below. These are important to the assessment and should be read alongside this chapter:

- Technical Appendix 6.1 Methodology
- Technical Appendix 6.2 Visuals Methodology
- Technical Appendix 6.3 Landscape Sensitivity
- Technical Appendix 6.4 Illustrative Views
- Technical Appendix 6.5 Residential Visual Amenity Assessment (RVAA).

6.1.10.2 Key terms used within the assessment are described in **Section 6.2** and **Technical Appendix 6.1** which set out the methodology. A glossary is provided within **Technical Appendix 6.1**.

6.2 Methodology

6.2.1.1 The full methodology is described in **Technical Appendix 6.1**, which also references the key guidance documents which inform the approach. A summary of key points is provided below.

6.2.2 Distances

6.2.2.1 Where distances are given in the assessment, these are approximate distances between the nearest solar panel area and the nearest part of the receptor in question, unless explicitly stated otherwise.

6.2.3 Visualisations

6.2.3.1 Photographs of the existing views, wirelines, and photomontages from selected viewpoints, showing the Proposed Development are included within Volume 2. The method of visualisation selected has been informed by Landscape Institute (LI) Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals, with a mix of photographs and matched wirelines and photomontages being selected as being the most appropriate approach given the low level of structures, uniformity of form and materials, and the undulating topography and vegetation within the surrounding landscape limiting the degree of visibility. The methodology of production for the visualisations (undertaken by FTR Visuals Ltd) is described **Technical Appendix 6.2**.

6.2.4 Sensitivity

6.2.4.1 Sensitivity judgements take account of consideration of the value and susceptibility of the receptor as illustrated by the diagrams below. Where sensitivity is judged to lie between levels, an intermediate assessment will be adopted. As comparison of **Diagram 6.1** and **Diagram 6.2** indicates, a slightly greater weight is given to susceptibility in judging sensitivity of visual receptors.

DIAGRAM 6.1 LANDSCAPE SENSITIVITY

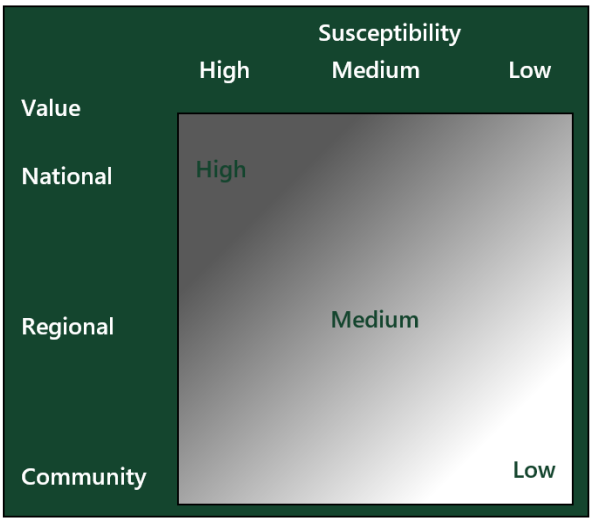
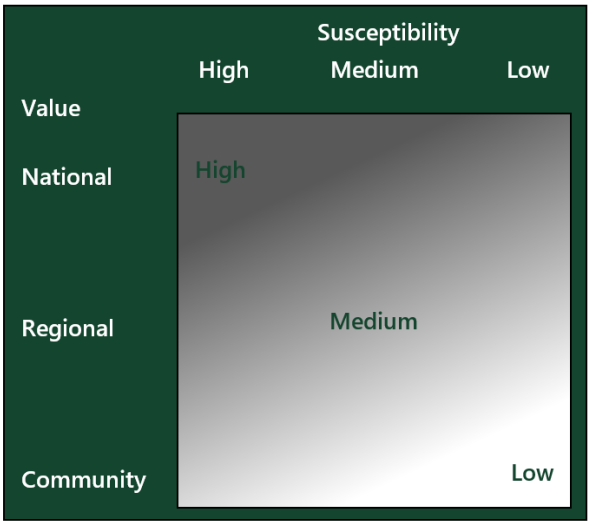


DIAGRAM 6.2 VISUAL SENSITIVITY



6.2.5 Magnitude

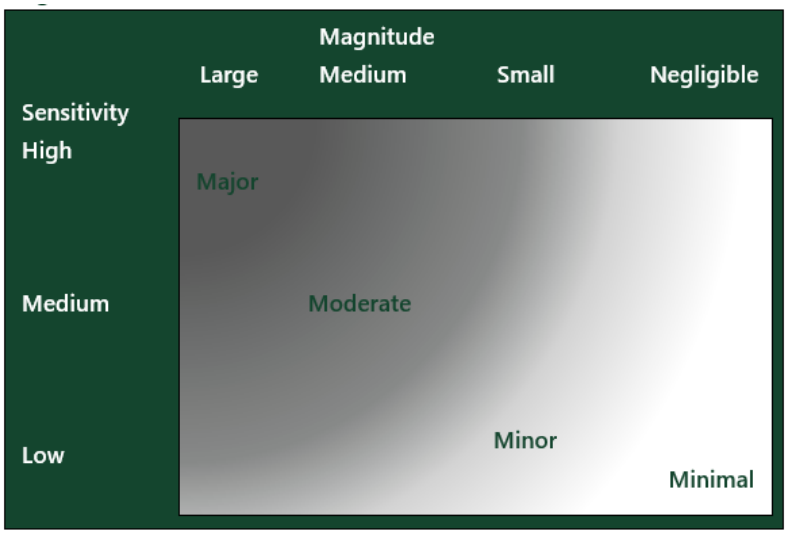
6.2.5.1 Magnitude of change (Large, Medium, Small, Negligible) judgements take account of the degree of change arising from the Proposed Development at any particular location in terms of its size or scale; extent of the area or receptor that is influenced, and the duration and reversibility of the change.

6.2.5.2 The maximum scale of change on the receptor is the primary factor in determining magnitude. However, for particularly widespread and/or long-lasting effects the magnitude judgement may be slightly greater than the scale of change; or for effects that are constrained in geographic extent and/or short-lived the magnitude of change may be slightly lower than the scale of change.

