



Chapter 6: Landscape and Visual Impact Assessment

Kirknewton Solar & BESS EIA Report

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Non-Technical Summary

Landscape and Visual

- 6.1.1 The proposed Kirknewton Solar Array and BESS (the Proposed Development) has been the subject of a Landscape & Visual Impact Assessment (LVIA) to identify the potential effects on the landscape, and the views of people who live in, travel through, and visit the local area. The assessment was undertaken in accordance with recognised guidance, and consultation with West Lothian Council.
- 6.1.2 The Site is located in gently sloping arable farmland, which is bordered in the east by existing woodland and established shelterbelts. The Proposed Development would result in the introduction of solar array, battery storage and associated infrastructure to the Site, as well as landscape planting to assist with screening and to improve habitats. This includes new areas of native woodland, trees, hedgerows and species-rich grassland. The Site would continue to be used for livestock grazing alongside the solar panels.
- 6.1.3 In terms of landscape change, the main effects resulting from the introduction of the Proposed Development would be localised and predominantly restricted to the Site. In addition, the perception of landscape change would also be evident locally from limited areas to the north (within 1km), and remote upland areas, such as Corston Hill to the west. The character of the wider landscape would not be significantly changed. This is due to the relatively low-lying nature of the development, and the screening influence of existing woodland in combination with the proposed planting, which would help integrate the development into its setting.
- 6.1.4 The Site is not located within a designated landscape (a landscape that has been recognised for its outstanding beauty or uniqueness). There are designated landscape areas within the wider surroundings, namely the Special Landscape Areas of the Pentland Hills, Almond & Linthouse Valleys, and the Ratho Hills. However, due to their spatial separation from the Site and extent of intervening screening, the special qualities of these designations would not be significantly altered by the Proposed Development.
- 6.1.5 Visual effects would also be restricted through the Site location, which is spatially separated from residential settlements, and partly contained by surrounding woodland and tree cover. The most notable effects would be experienced by residents at Nos. 29 and 31 Newlands to the south-east, Leyden Farm Cottages (nos. 1, 2, 3, & 4) to the west, and Burnbrae to the north. The effects would steadily reduce over time in accordance with the establishment of proposed planting measures within the Site.
- 6.1.6 There would be no significant adverse effects on views from recreational paths, cycleways, or attractions, or from main transport routes. The clearest views would be experienced from Leyden Road in close proximity to the Site, most notably when travelling south in the vicinity of Selm Muir Wood.
- 6.1.7 Potential cumulative effects in combination with other developments have also been considered. The Proposed Development would augment the presence of the existing Ormiston Farm Wind Turbine and consented Selms Muir Solar Farm within the local landscape to the northwest. However, the combined effect of the Proposed Development with these schemes would be restricted by the presence of

intervening woodland and tree cover. As such, cumulative effects would be localised and limited to travellers on Leyden Road. The Proposed Development, in combination with consented and existing energy infrastructure, would not result in a notable alteration to wider landscape character or to people's visual perception of this agricultural landscape.

Acronyms and Abbreviations

CEMP	Construction Environmental Management Plan
CMLI	Chartered Member of the Landscape Institute
EIA	Environmental Impact Assessment
ES	Environmental Statement
GLVIA3	Guidelines for Landscape and Visual Assessment (3 rd Edition)
LCA	Landscape Character Assessment
LCT	Landscape Character Type
LDP	Local Development Plan
LEMP	Landscape Enhancement & Mitigation Plan
LI	Landscape Institute
LMP	Landscape Management Plan
LPA	Local Planning Authority
LVA	Landscape and Visual Appraisal
LVIA	Landscape and Visual Impact Assessment
MLA	Master of Landscape Architecture
NPF	National Planning Framework
PM	Photomontage
VP	Viewpoint
WLC	West Lothian Council
ZTV	Zone of Theoretical Visibility

6.0 Landscape and Visual Impact Assessment (LVIA)

6.1 Introduction

6.1.1 This chapter assesses the likely significant effects of the Proposed Development upon sensitive receptors in the vicinity of the Site during the construction and operational phases.

6.1.2 This chapter is supported by the following figures, which are presented in **EIAR Volume II**:

- **Figure 6.1** – 3km Study Area
- **Figure 6.2** – Zone of Theoretical Visibility (ZTV)
- **Figure 6.3** – Excluded ZTV with Viewpoints
- **Figure 6.4** – Landscape Character Types
- **Figure 6.5** – Landscape Designations and Visual Receptors
- **Figure 6.6** – Residential Receptors
- **Figure 6.7** – Cumulative Development

6.1.3 This chapter is supported by the following technical appendices, which are presented in **EIAR Volume III**:

- **Technical Appendix 6.1** – Policy and Guidance
- **Technical Appendix 6.2** – Full LVIA methodology
- **Technical Appendix 6.3** – Landscape Sensitivity
- **Technical Appendix 6.4** – Residual Visual Effects
- **Technical Appendix 6.5** – Landscape Mitigation Plan
- **Technical Appendix 6.6** – Visualisations (Viewpoints 1 – 4)

6.1.4 This chapter has been prepared by **Christopher Lockett CMLI** of TGP Landscape Architects Ltd., a Landscape Institute-registered Practice.

6.1.5 Chris is a Landscape Institute-Chartered Landscape Architect with over 20 years' experience in landscape planning and design, both in the UK and USA.

6.1.6 Having conducted numerous Landscape & Visual Appraisals (LVA) and full LVIA across a range of private and public sectors including: renewables; residential development; commercial / industrial; and agricultural infrastructure, Chris' knowledge and understanding of assessment guidelines, policy, and procedure is a valuable part of an established collaborative landscape planning team within TGP.

6.1.7 **Gary Stodart (MLA)** is Director and Practice Owner of TGP Landscape Architects. Gary is a highly experienced and chartered landscape consultant, with a Postgraduate Masters in Landscape Design (MLA) and over 30 years of experience in landscape consultancy, across a wide range of sectors. Gary has also undertaken a number of landscape planning projects for local authorities across the UK, in relation to settlement expansion and open space, including capacity studies feeding into emerging development plans.

6.2 Relevant Legislation, Policy and Guidance

6.2.1 This chapter has been prepared with reference to the following legislation, policy and guidance. Details and links are provided in **Appendix 6.1, EIAR Volume III**.

Legislation

6.2.2 This chapter takes account of the following legislation:

- Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations, 2017 ('EIA Regulations')

Planning Policy and Guidance

6.2.3 This chapter takes account of the following planning policy and guidance:

- National Planning Framework 4, (NPF4), updated Oct 2024
- Local Development Plan (LDP), West Lothian Council (WLC), 2018

6.2.4 Supplementary Guidance documents are statutory and form part of the Local Development Plan. Along with Non-Statutory Guidance they support the content of the LDP and inform applicants on expectations within planning applications.

Statutory Guidance

- Development in the Countryside Supplementary Guidance (2019); and
- Supplementary Guidance: Renewables and Low Carbon Energy Development (Excluding Wind Energy) (2021).

Non-Statutory Guidance

- Planning Guidance: Controlling Obtrusive Lighting (2021);
- Planning Guidance: Planning for Nature – Development Management and Wildlife (2020); and
- Planning Guidance: Soil Management & After Use of Soils on Development Sites (2021).

Other Policy and Guidance

6.2.5 This chapter also takes account of the following:

- *Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3)*; Institute of Environmental Management and Appraisal and the Landscape Institute, 2013;
- *Landscape Character Assessment: Guidance for England and Scotland*; Prepared on behalf of the Countryside Agency and NatureScot, Land Use Consultants, 2002;
- *Landscape Sensitivity Assessment Guidance*; NatureScot, 2022;
- *Visual Representation of Development Proposals*; Landscape Institute Technical Guidance Note 06/2019 (2019);
- *Assessing Landscape Value Outside National Designations*; Landscape Institute Technical Guidance Note 02/21;

- *Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment (GLVIA3)*: Landscape Institute Technical Guidance Note (LITGN-2024-01); and
- BS 5834:2012 Trees in Relation to Design, Demolition and Construction.

6.3 Assessment Methodology

Consultation

- 6.3.1 The following viewpoint locations within **Table 6.3.1**, alongside the rationale for their selection, were determined from desk-based analysis and field study. Per GLVIA3 guidance these have been chosen based upon receptor type; the ZTV overlay; location in relation to development (distance/elevation/orientation); and public accessibility. **Figure 6.3** illustrates their locations.
- 6.3.2 West Lothian Council (WLC) were consulted regarding Viewpoints and general methodology on 1st July 2025 via email following their pre-application site visit of 20th June. The WLC response, received via email (4th August 2025), stated that WLC have no issue or further comment with the locations of the viewpoints.
- 6.3.3 Following further fieldwork, lack of access to Corston Hill cairn due to livestock resulted in a location on lower ground with an appropriate informal path to Leyden Farm being selected. Furthermore, a second viewpoint on the B7031 was discounted due to lack of direct visibility.

Table 6.3.1: Viewpoint Locations

Viewpoint	Rationale
1. View north from Leydon Road near Belstane Farm	View from the local road. Representative of views experienced by local road users.
2. View southeast from Selm Muir Wood path entrance on Leydon Road	View from the local road. Representative of views experienced by walkers, local road users, and nearby residential receptors.
3. View northeast from path at Corston Hill, Pentland Hills SLA	View west from informal path. Representative of potential recreational walkers.
4. View southwest from Kaimes Hill	View west from Kaimes Hill. Representative of recreational walkers.
Discounted Viewpoint Locations	
View southwest from B7031 near Greenburn	View west from B7031 local road network. Representative of views experienced by local road users, and residential receptors. Discounted due to intervening woodland and shelterbelt/field boundary trees – no direct visibility.

EIA Screening and Scoping

- 6.3.4 WLC were requested to adopt a screening opinion on the Proposed Development through a formal letter dated 30th July 2025.
- 6.3.5 Formal Screening Opinion (WLC ref: 0717/EIA/25) dated 9th October returned the requirement for EIA, to include for full LVIA.

Study Area

- 6.3.6 GLVIA3 emphasises that study should be proportionate and tailored to development to ensure concise and considered reporting, focussing on significant impact and effect.
- 6.3.7 Based upon the pre-application study and following EIA Screening, a 3 km radius Study Area from the Proposed Development has been adopted for the assessment of landscape and visual effects.
- 6.3.8 This has been informed by analysis of Zone of Theoretical Visibility (ZTV) mapping and an early appraisal of potential effects for a Proposed Development of this scale. It is deemed that any significant landscape or visual effects would be confined within this geographical area.
- 6.3.9 The Study Area is shown on **Figure 6.1** in EIA Report.

Establishing Baseline and Sensitive Receptors

- 6.3.10 In establishing the baseline and receptors, use has been made of other published guidance with assessment work drawing on the following relevant baseline information:
- National Landscape Character Assessment (web-based interactive map), NatureScot, 2019¹;
 - Ordnance Survey Land Ranger (1:50 000) and Explorer (1:25 000) maps;
 - Field surveys; and
 - Aerial photography.

¹ NatureScot, LCA: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>

- 6.3.11 Desk-based assessment has been followed up with Site and area fieldwork, with photography conducted to industry standards on 12th August 2025.
- 6.3.12 Further information on the survey methodologies is provided in **Technical Appendix 6.1, EIAR Volume III**.

Approach to Impact Assessment

ZTV and Viewpoint Analysis

- 6.3.13 The potential landscape and visual effects arising from the Proposed Development have been analysed in two ways:
- ZTV map analysis, to provide a general overview of the geographical extent of visibility of the Proposed Development within the Study Area; and
 - Analysis of the potential effects at key viewpoints.