6.2.6 Level of Effect

6.2.6.1 The level (Major, Moderate, Minor, Minimal) of any identified landscape or visual effect reflects a professional judgement as to the relative importance of the effects identified, taking account of the sensitivity of the receptor and the predicted magnitude of change as illustrated by **Diagram 6.3** below. Where the effect has been classified as Major or Major/Moderate this is considered to be equivalent to likely significant effects referred to in the EIA Regulations. The indication that some effects are 'significant' should not be taken to imply that they should warrant refusal in any decision-making process.

DIAGRAM 6.3 LEVEL OF EFFECT



6.2.7 Positive/Adverse

6.2.7.1 Landscape and visual effects can be positive, adverse or neutral (different but neither better nor worse taking all factors into account). Taking a precautionary approach in making an assessment of the 'worst case scenario', the assessment considers that all effects which would result in a notable difference to the existing features, character, views or special qualities would be adverse unless indicated otherwise. It should be noted however that people's individual responses to change arising from development can vary markedly.

6.3 Planning Policy

6.3.1 National Planning Policy

6.3.1.1 Relevant national planning policy is set out within National Planning Framework 4 (NPF4)[1]. Policies relevant this assessment, and the design of the Proposed Development, include:

- Policy 3 (Biodiversity) – states that development *"will contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them"*.
- Policy 6 (Forestry, woodland and trees) – states (inter alia) that *"proposals that enhance, expand and improve woodland and tree cover will be supported"* and that proposals will not be supported where there are adverse impacts on ancient woodland, veteran trees or native woodlands, trees and hedgerows of high biodiversity value. It further notes that fragmenting or severing woodland habitats will not be supported unless appropriate mitigation measures are identified and implemented.

[1] Scottish Government (2023). National Planning Framework 4. Available at: https://www.transformingplanning.scot/national-planning-framework/adopted-npf4/

- Policy 11 (Energy) – states that proposals for all forms of renewable energy, including solar arrays, will be supported but notes that where they may *"impact on international or national designations will be assessed in relation to Policy 4"*. It further notes (inter alia) that project design will demonstrate how impacts on landscape and visual receptors, including communities and residential visual amenity, are addressed but recognises that significant impacts are to be expected for some forms of renewable energy development and that where *"impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable"*.

6.3.2 Local Planning Policy

6.3.2.1 Current local planning policy is described in the East Lothian Local Development Plan (LDP) (2018)[2]. Policies relevant to this assessment include:

- Policy DC9: Special Landscape Areas – which states that development will only be permitted where it does not harm the special character of the Special Landscape Areas (SLAs) or where the public benefits outweigh any adverse impacts, and that the development is designed to minimise such impacts.

- Policy DP1: Landscape Character – which that (inter alia) all new development should be *"well integrated into its surroundings by responding to and respecting landform, and by retaining and where appropriate enhancing existing natural and physical features at the site* […] *that make a significant contribution to the character and appearance of the area"*.

- Policy DP2: Design – primarily relates to the development of buildings although notes that all development should retain natural and physical features important to the amenity of an area, or provide adequate replacement.

6.3.3 Policy Considerations

6.3.3.1 Taking account of these policies, this assessment considers effects on landscape and visual receptors; with the assessment for designated landscapes identifying any effects on the qualities for which they are designated and the effect on the overall integrity of the designation. Baseline studies also inform this assessment as set out below.

6.3.4 Other Relevant Guidance and Documents

6.3.4.1 Other published documents relevant to this assessment include the following documents which have informed this assessment and/or the design of the Proposed Development in relation to the mitigation of landscape and visual effects:

- NatureScot National Landscape Character Assessment (2019)[3]

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[2] East Lothian Council (2018). Local Development Plan 2018. Available at: https://www.eastlothian.gov.uk/downloads/file/27791/local_development_plan_2018_adopted_270918

[3] NatureScot (2019). National Landscape Character Assessment. Available at: https://www.nature.scot/professional-advice/landscape/landscape-character-assessment

- East Lothian Special Landscape Areas Supplementary Planning Guidance (2018)[4]

6.3.4.2 These baseline studies are further considered at **Section 6.4.2**.

6.4 Baseline

6.4.1 Introduction

6.4.1.1 LVIA is an iterative process; baseline studies have informed both design and early assessment before the final design and final assessment were prepared as documented in this chapter. This section provides a review of documented baseline studies (as listed at **Section 6.3.4** above) and a baseline description of the Application Site and its landscape and visual context. The baseline description of the individual landscape and visual receptors is provided alongside the assessment in **Section 6.6** for ease of reference.

6.4.2 Baseline Studies

East Lothian Special Landscape Areas Supplementary Planning Guidance (2018)

6.4.2.1 Appendix 1 of this Supplementary Planning Guidance (SPG) provides baseline descriptions of landscape character within East Lothian and is used as the primary reference for landscape character within this area. In addition to providing baseline character descriptions it provides management recommendations for each identified landscape character area (LCA) and management considerations aimed at maintaining wider regional distinctiveness. This regional and LCA level advice has informed the design of the Proposed Development, as set out in **Section 6.5**.

6.4.2.2 Appendix 2 of the SPG sets out the various SLAs within East Lothian and provides statements of importance for each. It informs considerations of the valued qualities of these locally designated areas within this assessment.

NatureScot National Landscape Character Assessment (2019)

6.4.2.3 This national programme of landscape characterisation provides the most up to date baseline description of landscape character within the Scottish Borders. It forms the primary reference for landscape character within the Scottish Borders and supplements information noted above in respect of LCAs within East Lothian.

[4] East Lothian Council (2018). Special Landscape Areas Supplementary Planning Guidance. Available at: https://www.eastlothian.gov.uk/info/210547/planning_and_building_standards/12242/local_development_plan/3

6.4.3 Application Site and Context

6.4.3.1 The Application Site encompasses an area of farmland at the edge of the Lammermuir Hills, where the land falls away to the lower lying coastal fringe and the sea to the northeast, and is encompassed within the Eastern Lammeruir Fringe and the Innerwick Coast LCAs, as shown on **Figure 6.4**. Field boundaries across the Application Site are primarily formed by a mix of hedgerows and woodland with a smaller number of boundaries more open, comprising dry stone walls (in the more elevated western part of the Application Site) or post and wire fences.