Zone of Theoretical Visibility Analysis

- 6.3.14 Theoretical visibility mapping of the Proposed Development is illustrated in **Figures 6.2 and 6.3**. The ZTVs have been prepared on the basis of 'bare ground' (excluding the screening effects of surrounding buildings or woodland / vegetation) and 'excluded' to show the mitigating influence of landcover – both man-made and natural. These illustrate the maximum overall visibility of the Proposed Development.
- 6.3.15 **Figure 6.2** clearly shows the topography of the Lowland Plains and Upland Fringes LCTs, with the extent of potential visibility illustrated in a north-east – south-west orientation, focused within 1 km, with further influence on face of hills to the north-west to west, and south-east to east. To the west, this influence extends to 2.5 km, and to the east beyond 3 km.
- 6.3.16 **Figure 6.3** illustrates how character elements of local and wider LCT woodland restricts the influence of Proposed Development, particularly with reduction in the

extent of the ZTV footprint to the northwest; north beyond conurbation; north-east and east; and south-east.

Viewpoint Analysis

- 6.3.17 Analysis has been carried out on a selection of key viewpoint locations to assess the likely level of effects arising as a result of the Proposed Development.
- 6.3.18 As previously stated, four viewpoints have been selected as being representative of the main views from publicly accessible locations within the Study Area (see **Figure 6.3**). Visualisations are included within **Technical Appendix 6.6**.
- 6.3.19 Two of the Viewpoints are illustrated as photo sheets (VP1 and VP3) to highlight the approx. extent of the Proposed Development within the views. VP2 and VP4 have been developed to full photomontage.

Table 6.3.2: Viewpoint 1: View north from Leydon Road near Belstane Farm

Viewpoint 1: Analysis
This viewpoint is located approx. 850 m to the south of the Proposed Development, adjacent to Belstane Farm within the Lowlands Plain LCT. It is representative of views experienced by local road users and walkers.
<p>Existing View:</p> <p>The existing guided views are characterised by the road corridor, with roadside trees and hedgerow, and long-range views towards the simple and expansive skyline defined by the Bathgate Hills beyond. While in close proximity to The Site, the subject field is screened by existing (predominantly Hawthorn) hedging.</p>
<p>Predicted View:</p> <p>At this upper elevation (approx. 251 m AOD) with the Site sloping away in a northerly direction, the existing unmaintained hedgerow provides considerable screening to the Proposed Development. As is illustrated by the wireline overlay, the array infrastructure would not exceed the current height of the hedge.</p>
<p>Effects on Visual Amenity:</p> <p>If existing hedgerow is to residually remain unmaintained, the magnitude of change to the view from this location would be none or Negligible, at worst. As such, the level of effect on receptors is deemed to be neutral or Minor, at worst. This would be adverse and not notable.</p> <p>If the hedgerow is maintained / cut, the upper extents of panels and perimeter fencing would be viewed. Magnitude of change would be Slight, with level of effect deemed Moderate, adverse, and not notable.</p>
<p>Landscape Effects:</p> <p>With the existing hedgerow screening, the introduction of the Proposed Development would not alter the landscape character or fabric from this viewpoint. As such, magnitude of change on landscape is classed as Negligible, with resultant Negligible/Minor level of effect, adverse, and not notable.</p>
<p>Mitigation:</p> <p>As shown at 10-years, proposed mitigation in the form of infilled and improved field boundary trees add complementary and beneficial structural landscape form to the view.</p>

Table 6.3.3: Viewpoint 2: View southeast from Selm Muir Wood path entrance on Leydon Road

Viewpoint 2: Analysis
<p>This viewpoint is located approx. 200 m to the north of the Proposed Development, at closest point, at the north of the Selms Muir Forest track entrance, which is a popular walking route. The vantage point is representative of views experienced by recreational walkers and vehicular road users. The viewpoint is also indicative of residential receptor ingress/egress at Rowanbank, which is in close proximity within the edge of Selm Muir Forest.</p>
<p>Existing View:</p> <p>The existing view to the south-east is defined by the undulating rise in topography to a gentle skyline. Character is rural with agricultural fields, defined by elements of post-&-wire fencing and drystone walls. Tree cover comprises single-line field boundary trees and expansive areas of deciduous and evergreen woodland. The rural perception is impacted by the presence of large-scale electricity pylons and overhead lines, which dominate the view.</p>
<p>Predicted View:</p> <p>The eastern parcel of Proposed Development would be viewed beyond the fragmented line of field boundary trees which define the northern site boundary. The BESS compound would also be evident on the slope of the hill, backdropped by the woodland beyond. The eastern extent of the western array infrastructure would be seen extending to the skyline.</p>
<p>Effects on Visual Amenity:</p> <p>For recreational path users arriving and exiting the Selm Muir Forest, the introduction of the solar array and BESS infrastructure would be a noticeable addition to the rural landscape, viewed in combination with the existing pylons and OHLs. This magnitude of change would be deemed Moderate, with resultant level of effect on visual amenity being Major/Moderate, adverse, and notable.</p> <p>The establishment and growth of boundary mitigation tree planting would see residual level of effect reduced to Moderate, adverse, and notable.</p>
<p>Landscape Effects:</p> <p>While predominantly rural in character, the idyllic quality of the baseline landscape is impacted by the presence of electricity transmission infrastructure. The addition of solar array and BESS would introduce elements that are prominent, but are not substantially uncharacteristic with the attributes of the baseline landscape. Magnitude of change is deemed to be Moderate, with level of effect on landscape fabric and character assessed as Moderate, adverse, and notable.</p> <p>The establishment of mitigation tree planting as an important component of Proposed Development would enhance existing perception of field boundary trees and woodland – an important feature of the local and wider landscape. The residual adverse level of effect on landscape would remain Moderate, though not notable.</p>
<p>Mitigation:</p> <p>New infill tree planting and structural block hedgerow further add to the existing landscape framework buffering direct views of the eastern parcel array and BESS infrastructure. New field boundary tree planting and hedgerow restoration / installation along Leyden Road provides additional landscape screening to the western parcel, helping to blend development into the rural setting.</p>

Table 6.3.4: Viewpoint 3: View northeast from Corston Hill path

Viewpoint 3: Analysis
<p>This viewpoint is located at the base of Corston Hill approx. 1.7 km west of the Proposed Development, on a trail that links Morton Road to Leydon Farm. The viewpoint is located within the Upland Fringes – Lothian LCT. It is representative of views experienced by recreational walkers.</p>
<p>Existing View:</p>

Viewpoint 3: Analysis
The existing views to the north-east are characterised by the upland fringe / valley landscape of semi-improved grassland on the adjacent hillside, improved agricultural grazing land, woodland, and farm steading buildings.
<p>Predicted View:</p> <p>From within the lower setting of the landscape, direct views of the Proposed Development would be restricted by small changes in valley topography and intervening stances of woodland / shelterbelt planting. Any glimpsed view of development would be limited to the upper extent of array infrastructure / perimeter fencing seen in small windows through trees and adjacent topographic rises.</p>
<p>Effects on Visual Amenity:</p> <p>Potential views of the Proposed Development experienced by walkers on the informal path at this location would be fleeting and predominantly screened by intervening vegetation and landform. Change to the baseline view would be barely perceptible. The composition and character of the view would be substantially unaltered, approximating to little or no change. Magnitude of change would be Negligible, at worst. This would lead to a level of effect on visual amenity deemed Minor, adverse, and not notable.</p>
<p>Landscape Effects:</p> <p>The introduction of Proposed Development would result in a very minor alteration to the agricultural / rural characteristics of the baseline landscape. Change would be barely distinguishable approximating little to no change. Magnitude of change to landscape character would be Negligible at worst, resulting in a Minor adverse level of effect on landscape character and fabric which is deemed not notable.</p>
<p>Mitigation: Established planting does not alter the existing perception of woodland within the lowland agricultural scene from this location; however, this embedded component of the Proposed Development is complementary to the existing framework of steading groupings and field boundary trees.</p>

Table 6.3.5: Viewpoint 4: View southwest from Kaimes Hill

Viewpoint 4: Analysis
This viewpoint is located approx. 2.1 km to the north-east of the Proposed Development on the craggy summit of Kaimes Hill, within the Lowlands Plain LCT. It is representative of views experienced by recreational walkers from an elevated vantage point.
<p>Existing View:</p> <p>The vantage point allows for panoramic views over the surrounding lowland LCTs. Existing views to the south-west encapsulate the mosaic of field patterns, interspersed with estate woodland, coniferous plantation, shelterbelt and field-boundary trees, as well as the open Kirknewton Airfield. There is a richness of texture and colour provided by the various land use / management of the lowlands, extending up the slopes of the gentle uplands, topped by moorland. The view can be defined as complex.</p>
<p>Predicted View:</p> <p>The Proposed Development would be seen in the middle-distance, providing an area of in-fill between stances of existing woodland. At this range, and through intervening / existing tree groupings, the BESS infrastructure would not be noticeable.</p>
<p>Effects on Visual Amenity:</p> <p>Within the complex mosaic of landscape patterns, the introduction of the Proposed Development, while partially visible, is at sufficient distance to result in limited change to the view. The character and composition, although altered would be similar to the baseline existing situation. Magnitude of change is deemed to be Slight and, as such, the level of effect would be Moderate, adverse, and not notable.</p> <p>At this range, the establishment of mitigation landscaping would see level of effect remain the same.</p>

Viewpoint 4: Analysis

Landscape Effects

The introduction of the Proposed Development would see a minor alteration to the agricultural characteristics of the baseline and the introduction of a new element that is not wholly uncharacteristic with the surrounding landscape at this range. It is not out of scale with the pattern of existing landscape elements and presents a magnitude of change deemed Slight. Level of effect on landscape fabric and character is Moderate/Minor, adverse, and not notable.

At this range, the establishment of mitigation landscaping would see level of effect remain the same.

Mitigation: At this distance the 10-year established mitigation planting is a slight beneficial addition to the wider pattern of existing woodland and field boundary / shelterbelt trees seen in the mosaic of the agricultural lowlands.

Assessment of Sensitivity

Designations and Receptor Types

6.3.20 Landscape planning designations and policies are considered in the determination of the sensitivity of landscape and visual receptors, as they provide an indication of value ascribed to the landscape or visual resource. **Table 6.3.6** sets out the scale of sensitivity that has been applied to the receptors identified in relation to this technical assessment.

Table 6.3.6: Sensitivity of Receptor

Receptor Sensitivity	Landscape Receptor Sensitivity Criteria	Visual Receptor Sensitivity Criteria
High	Landscape character, characteristics and elements which would generally be of lower landscape capacity or scope for landscape change, and of notable landscape value and quality. These are landscapes that may be considered to be of particular importance to conserve and which may be particularly sensitive to change if inappropriately dealt with.	Residents within the curtilage of their homes; users of outdoor recreational facilities including footpaths, cycle ways and recreational road users; people experiencing views from important landscape features of physical, cultural or historic interest, beauty spots and picnic areas.
Medium	Landscape character, characteristics and elements where there would be a moderate landscape capacity or some scope for landscape change. Often include landscapes of moderate landscape value and quality which may be locally designated.	Road users and travellers on trains experiencing views from transport routes. People engaged in outdoor sport other than appreciation of the landscape, e.g. nature conservation, golf and water-based recreation.
Low	Landscape Character, characteristics and elements where there would be higher landscape capacity or scope for landscape change to accommodate the proposed type of development. Usually applies to landscapes of lesser landscape susceptibility or higher landscape capacity for the Proposed Development.	Workers, users of facilities and commercial buildings (indoors) experiencing views from buildings.