6.4.3.2 There are several small settlements within the study area including Oldhamstocks (0.4 km, S), Hoprig (1.1 km, S) and Dunglass (1.2 km, E), with dispersed farmsteads and rural properties also scattered across the study area. Cockburnspath is the nearest larger village, located just beyond the 2 km study area to the east. There is a network of minor local roads across the study area, including several passing through the Proposed Development, although this is more limited to the west of the Application Site as land rises into the hills. The A1 and East Coast Main Line pass around 0.9 km to the northeast and form the main transport corridor in the area.

6.4.3.3 To the north of the Application Site, there are a number of consented infrastructure projects that will be located around Braxton. The construction of these projects will have short to medium term effects on the area to the north and northwest of the Application Site, and includes the landfall and underground cabling for Eastern Green Link 1, more than 1.5 km from the Proposed Development; Branxton Substation at Thornton Bridge to the northwest of the Proposed Development; Branxton BESS at Thornton Bridge to the northwest of the Proposed Development and adjacent to the Branxton Substation; and the onshore works for Berwick Bank Offshore Wind Farm. Once operational, the Branxton Substation (approximately 840m to the north, beyond intervening landform) and Branxton BESS (approximately 930m to the north, adjacent to the existing railway line) will be the main structures that remain visible.

6.4.3.4 Recreational interests within study area include users of Core Paths, as illustrated on **Figure 6.6**, rights of way and other informal walking routes. There are no promoted long-distance walking or cycling routes located within the study area although one end of the Berwick Coast Path and Southern Upland Way routes can be found at Cocksburnpath, extending northeast out of the village and away from the Application Site.

6.4.3.5 There are no nationally designated landscapes within the study area or surrounding region. As illustrated by **Figure 6.1**, the western part of the Proposed Development extends into the edge of the Monynut to Blackcastle SLA and the coastal margin to the northeast side of the study area is encompassed within two further SLAs. The Dunglass GDL is also located immediately east and southeast of the Application Site.

6.5 Design and Mitigation

6.5.1 Relevant Guidance

6.5.1.1 As set out in **Section 6.4.2**, Appendix 1 to the East Lothian Special Landscape Areas SPG provides management recommendations for each identified LCA and also management

considerations aimed at maintaining wider regional distinctiveness. This guidance has informed the evolving design and mitigation of landscape and visual effects as set out below.

6.5.1.2 The Application Site is located across two LCAs, Innerwick Coast (which falls within the Eastern Coastal areas of Lowland Scotland at a regional level) and Eastern Lammermuir Fringe (which falls within the Southern Uplands of South Scotland at a regional level). In relation to these two LCAs, Appendix 1 to the SPG describes the following measures that are relevant to the design of the Proposed Development.

Innerwick Coast

6.5.1.3 The following landscape features/elements are identified as being considered characteristic of Eastern Coastal Lowland Scotland, and are relevant in the context of the Application Site:

- Undulating, fertile arable land;
- plantation, shelter belt and policy tree-planting;
- relatively dense network of single lane rural roads often lined with hedges or drystone walls; and
- closely spaced designed landscapes.

6.5.1.4 Expanding on those regionally distinctive landscape features/elements, Appendix 1 of the SPG identifies the following considerations to protect and enhance them:

- Retain the arable appearance of the area;
- woodland should be retained and enhanced in appropriate locations and the diversity of species in new woodland planting should be increased;
- development must not harm the small-scale rural character of the roads, including characteristic features such as hedges and stone walls, passing places, cattle grids and stone bridges; and
- development must respect, retain and not harm the elements and qualities of East Lothian's GDLs.

6.5.1.5 In relation to the Innerwick Coast LCA, the following management guidelines are identified in the SPG and are applicable to the Application Site and its immediate context:

- Retain arable character.
- Promote increase in roadside planting to reduce impact of major visual detractors without screening all views out.
- Encourage increase in small scale farm woodland cover on steep slopes and in deans however the open arable nature of this area, with high levels of intervisibility forms part of its character and it is not suitable for widespread woodland planting in particular of commercial conifers.
- Diversity of species in new woodland planting should be increased.

- Retain rural character of minor roads.
- Restore and maintain traditional hedge and stone wall field boundaries.

Eastern Lammermuir Fringe

6.5.1.6 The landscape features/elements identified as being considered regionally characteristic of the Southern Uplands are not notably present within the areas of Eastern Lammermuir Fringe in the vicinity of the Application Site.

6.5.1.7 In relation to the Eastern Lammermuir Fringe LCA, the following management guidelines are identified in the SPG that are applicable to the Application Site and its immediate context:

- Retain distinctive strong local relationships between land cover and topography, emphasising the transition from upland to coastal plain.
- Reinforce visual and ecological contrasts between open hill slopes and steep valley sides.
- Encourage further woodland expansion within deans and cleughs, including fencing to promote natural regeneration.
- Diversity of species in new woodland planting should be increased.
- Retain rural character of dense minor road network, including characteristic features.
- Restore and maintain traditional hedge and stone wall field boundaries.
- Preservation against further hill tracks on visually-sensitive slopes.

6.5.2 Mitigation and Enhancement Measures

6.5.2.1 Measures included within the design to prevent or reduce landscape and/or visual effects are set out in **Table 6.2** below. These measures are embedded within the design as shown on **Figure 1** of the outline Landscape and Biodiversity Management Plan (oLBMP), and will be secured via that document:

TABLE 6.2 MITIGATION AND ENHANCEMENT MEASURES

MEASURE	DESCRIPTION
Managing existing hedgerows and panel setbacks	Where local roads and paths pass alongside fields containing panels, hedgerows would be managed and panels set back to ensure that: • The hedgerows remain of a suitable maintainable height as dense hedges and do not become over-tall and thin at the base; and • Fencing and CCTV are not visible above the hedges and visibility of the solar panels over the hedge is minimised – noting that in some locations topography will prevent full screening.

MEASURE	DESCRIPTION
Reinforcement of existing hedgerows	Existing hedgerows would be 'gapped up' where they are sparse in order to provide more effective visual mitigation (and enhance the landscape fabric).
Retention of woodland within deans and cleughs	Throughout the Application Site, panels have been set back from deans and cleughs to ensure that both the landforms and the vegetation within them are retained.
Additional woodland planting	Small areas of additional woodland planting, using an appropriate mix of woodland species to tie into adjacent woodland in the deans and cleughs, would be implemented in areas where additional visual screening would be appropriate.
Seeding and management of panel areas	The landscape fabric of the site would be maintained to ensure it remains suitable for future farming whilst supporting biodiversity during operation. These measures would also permit reinstatement of the present landscape character post-operation.

6.6 Landscape and Visual Effects

6.6.1 Introduction

6.6.1.1 This section sets out the effects that the Proposed Development would have on landscape and visual receptors. Some receptors are only briefly discussed and for these receptors effects *"have been judged unlikely to occur or so insignificant that it is not essential to consider them further"* (GLVIA3, para. 3.19).

6.6.1.2 Effects on landscape character and visual receptors are set out before those on designated areas as it is common for designations to encompass both character and visual considerations within their special qualities or purposes of designation.

6.6.1.3 As set out at **Section 6.1.9**, effects during construction and decommissioning would be short-term and temporary and would include a noticeable presence of vehicles and plant on site during groundworks, and the installation/removal of the solar panels, substation and BESS infrastructure. The most notable effects during these stages would occur due to the presence of the infrastructure and these effects are assessed to be the same as during operation except where otherwise specifically noted in the assessment below.

6.6.1.4 Effects are considered at two stages in the operational life of the Proposed Development:

- On completion of construction activity and during early operation (approximately years 0-10), prior to any notable growth of proposed mitigation planting; and
- once proposed landscape mitigation has had time to mature and grow to the heights intended to provide a degree of screening (years 10-40).

6.6.1.5 Where mitigation planting would be effective at reducing effects, the effects during construction and early operation are assessed before planting matures as lasting for a Medium-term duration, with effects thereafter being assessed as though as Permanent. Assumptions about the growth of proposed mitigation planting are based on the advice provided in 'Predicting Tree and Hedge Growth' (IEMA)[5], as follows:

- Where proposed mitigation consists of managing existing hedgerows to an increased height, this would typically achieve an adequate height to largely screen views of solar panels in 1-3 years, allowing for an increase from 1.3-1.5 m to 2-2.5 m.
- New planting planted as 60-80 cm whips would be expected to grow 30 cm per year for the first 5 years, increasing to 50 cm per year thereafter. Hedges would be managed to encourage them to thicken rather than continue to increase height. On this basis, hedges of 2-2.5 m which largely screen views of solar panels would be expected to be established in 7-10 years. Acoustic enclosures around central inverter/transformers (CITs) may remain visible above hedges in the longer term due to the slightly greater height (4.5 m), although these are generally located away from perimeter hedgerows.
- Newly planted trees and woodland (depending on species and stock sizes) would be expected to achieve heights of around 7-7.5 m in 15 years and continue to mature thereafter.

6.6.2 Effects on Landscape Fabric

6.6.2.1 Aside from the presence of the equipment and infrastructure of the Proposed Development, changes to landscape fabric would consist of:

- Groundworks for the substation and BESS areas, and for access tracks in solar areas – removing vegetation in pasture and arable fields;
- Removal of approximately 100 m of hedges to create visibility splays at Site entrances, and a single approximately 8 m length between solar fields to create an internal access route.
- Installation of solar panels and inverters in the solar fields and seeding/management of the solar fields with grassland mixes (approximately 120 ha.); and
- Planting of new hedges (approximately 1.2 km) and gapping up of existing hedges (approximately 6.7 km).

6.6.2.2 These changes would affect commonplace landscape elements and features of medium sensitivity and would be very limited in their extent. Effects on landscape fabric would be positive and not significant.

[5] IEMA. Predicting tree and hedge growth. Available at https://www.iema.net/articles/predicting-tree-and-hedge-growth#:~:text=If%20planted%20as%20transplants%2C%20this,and%20hedges%20in%20the%20locality

6.6.3 Geographic Distribution of Effects

ZTV Studies

6.6.3.1 Zone of Theoretical Visibility (ZTV) studies have been prepared to indicate the potential visibility of the Proposed Development; inform viewpoint selection and site assessment work; and ensure that this assessment focusses on the most important / potentially significant effects. Where receptors are outside of the area of visibility indicated by the ZTV study, no effects would arise and they are not considered further.

6.6.3.2 **Figure 6.1** indicates the potential visibility for the solar PV areas, it includes screening from woodlands and buildings to provide a more accurate pattern of visibility. **Figure 6.2** indicates the potential visibility arising from the BESS and the substation. These ZTVs are combined where they are shown on other figures (see **Figures 6.5** and **6.6**) to indicate the extent of theoretical visibility from all parts of the Proposed Development.

6.6.3.3 The ZTV study for the solar PV areas shows that the main areas of visibility would arise within 500m the north, east and south and 1.5 km to the west of the Proposed Development. Beyond these areas, woodland would fragment the extent of theoretical visibility, with the hills to the south and west limiting visibility beyond and providing occasional vantage points where views towards the Proposed Development would arise.

6.6.3.4 The ZTV study for the BESS and Substation shows that the potential visibility would be largely contained to the Application Site itself, with some very limited visibility extending into the adjacent fields to the north, across fields near Belvidere Wood to the east, and intermittently across areas of agricultural land to the west, between 0.7-1.7 km from the substation.

6.6.3.5 Both ZTVs indicate potential visibility across Ewieside Hill and Ecclaw Hills which lie beyond the 2 km study area, from these hills the Application Site would be seen as a more minor feature in wider views.

6.6.3.6 It was noted during site surveys that trees at Cockit Hat Strip along a short part of the Application Site boundary to the north of Oldhamstocks has been felled and recently replanted and other small areas of tree felling within larger areas of woodland/plantation can be noted in the vicinity of the Application Site, some of which have been replanted and some of which have not been. None of these felled areas would markedly alter the pattern of visibility illustrated by the ZTVs and, where they are relevant to the assessment of effects, they are noted in relation to the receptor being considered.