Assessment of Magnitude

6.3.21 The magnitude of impact is the degree of change to which a receptor will be subject as a result of the construction and/or operation of the Proposed Development.

Table 6.3.7 sets out the scale of impact magnitude relevant to this technical assessment.

Table 6.3.7: Scale of Magnitude

Scale of Magnitude	Description of Landscape Impact	Description of Visual Impact
Substantial	Total loss or extensive alteration to key landscape elements/features/ characteristics of the baseline, or introduction of uncharacteristic elements which would give rise to a fresh characterising effect.	Where the proposals would have a defining influence on the view. Change very prominent leading to substantial obstruction or complete change in character and composition of the baseline existing view.
Moderate	Partial loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or introduction of elements that may be prominent, but not necessarily substantially uncharacteristic with the attributes of the receiving landscape (which could co-characterise parts of the landscape).	Where the proposals would be clearly noticeable and an important new element in the view. It may involve partial obstruction of existing view or partial change in character and composition of the baseline existing view
Slight	Minor loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or introduction of elements that may not be uncharacteristic with the surrounding landscape or may not lead to a characterising or co-characterising effect.	The proposals would be partially visible or visible at sufficient distance to be perceptible and result in limited or minor changes to the view. The character and composition, although altered will be similar to the baseline existing situation
Negligible	Very minor loss or alteration to one or more key landscape elements/features/ characteristics of the baseline and/or the introduction of elements that are not uncharacteristic of the surrounding landscape. Change would be barely distinguishable approximating to no change.	Change would be barely perceptible. The composition and character of the view would be substantially unaltered, approximating to little or no change.

Assessment of Significance

6.3.22 The significance of effect is a product of the sensitivity of the receptor and the magnitude of the impact. **Table 6.3.8** sets out how the significance of effects has been ascribed in this technical assessment.

Table 6.3.8: Significance Matrix

		Magnitude of change				
		Substantial	Moderate	Slight	Negligible	No Change
Receptor Sensitivity	High	Major	Major/Moderate	Moderate	Minor	Neutral
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible	Neutral
	Low	Moderate	Moderate/Minor	Minor	Negligible	Neutral

6.3.23 This matrix methodology is not used as a prescriptive tool, rather it allows for the exercise of professional judgement, as established by GLVIA3. Thus, in some instances a particular parameter may be considered as having a determining effect on the analysis.

6.3.24 Where the landscape or visual effect has been classified as Major or Major/Moderate this is considered to be significant as per the EIA guidelines.

6.3.25 Where Moderate effects are predicted, professional judgement is applied to ensure that the potential for significant effects arising has been thoroughly considered. The complete assessment methodology is set out in **Technical Appendix 6.2**.

6.3.26 As set out in **Chapter 2: EIA Methodology**, effects are also given descriptors to confirm their nature (i.e. direct or indirect), temporal scale (short-, medium- or long-term), permanence (temporary or permanent), type (adverse or beneficial) and/or spatial scale (site, local, regional, national).

Assumptions and Limitations

6.3.27 The following assumptions and limitations are relevant to this technical assessment:

- Assumption 1 – The Site – refers to the land located within the red line boundary (as shown in application Figures);
- Assumption 2 – The Proposed Development – comprises: the Solar array; BESS Compound with Battery Units and Power Conversion System (PCS) Units; DNO Substation; Private Substation; 7no Transformer Stations; 2no Welfare Units; Pump House & 2no Water Tanks; Storage building; Spare container; Perimeter fencing, CCTV cameras and security lighting; 6m wide Access Road and Vehicular access points; and Landscaping and biodiversity enhancement measures;
- Assumption 3 – For the purposes of the LVIA, the Proposed Development, albeit long-term, is regarded as being temporary. The construction stage would be temporary, approximately 8 to 12 months in duration;
- Assumption 4 – The landscape proposals within the Site (including tree planting and other areas of habitat creation) form an integral component of the Proposed Development;

- Assumption 5 – Visual effects are assessed on the basis of good visibility. Visual effects can be expected to vary e.g. poor visibility at times of low cloud, rainfall and dusk. At these times a reduction in visual clarity, colour and contrast would be experienced. Reduced visibility would limit the extent of view, particularly from mid to long distance views. Consequently, the assessment of effects is based on the worst-case scenario, where the Proposed Development would be most visible; and
- Assumption 6 – The assessment considers the landscape and visual effects at completion, and the residual effects when embedded mitigation planting has established. This is considered to occur ten years post-completion, referred to hereafter as ‘Year 10’.
- Assumption 7 – Viewpoint locations included in the assessment are from publicly accessible locations.

6.3.28 General assumptions and limitations that apply to all technical chapters are set out in **Chapter 2: EIA Methodology**.

6.4 Baseline Conditions

Existing Baseline

- 6.4.1 **Figure 6.1** illustrates the geographic location of the Proposed Development, which is located 1.2 km south of Kirknewton.
- 6.4.2 The Site comprises seven medium to large-scale agricultural fields, currently managed in an arable crop / grazing rotation, and is bisected into two parcels by Leyden Road which runs in a north-west – south-east orientation. Field margins comprise a mixture of stone walling, post & wire fencing, hedgerow (degraded in places), and patches of gorse. Field boundary trees are sporadic and in varying conditions of health / structure.
- 6.4.3 Shelterbelt planting of both broadleaf and coniferous trees is found within and around the eastern parcel of the Site, running in a predominantly north – south orientation. More expansive pockets of coniferous plantation woodland exist within the wider landscape, notably to the north-west / west (Selm Muir Wood), and to the south-east (Buteland Hill).
- 6.4.4 The eastern, north-eastern, southern, and western boundaries of the eastern parcel of the Site abut woodland / shelterbelt planting, both evergreen and deciduous. This parcel is split in its eastern extent by the linear form of the Green Burn which is an important physical landscape and ecological feature of the local hydrological network. The ruins of an old steading (Newlands) are central to this parcel.
- 6.4.5 The western parcel is more open, with the northern boundary defined by the Gogar Burn and Selm Muir Wood beyond, and the eastern boundary defined by Leyden Road.
- 6.4.6 The Study Area is predominantly rural in character, with an extensive mosaic of fields interspersed with shelterbelt trees, pockets of woodland, and dispersed farm steadings and detached residences. To the south-eastern corner of the Site is the development of large detached properties known as Newlands. This hamlet is physically separated from the Site by a belt of mature woodland, which results in