Viewpoint Analysis

6.6.3.7 Viewpoint analysis has been undertaken from 9 viewpoints. The final list of viewpoints was prepared following consultation as set out within **Section 6.1.4**. Viewpoint descriptions and analysis are provided on the viewpoint cover sheets and the **Table 6.3** provides a summary of the scale and nature of the changes to views at each viewpoint.

6.6.3.8 The viewpoint locations are shown on all Figures and visualisations are provided with reference to the viewpoint numbers listed below.

TABLE 6.3 SUMMARY OF SCALE AND NATURE OF CHANGE PER VIEWPOINT

VP	LOCATION	DISTANCE, DIRECTION	SCALE AND NATURE OF CHANGE	
			Medium-term (early operation)	Permanent (once mitigation planting matures)
1	Local Road between A1 and Oldhamstocks	0km, NW	Large, Adverse	Large, Adverse
2	Local Road near A1 and Bilsdean	0.8km, E	Small/negligible, Neutral	Negligible, Neutral
3	Core Path through Dunglass GDL	0.6km, E	Small/negligible, Neutral	Small/negligible, Neutral
4	Hoprig	1.2km, S	Small/negligible, Neutral	Small/negligible, Neutral
5	Local Road southeast of Oldhamstocks	0.8km, S	Small/negligible, Neutral	Small/negligible, Neutral
6	Core Path near Oldhamstocks	0.2km, SW	Negligible, Neutral	Negligible, Neutral
7	Local road near Dirtside	0.2km, W	Medium, Adverse	Medium, Adverse
8	Cocklaw Hill Core Path	1.6km, W	Small/negligible, Neutral	Small/negligible, Neutral
9	Local road north of Oldhamstocks	0.3km, S	Negligible, Neutral	Negligible, Neutral

Outcomes

6.6.3.9 Each of the viewpoints is a 'sample' of the potential effects, representing a range of visual receptors including people at the viewpoint and nearby, at a similar distance and/or direction. From the ZTV and viewpoint analysis it can be seen that changes to views would arise as follows:

- The extent of Large and Medium scale visual changes, where the Proposed Development would form a major alteration to key elements, features, qualities and characteristics of the view such that the baseline will be fundamentally or notably changed, would be limited to the local roads which pass through the Application Site (i.e. at viewpoint 1) and elevated sections of these roads within approximately 250 m, such as at viewpoint 7.

- Beyond this area, Small and Small/negligible scale changes to views would arise within up to 0.6 km in lower lying areas and up to 1.6 km from more elevated viewpoints to the west and south.

- Proposed mitigation planting would further reduce changes to Negligible where it would entirely or largely screen views from locations with already limited visibility although where open and/or elevated views into the Proposed Development occur, the additional screening would be limited.

6.6.3.10 The ZTV and viewpoint analysis also inform the consideration of effects on character. Typically, the scale of change to character at a particular location will be slightly less than the changes to views, as character derives from a more holistic experience of the landscape, not just views. The degree to which a proposal changes character depends on a combination of:

- The degree to which it is 'in keeping' with the existing character;
- proximity and visibility; and
- the importance of views towards the site to the existing character.

6.6.3.11 These factors vary by character area and are considered below.

6.6.4 Effects on Landscape Character

Innerwick Coast (includes part of the Application Site)

6.6.4.1 As shown on **Figure 6.4**, this character area includes approximately two thirds of the site and extends north from the boundary with Scottish Borders along the coast, covering much of the northern half of the study area. Viewpoints 1-3 are located within this LCA. The SLA SPG describes the area as a *"transition between the north-eastern fringes of the Lammermuir Hills and the sea"* comprising *"rolling lowlands cut by numerous steep-sided stream valleys"* closest to the Eastern Lammermuir Fringe LCA. The terrain is described as opening *"out towards the coast into a broad, gently undulating plain through which the streams follow shallow less obtrusive courses"*, with rounded headlands, rocky cliffs and sheltered beaches backed by grass turf dunes at the coast.

6.6.4.2 The key characteristics are summarised as:

- Vegetation and landcover: medium to large arable fields with improved grassland and woodland along watercourses, with further clusters of woodland around farmsteads and in shelterbelts.
- Access: a highly accessible landscape where the coast forms a popular recreational resource. It notes numerous small roads, the John Muir Way and major road and rail routes along the open plain.
- Built features: two GDLs, the settlement of Innerwick and scattered farms and minor settlements, with some properties dating from the 18th and 19th centuries.
- Infrastructure and Industry: industry is prominent along the coast and infrastructure associated with the transport corridors forms highly visible features.
- Aesthetic qualities and views: extensive views from the predominantly unwooded plain to the coast; the open sea dominates views provides a sense of tranquillity. Industrial development and major transport corridors detract from the calm character of the wider LCA.

6.6.4.3 A number of consented infrastructure projects will be located within this LCA, including the onshore works and electricity transmission building associated with Berwick Bank offshore wind farm, Branxton BESS and the convertor station and cable works Eastern Green Link electrical 'superhighway' will affect a wide extent of the central area of the LCA during their construction and introduce a number of new large-scale permanent infrastructure features.

6.6.4.4 As described in **Technical Appendix 6.3**, this LCA is considered to be of Regional/community value, Medium/low susceptibility and to have a Medium/low sensitivity.

6.6.4.5 The Proposed Development would become the most dominant characteristic of the landscape and give rise to Large and Large/medium scale changes to character within most of the Application Site within this LCA, the sloping field immediately to the northwest of the proposed substation and BESS location (west of Field 1) and up to up to the local road and track passing Springfield Farm to the eastern edge of the Proposed Development (east of Fields 7 and 9), given the very close proximity and visibility of large parts of the Proposed Development in these areas. These changes would affect a Limited extent of the LCA.

6.6.4.6 Beyond these areas, increased distance and more limited visibility would give rise to Medium and Medium/small scale changes to character to the east of Springfield Farm, up to the edge of the GDL, (0.3-0.5 km east of the Proposed Development) where the Proposed Development would be seen beyond the farm complex. Medium and Medium/small scale effect would also arise in the fields northwest of Oldhamstocks Mains (within the Application Site but excluded from built development), where the sense of separation provided by the wooded valley passing the houses and the open views out towards the coast and rolling hills beyond the Proposed Development (see illustrative view 1 in Technical Appendix 6.4) would moderate its characterising influence. Changes in the remainder of the LCA would be Negligible scale due to the very limited visibility of the Proposed Development as a result of the landform, hedgerows and woodland, as illustrated by viewpoints 2 and 3.

6.6.4.7 Considering the above changes to character together, with particular reference to the Limited extent of Large and Large/medium effects, there would be a Medium magnitude impact on the character of the LCA through all stages of the Proposed Development and effects would be **Moderate, Adverse and not significant.**

Eastern Lammermuir Fringe (includes part of the Application Site)

6.6.4.8 As shown on **Figure 6.4**, this character area includes the south and western edges of the Site and covers the edge of the Lammermuir Hills within the western part of the study area. Viewpoints 5-9 are located within this LCA. The SLA SPG describes the LCA as having a *"strongly moulded landform … composed of an intricately interwoven series of smooth, rounded low hills and slopes, dissected by an abundance of streams"*. The description notes watercourses within the deeply incised valleys and presence of several small waterbodies, often hidden in depressions.

6.6.4.9 The key characteristics are summarised as:

- Vegetation and landcover: large scale fields bound by stone walls and post and wire fences, interspersed with occasional hedgerows. Mixed tree cover with scattered hedgerow trees across the lower arable slopes; deciduous woodland or gorse, bracken

and scrub across steep valley sides; ancient woodland along cleughs; and areas of medium scale forestry or mixed woodland across hill slopes or near farm buildings.

- Access: mostly winding minor roads which cross the numerous water courses. Straightened, widened or new stretches of road associated with wind farm access.

- Built features: scattered traditional farmsteads often dwarfed by large modern outbuildings, Spott House and conservation estate field form notable features, construction all in local deep pink sandstone.

- Infrastructure and Industry: two highly visible pylon lines are present, alongside three wind turbines on the peripheries of the LCA that give the impression that the large-scale windfarms are creeping off the plateau and closer to the coast.

- Aesthetic qualities and views: extensive views to the coast from domed hill tops. A strong pattern of open topped hills split by steep wooded valleys. Flowing forms within the higher ground that contrast with the angular outlines of stream valleys.

6.6.4.10 As described in **Technical Appendix 6.3** this LCA is considered to be of Community value, Medium/low susceptibility and Low sensitivity.

6.6.4.11 The Proposed Development would become the most dominant characteristic of the landscape and give rise to Large and Large/medium scale changes to character within the Application Site and the fields immediately to the west of the Application Site, extending up to the local road leading to Dirtside. This area extends 0.3 km to the west, where the landform and open field boundaries allows close proximity views of the Proposed Development (see viewpoint 7). To the north, this area is contained by the woodland along the northwestern boundary of the Application Site which breaks visibility and provides physical separation and to the south the low hilltop at Cockit Hat Strip would break visibility and limit changes to character beyond. These changes would affect a Limited extent of the LCA.

6.6.4.12 Medium and Medium/small scale changes to character would arise up to approximately 0.6-0.8 km further west, beyond the area of Large and Large/medium scale changes described above, where the landform continues to rise and where the Proposed Development would be a more distant feature in the expansive landscape. Changes in the remainder of the LCA would be Negligible scale due to the very limited visibility of the Proposed Development, as demonstrated by Viewpoints 5, 6, 8 and 9.

6.6.4.13 Considering the above changes to character together, with particular reference to the Limited extent of Large and Large/medium effects, there would be a Medium magnitude of impact on the character of the LCA through all stages of the Proposed Development and effects would be Moderate, Adverse and **Not Significant.**

Other Character Types

6.6.4.14 Character type 110: Coastal Farmland – Borders, which occupies the southeastern part of the study area, beyond 500m from the Proposed Development. Given the distance, limited extent and degree of visibility of the Proposed Development that would occur from within this character type, as illustrated by the ZTVs and viewpoint 4, effects on character would be Negligible and do not require detailed assessment.

6.6.5 Visual Effects

6.6.5.1 Three types of visual receptors are considered within this assessment:

- Groups – Based around settlements or rural areas and representing effects on the community within public spaces including streets and local recreational routes in that place. Views from groups of homes may also be noted in the descriptions, but as noted at **6.1.8**, effects on these are a separate matter.
- Routes – Users of longer distance transport and recreational routes through the study area.
- Specific viewpoints – Visitors to locations which are recognised and valued for the views available.

Rural Area within 0.4 km

6.6.5.2 This receptor group encompasses the minor roads where they pass within or very close to the Application Site, and the Core Path to the west which extends south from Dirtside, coinciding with the main area of close views as illustrated by **Figure 6.2**. Homes in this group include Oldhamstocks Mains Farmhouse and Cottage and the small group of homes at Birnieknowes as well as the financially involved property at Springfield. Land to the west of Oldhamstocks Mains lies within an SLA as shown on **Figure 6.1** and in this area views are of Regional value, elsewhere in the receptor group views are of Community value. Residents in public spaces near their homes and visitors to the area have a High susceptibility and sensitivity is judged to be High/medium.

6.6.5.3 Viewpoints 1, 6, 7 and 9 represent views from local roads and Core Paths which are included in this receptor group. The most open views from local roads are represented by viewpoint 1 and illustrative view C in **Technical Appendix 6.4** where the undulating terrain would permit close views of the Proposed Development, including the BESS and substation. Elsewhere, hedges or tree belts would often screen or partly screen views as illustrated by viewpoint 6, 9 and illustrative views B and D in **Technical Appendix 6.4**, though elevated views from the local road to the west are also available as illustrated by viewpoint 7. When hedges have been recently cut there will be more open views over the hedges, including from the Core Path to the southwest and local road to the northeast of Springfield Farm, noting that those within and on the perimeter of the Application Site would be managed at an increased height during the lifetime of the Proposed Development.

6.6.5.4 Changes to views would be Large to Medium scale for an Intermediate extent of this receptor group giving rise to impacts of Large/medium magnitude through all stages of the Proposed Development. Effects would be **Major/moderate, Adverse and significant**.