- extensive screening, although 2 western properties have potential views into the Site from the rear of the house and garden areas.
- 6.4.7 The Ministry of Defence (MoD) training facility of RAF Kirknewton is located approx. 650 m east of the Site at closest point. This houses a gliding squadron, providing flying experience and training to members of the Royal Air Force Air Cadets.
- 6.4.8 The largest settlement within the Study Area is Kirknewton, approx. 1.2 km north at its closest point, with the southern boundary of East Calder approx. 2.0 km north-west at its closest point.
- 6.4.9 Main transport routes comprise the A71, running in a south-west – north-east orientation approx. 1.8 km north of the Site at its closest point. The A70 runs in the same orientation, approx. 770 m south of the Site at its closest point. The B7031, which runs north – south approx. 650 m east of the Site, links Kirknewton to the A70. A further network of smaller roads link residences and farm steadings.
- 6.4.10 Other perceived elements of energy infrastructure within the Study Area comprise large-scale pylons and overhead power lines (OHL) extending to the west and north, and a single large-scale wind turbine located approx. 950 m north of the Site.

Landscape Designations

- 6.4.11 Landscape planning designations and policies are considered in the determination of the sensitivity of landscape and visual receptors, as they provide an indication of value ascribed to the landscape or visual resource. With reference to **Figure 6.5**, the site is not located within a landscape designation. However, the wider study area encompasses three Special Landscape Areas (SLA):
- Pentland Hills SLA, 300 m to the south;
 - Almond & Linhouse Valleys SLA, 1.5 km to the north-west; and
 - Ratho Hills SLA, 3 km to the north of the Site.

Soils and Peat

- 6.4.12 As identified through the Scottish Government National Scale Land Capability for Agriculture online mapping resource², the majority of the Site is Class 4.2 (Land

² ScotGov, Scotland's Soils, Mapping: https://map.environment.gov.scot/Soil_maps/?layer=1#

capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops).

- 6.4.13 The north-eastern and eastern extents are Class 3.2 (Land capable of average production though high yields of barley, oats and grass can be obtained. Grass leys are common). While it is in agricultural use, land classification is not prime.
- 6.4.14 Carbon and Peatland 2016 mapping identifies the majority of the Site as Class 0 (Mineral Soil) with a small zone in the eastern parcel Class -2 (Non-soil). Peatland habitats are not typically found on such soils.

Future Baseline

- 6.4.15 In the event of non-development, the existing baseline would remain and evolve as a result of natural changes in the absence of the Proposed Development, as well as the continued management of the Site through agricultural use.
- 6.4.16 Potential further degrading of natural character landscape features may occur, notably aging and collapse of existing historic hedgerow and field boundary tree systems.

Sensitive Receptors

- 6.4.17 A number of sensitive receptors have been identified following the baseline review, as listed in Table 6.4.1 and shown on **Figures 6.5 and 6.6**.

Table 6.4.1: Sensitive Receptors

Description	Location	Sensitivity
Landscape Designations		
Pentland Hills SLA	~300 m south	High
Almond & Linthouse Valleys SLA	~1.5 km west and north-west	High
Ratho Hills SLA	~3.0 km north	High
Settlements		
S1 – Newlands	~195 m south-east	High
S2 – Kirknewton	~1.1 km north	High
Single and Grouped Residences		
1 – Belstane Farm	~115 m south-east	High
2 – Leyden	~150 m south-west	High
3 – Leyden Farm Cottages (Nos. 1, 2, 3, & 4)	~170 m west	High
4 – Leyden Old House	~240 m west	High
5 – Rowanbank	~275 m north	High
6 – Belstane Farm (South)	~325 m south	High
7 – The Byrony	~415 m south-east	High
8 – Burnbrae	~460 m north	High

Description	Location	Sensitivity
9 – Greenburn	~545 m east	High
10 – Latch Farm Cottages	~550 m north	High
11 – Whitemoss Cottages	~650 m east	High
12 – South Lodge	~650 m east	High
13 – Whitemoss	~720 m east	High
14 – Ainville Bungalow*	~740 m south	High
15 – Ainville Cottage*	~750 m south	High
16 – Ainville*	~800 m south	High
17 – Kirknewton House	~845 m north-east	High
18 – Ormiston Hill House & Ormiston Bungalow	~1.07 km north-west	High
19 – Ormiston Hill & Ormiston Farm Steadings	~1.10 km north-west	High
20 – Leithbank House*	~1.10 kms south-east	High
21 – Templeland & Heatherlands*	~1.10 km south-east	High
22 – Cockmylane	~1.10 km north	High
23 – Overton Farm & Overton Farm Cottages	~1.15 km north	High
Recreational Receptors		
West Lothian Core Path 1 network	~1.22 km north	High
National Cycle Route 75	~1.22 km north	High
Almondell & Calderwood Country Park*	~2.68 km north-west	High
West Lothian Core Path 13 network	~2.70 km north-west	High
West Lothian Core Path 15 network	~2.79 km north & north-west	High
Scheduled Monuments		
Corston Hill (Cairn)*	~1.6 km west	High
Kaimes Hill Fort	~2 km north-east	High
Dalmahoy Hill (Fort)	~2.5 km north-east	High
Road and Rail Receptors		
B7031	~593 m east	Medium
A70	~750 m south	Low
A71	~1.9 km north	Low
Edinburgh – Kirknewton – Livingston Rail Line*	~1.75 km north	Medium

- 6.4.18 *Residential properties 14, 15, 16, 20, and 21; Almondell & Calderwood Country Park; A70 / A71 road routes; and rail line are all outside of the ZTV and, as such, are not considered further within the assessment.
- 6.4.19 The Cairn at Corston Hill is located outside the ZTV and, as such, this vantage point is not considered further. Without commenting on heritage significance and setting, this cairn is also not accessed by public footpaths. As such, the sensitivity of the location for recreational amenity is considered reduced.