Visitors to Dunglass GDL (adjacent, east)

6.6.5.5 This receptor group encompasses visitors to the designated historic landscape which extends between Oldhamstocks and the coast as shown on **Figure 6.6**. The GDL is identified as being of high historic and artistic interest as an example of the 'Picturesque' style, and of 'some' scenic value given some features have been lost. Visitors to the GDL would have a High susceptibility to changes to views which are judged to be of Regional value given the

moderate scenic value and the fact that visibility arises primarily within outlying farmland rather than from within the designed landscape. Sensitivity is judged to be High/medium.

6.6.5.6 Viewpoints 3 and 5 represents views from within the GDL and together with **Figure 6.6** these illustrate that the undulating terrain and policy woodlands would limit visibility of the Proposed Development to glimpsed views from the farmland at the outer western and southern edges of the GDL. Changes to views during all stages of the Proposed Development would be Small/negligible to Negligible scale for a limited extent of the area, giving rise to a Negligible magnitude of impact through all stages of the Proposed Development. Effects would be Minor, Neutral and **Not Significant**.

Hoprig (0.8km, south)

6.6.5.7 This receptor group encompasses the minor roads radiating from Hoprig as well as the village and the group of homes at Ferneylea to the northwest of the settlement. Views in this undesignated area are of Community value. The local road north of Hoprig has views into the Dunglass GDL, but these views are of particular value given they feature large open field and a close view of pylons. Residents and visitors to the area have a High susceptibility and sensitivity is judged to be High/medium.

6.6.5.8 Existing trees, woodland and hedgerows lining roads in and out of Hoprig, and bordering the fields immediately surrounding the settlement, largely screen outward views in the direction of the Application Site. The most open views occur from gaps in the roadside hedgerow/trees on the road to Cocksburnpath to the northeast, as illustrated by viewpoint 4, and the few properties located at this northeast edge of Hoprig would have similar views from the rear. Similar views would also be possible from the short and more elevated section of the local road northwest to Oldhamstocks, as illustrated by viewpoint 5, as it passes Ferneylea and slightly more open and elevated views of the Proposed Development would occur from the road passing the houses at Ferneylea, albeit intermittently screened/filtered by the roadside hedgerow and trees.

6.6.5.9 Changes to views would be Small/negligible to Negligible scale for an Intermediate extent of this receptor group giving rise to impacts of Small/negligible magnitude. Effects would be Minor, Adverse and **Not Significant**.

Other Visual Receptors

6.6.5.10 Based on the geographic distribution set out in **Section 6.6.3**, some visual receptors within the study area would experience negligible effects and do not require detailed assessment:

- Local roads, homes and Core Paths where no visibility is indicated on **Figure 6.6**. This includes the settlements of Oldhamstocks, Cockburnspath and Thornton.
- The local road, Core Path and homes around Oldhamstocks Burn to the west of the Application Site and local roads and homes beyond 0.4 km to the northeast. Although the ZTV studies indicate some visibility in these areas, in practice there is very limited visibility towards the Application Site and where visibility does arise changes to views tend to be Small/negligible scale as illustrated by viewpoint 2.
- A1 and East Coast Main Line Railway (0.9km, NE) – both of these routes would have limited visibility of the Proposed development as shown by **Figure 6.6**, and changes to views would be Negligible scale.

6.6.6 Designated Landscapes

SLA4: Monynut to Blackcastle (includes part of Application Site)

6.6.6.1 As shown on **Figures 6.1** and **6.2**, this SLA extends westwards from the Application Site and covers the adjacent rolling hilltops and dissected edge of the Lammermuir Plateau to the west. It incorporates steep sided wooded cleughs, wider glaciated valleys and the historic village of Oldhamstocks. The ZTV studies indicate that visibility of the Proposed Development would be mostly limited to the eastern edge of the SLA, within 2 km of the Application Site. There would be potential for more distant fragmented theoretical visibility beyond this across hills to the south-west. Potential visibility is generally limited within the incised cleughs, including around Oldhamstocks where potential visibility is limited to the higher slopes around the village.

6.6.6.2 **Table 6.4** summarises and considers effects on each of the special qualities and features of the SLA as set out within East Lothian Council's SLA SPG.

TABLE 6.4 SUMMARY OF EFFECT

QUALITY	SUSCEPTIBILITY	EFFECT
The landscape pattern and sense of place.	High/medium – solar development could alter the landscape pattern and *"sparse built development"* within the area.	Medium scale for a Limited extent – the Proposed Development would form a new, atypical feature at the edge of the SLA and would reduce the clear delineation of the woodland belt marking the change of the designated area to the north of Oldhamstocks.
Complex and contrasting mix of land uses.	Medium – a new solar development would increase the types of land use within the area, but would reduce the sense of naturalness identified in some areas.	Medium scale for a Limited extent – the Application Site is located across an area of intensively managed agricultural land across rolling hilltops and away from more naturalistic areas. It would form a new type of land use within the SLA.
Colour and contrast of natural features and turbines.	Medium – solar development would add further contrast to colours within the landscape.	Small scale across a Localised extent – the solar panels would not alter the moorland and heather which form part of the distinctive colours within the SLA, however they would add new colours within the eastern edge of the SLA and in views to the sea.
Naturalness and wildness.	High/medium- Solar development would reduce the	Negligible – the solar development would not affect more sensitive habitats or the

QUALITY	SUSCEPTIBILITY	EFFECT
	naturalness of the area but would not increase lighting at night.	sense of wildness around Monynut Edge where existing wind farms are present.
Distinctive cleughs of Ling Hope, Bladdering Cleugh and Burn Hope and the valley of Sheepath Glen.	Low – solar development is unlikely to be located within steep sided valleys or cleughs.	Negligible – the solar development is not located near or visible from the listed distinctive cleughs.
Calcareous grassland and valley fen marsh habitats.	Low – solar development is unlikely to be located on rare habitats.	Negligible – the solar development is not located within or near Lammermuir Deans where sensitive habitats are described.
Fairy Glen geological site.	Low – solar development is unlikely to be located within a glen or affect the underlying geology.	Negligible – the solar development is not located within or near Fairy Glen.
Winding minor single-track roads and associated scenic value.	High/medium – solar development is unlikely to alter existing roads or routes for construction or access, but may affect scenic value as experienced from these routes.	Medium to Small scale for a very Limited extent – there would be changes to views from the local road as it passes the Application Site, as illustrated by viewpoint 7.
Open access across the moorland and core paths	Medium – solar development may alter access, but would typically avoid doing so for key routes and areas.	Small scale for a Limited extent – access would no longer be available to the open fields within the SLA, however these do not include Core Paths or open land used regularly for recreation.
Views towards the coast.	High – solar development is likely to alter views when seen from nearby.	Medium to Small scale across a Localised extent – the solar farm would form a new feature in views from core paths at Cocklaw Hill and nearby to the west of the Application Site, however the wider views would be retained.
Views of the Lammermuirs and distinct hills.	High – solar development is likely to alter views when seen from nearby.	Negligible, the Proposed Development would not be seen in views towards the Lammermuirs or distinct hills from within the SLA.
Oldhamstocks village.	High – development close to the Oldhamstocks may affect the landscape setting of the village.	Negligible – the Proposed Development is set back from the village and would not be visible from the village or the lower slopes around the village

QUALITY	SUSCEPTIBILITY	EFFECT
		which form its immediate landscape setting.
Historical agricultural settlement visible as earthworks.	Low – solar development is unlikely to be built on or over visible historic earthworks.	Negligible – the solar panels would not be built on historic features.

6.6.6.3 Based on the detailed considerations set out above, there would be a Localised or Limited extent of Medium to Small scale changes to the landscape pattern and colours, scenic value experienced from local roads, and views towards the sea in areas between the eastern edge of the SLA at Cockithat Strip and Blackcastle Hill. The special qualities affected vary between High and Medium susceptibility and would be of High/medium sensitivity taking account of the Regional value of the SLA. The magnitude of impact would be Medium/small at all stages of the Proposed Development and effects would be Moderate, Adverse and **Not Significant**.

Other Designated Landscapes

6.6.6.4 Based on the geographic distribution changes to views set out in **Section 6.6.3**, some designated areas within the study area as shown on **Figure 6.1** and **6.2** would experience negligible effects and do not require detailed assessment:

- SLA 30: Thorntonloch to Dunglass Coast (0.8km, northeast) – Changes to views in the closest part of this area would be Small/negligible scale as illustrated by viewpoint 2. Visibility elsewhere within this SLA, which slopes away from the Application Site towards the coast would typically be less than at viewpoint 2 as illustrated by **Figure 6.2.**

6.7 Summary

6.7.1 Scope and Purpose

6.7.1.1 This assessment describes the existing landscape and views, considers their sensitivity to change and identifies changes likely to arise from the Proposed Development, providing judgements of the importance of the effects arising.

6.7.2 Design

6.7.2.1 Design of the Proposed Development has taken account of development management advice provided within the East Lothian Special Landscape Areas SPG. Solar panels would be set back from field edges that border local roads and paths to reduce visibility from these routes while reinforcement and management of existing hedgerows, along with new hedgerows and woodland planting, would over time increase the degree of screening in closer proximity views. Improvements to existing hedgerows within the Application Site

would provide a long-term enhancement to some of the locally characteristic features and the landscape fabric of the Application Site.

6.7.3 Effects on Landscape Character

6.7.3.1 The Proposed Development is located across the boundary between the Innerwick Coast and Eastern Lammermuir Fringe landscape character areas. Large to Medium scale changes to character would occur within parts of the Application Site hosting the infrastructure of the Proposed Development and extending up to around 300 m across undeveloped areas in some directions where open views would be possible. In the context of these extensive character areas, the very Limited extent of these changes would give rise to effects that are Moderate, Adverse and not significant.

6.7.4 Visual Effects

6.7.4.1 The most affected receptor group would be users of local roads, paths and residents within around 0.4 km of the Proposed Development where frequent, close proximity views of solar panels and other infrastructure would occur. These would sometimes be filtered or screened by roadside hedgerows, trees and woodland belts within the area, increasingly so as proposed landscape mitigation grows to provide additional screening. However, more open and elevated views looking down into the Proposed Development from some parts of the group would remain through all stages and give rise to effects that are Major/moderate, Adverse and significant.

6.7.4.2 Beyond the immediate vicinity of the Proposed Development, the degree of visibility would rapidly reduce and where more distant views are possible, they would feature only very small parts of the Proposed Development, typically giving rise to Small/negligible or Negligible changes to views and effects on other receptor groups would be not significant.

6.7.5 Effects on Designated Landscapes

6.7.5.1 The Proposed Development falls partly within SLA4: Monynut to Blackcastle. A Localised or Limited extent of Medium to Small scale changes to the landscape pattern and colours, scenic value experienced from local roads, and views towards the sea would give rise to effects that are Moderate, Adverse and not significant. No other designated landscapes would be notably affected by the Proposed Development.

6.7.6 Cumulative Effects

6.7.6.1 Cumulative effects with operational and consented developments are considered with the main assessment summarised above. There are no projects in planning or scoping likely to give rise to effects requiring detailed consideration within this assessment.

6.7.7 Assessment Summary Table

6.7.7.1 **Table 6.5** summarises the assessment outcomes, including only effects which are non-Negligible.

TABLE 6.5 SUMMARY OF ASSESSMENT OUTCOMES

RECEPTOR	DISTANCE, DIRECTION	SENSITIVITY	MAGNITUDE	LEVEL OF EFFECT
Character Areas				
Innerwick Coast	Includes part of Application Site	Medium / low	Medium	Moderate, Adverse, not significant
Eastern Lammermuir Fringe	Includes part of Application Site	Low	Medium	Moderate, Adverse, not significant
Visual Receptors				
Local roads, Core Paths and homes within 0.4km	Includes part of Application Site	High / medium	Medium / Small	Major/moderate, Adverse, significant
Core Path at Cocklaw Hill	0.5 km, W	High / medium	Medium / Small	Moderate, Adverse, not significant
Hoprig	0.8 km, S	High / medium	Small / negligible	Minor/minimal, Adverse, not significant
Designated Landscapes				
SLA 4: Monynut to Blackcastle	Includes part of Application Site	High / medium	Medium / Small	Moderate, Adverse, not significant