6.5 Assessment of Likely Significant Effects

Construction Effects

- 6.5.1 The likely impacts arising from the construction of the Proposed Development are summarised in the paragraphs below, with further detail provided in the relevant technical appendices supporting the EIA Report.
- 6.5.2 In assessing the likely construction impacts, the following mitigation has been assumed as being 'inherent' and is therefore considered within the pre-mitigation assessment:
- Considered site design and set-back from sensitive receptors;
 - Compliance with the requirements of an LPA-approved Construction Environmental Management Plan (CEMP);
 - Any stripping, moving, handling, storage of topsoil to be to BS3882 2015: Specification for Topsoil;
 - Pre-construction ecological survey work, and compliance with an WLC-approved Biodiversity Enhancement and Management Plan (BEMP) (an Outline BEMP is provided in Technical Appendix 5.6 of the EIA Report);
 - Tree works to be compliant with an Arboricultural Impact Assessment (AIA) and Tree Survey guidance / recommendations (**Technical Appendix 2.8** of the EIA Report); and
 - Site construction operations adjacent to existing hedgerows, trees, and woodland to adhere to BS5837 2012: Trees in Relation to Design, Demolition and Construction.
- 6.5.3 Any additional or secondary mitigation deemed necessary to avoid or minimise adverse effects arising from the construction of the Proposed Development is outlined in **Section 6.6 'Mitigation & Monitoring'**. Those measures are taken into account before reporting the residual (i.e. post-mitigation) construction effects of the Proposed Development.

Construction Stage Landscape Effects

- 6.5.4 Whilst it is the operational stage of the Proposed Development that would give rise to potential prolonged landscape and visual effects, temporary short-term effects at the construction stage would also occur based on the following operations:
- Erection of temporary perimeter fencing;
 - Minor pruning of entrance tree canopy to facilitate vehicle movements;

- Installation of temporary construction compound (including storage and welfare facilities);
 - Creation of temporary laydown areas;
 - Site clearance and excavation work for foundations;
 - Increased vehicular movement within the Site;
 - Gradual introduction of the proposed infrastructure; and
 - Reinstatement works, including the removal of the temporary accommodation and laydown areas.
- 6.5.5 There would be no felling or loss of individual or grouped trees through construction, or residually.
- 6.5.6 The works detailed would give rise to direct site-specific landscape effects, notably the removal of approx. 40.4 ha agricultural land for infrastructure and access within the 76 ha Site, and the introduction of man-made elements into a locally rural context.
- 6.5.7 In terms of **landscape fabric**, the Site is considered to be of Medium sensitivity to the Proposed Development due to its typology & scale, compartmentalised layout, and predominantly contained nature within the Lowland Plain LCT. On balance, the magnitude of change associated with the construction operations would be local and deemed **Substantial** – the change from solely agricultural use. The resultant level of effect on local landscape fabric would be **Major/Moderate** (adverse). This is assessed as being direct, significant, and short-term.
- 6.5.8 In terms of **landscape character**, the mosaic of the agricultural Lowland Plain LCT is influenced by parcels of woodland, both evergreen plantation and deciduous. The framework of medium to large-scale fields is often broken by geometric strips of established shelterbelt planting. The influence of this is felt locally, with woodland and shelterbelts limiting long-distance views across the plain, as well as further afield from surrounding LCTs where this pattern is readily seen.
- 6.5.9 The construction stage effects would be contained within the framework of existing fields which comprise the Site. The nature of the Lowland Plain with its stances of woodland restricts the wider influence of construction activities over the plains landscape.
- 6.5.10 In summary, the setting within the Lowland Plain LCT, within the Study Area, is assessed as being of Medium sensitivity to the nature of Proposed Development. The magnitude of change on regional landscape resulting from construction stage operations would be **Moderate**, resulting in a **Moderate** level of effect, deemed direct, adverse, significant, and short-term. These effects would be predominantly focused within 1 km, to the east, west, and north of the Site.
- 6.5.11 Effects across parts of the wider LCTs to the east and south-east, and the west and south-west, would be limited, and not significant, particularly at distances beyond 2 km.

Construction Stage Visual Effects

- 6.5.12 Visual effects of activities during the construction phase would be temporary, intermittent, and focused across the local area within 1 km of the Site. This is based

- on the containing effect of local woodland and shelterbelts within the Lowland Plains landscape, particularly at the larger eastern parcel of the Site.
- 6.5.13 Site levelling works for BESS and internal access tracks, along with the gradual introduction / movement of materials in order to create platforms for containers, buildings, and minimal foundations for array structures would coincide with a short-term, temporary increase in vehicle movements / human activity to, from, and within the Site, alongside temporary elements such as laydown areas, construction compound, site office, and welfare facilities.
- 6.5.14 Activities would be seen intermittently from surrounding upland areas, but at further distance.
- 6.5.15 On balance, the visual magnitude of change during the construction phase would be predominantly local and deemed **Moderate**. Level of effect on nearby identified visual receptors would be **Moderate**, adverse and significant.
- 6.5.16 In summary, the most notable visual effects of construction (including indirect effects) would be predominantly localised to <1 km. Through the mitigating effect of shelterbelt planting and established woodland within the local and wider landscape, regionally, the visual magnitude of change at construction stage would be **Slight**, with resultant level of effect deemed **Moderate/Minor**, adverse, and not significant.
- 6.5.17 These effects would be short-term and temporary.

Operational Effects

- 6.5.18 The likely operational effects of the Proposed Development are summarised in the paragraphs below, with further detail provided in the relevant technical appendices.
- 6.5.19 In assessing the likely operational impacts, the following aspects of the scheme design are noted as 'inherent' or 'embedded' mitigation of relevance to this topic and is therefore considered within the pre-mitigation assessment:
- The layout and positioning of array and BESS infrastructure;
 - Colour and type of perimeter fencing; and
 - Occasional / limited residual appearance of operations / maintenance vehicles and personnel.
- 6.5.20 Any additional or secondary mitigation deemed necessary to avoid or minimise adverse effects arising from the operation of the Proposed Development is outlined in **Section 6.6 'Mitigation & Monitoring'**. Those measures are taken into account before reporting the residual (i.e. post-mitigation) operational effects of the Proposed Development.

Effects on Landscape Fabric

- 6.5.21 The landscape within the Site has been established as rotational agricultural – arable with livestock grazing. The transition of this landscape fabric through the construction stage, as appraised, would be significant, however, the establishment of landscape screening as set out and detailed in the accompanying indicative Landscape Enhancement and Mitigation Plan (LEMP – see **Technical Appendix 6.5**) would see the introduction of field boundary trees and further woodland planting

- in areas around the Site, complementary to the landscape character which has, in certain areas, experienced historic tree degradation and loss.
- 6.5.22 As such, this introduction, while providing mitigation to reduce adverse visual impacts of development, would be beneficial to the landscape fabric of the local and wider area.
- 6.5.23 The Site is assessed as being of Medium sensitivity to the Proposed Development based on the overall features of value within the Site, and factoring in the importance of hedgerow and trees which serve both a visual and ecological feature within the landscape. The Proposed Development would result in the transition of agricultural land (and management) – the common land use of the area – but would incorporate new tree planting, hedgerow restoration, and biodiverse groundcover.
- 6.5.24 The magnitude of change upon the landscape fabric of the local area would be **Moderate** giving rise to a **Moderate** effect which would be notable at the site-specific scale, but not notable in terms of the wider fabric of the Lowland Plain LCT.

Effects on Landscape Character

- 6.5.25 The effect of the Proposed Development on landscape character largely depends on the key characteristics of the receiving environment; the degree to which the development may be considered to be consistent with or at odds with it; and how the proposal would be perceived within its setting.
- 6.5.26 Located within a characteristically rural area, fringed with semi-rural landscapes which are influenced by current urban / transport infrastructure, the Site currently forms part of the agricultural component of the diverse mosaic which characterises the Lowland Plain landscape.
- 6.5.27 At a local level, predominantly from those elevated positions to the north, the transition of this agricultural component to solar and BESS infrastructure would result in change to local character. The magnitude of change would be **Moderate**, and the level of effect on local parts of the Lowland Plain LCT would be **Moderate**, adverse, and significant. Across wider parts of the LCT, the effects on landscape character would be tempered by intervening landform and vegetation. Accordingly, the magnitude of change would be **Slight**, resulting in a **Moderate/Minor** level of effect at most across wider parts of the Lowland Plain LCT, not significant.
- 6.5.28 Residually, as mitigation planting establishes and matures, the man-made elements would be increasingly absorbed into the landscape, which is characterised by areas of both deciduous and evergreen / plantation woodland. This would result in a gradual reduction in effects across the Lowland Plain LCT.

Visual Effects

- 6.5.29 The visual effects of the Proposed Development would be restricted by the relatively low height of the proposed infrastructure in combination with the screening influence of surrounding areas woodland and tree cover. As a result, the most notable effects would be limited to receptors within close proximity to the Site.
- 6.5.30 Significant effects would be experienced by residents at Nos. 29 and 31 Newlands to the south-east, Leyden Farm Cottages (nos. 1, 2, 3, & 4) to the west, and Burnbrae to the north. For these residents, the initial magnitude of change would be **Moderate** at most, and the resultant level of effect would be **Major/Moderate**,

adverse, and significant. In each case, the level of effect would steadily reduce over time in accordance with the establishment of proposed planting measures within the Site. Accordingly, the residual effects on views from would reduce to **Moderate**, not significant. There would be no significant effects on any other residential property within the Study Area.

- 6.5.31 There would be no significant adverse effects on views from recreational routes or outdoor recreational attractions due to their spatial separation from the Site, and / or the extent of intervening screening.
- 6.5.32 The effects experienced by road users would be primarily restricted to the local road network. There would be significant adverse effects from sections of Leyden Road in close proximity to the Site, most notably when travelling south past Selm Muir Wood. This is based on an assessed magnitude of change that would be **Moderate**, resulting in a **Moderate** level of effect that is deemed adverse and significant in this instance based on the proximity of view. Potential views from other transport routes within the Study Area (located at greater distance from the Proposed Development) would be subject to screening by intervening tree cover. Accordingly, there would be no significant effects.

6.6 Mitigation & Monitoring

Construction Mitigation

- 6.6.1 In order to mitigate the likely significant effects associated with the construction of the Proposed Development, the following secondary mitigation measures are proposed beyond the primary mitigation that has already been considered in the assessment:
- Site and surrounding roads are to be kept clean and uncluttered to minimise negative views as far as is reasonably practicable. Subject to condition; and
 - Vehicular movements to and from the Site are to be restricted to working hours to prevent adverse congestion on local roads. Subject to condition.

Construction Monitoring

- 6.6.2 The following monitoring measures are proposed during the construction phase:
- Council monitoring of the Site and local roads during construction stage to ensure compliance with conditions; and
 - Notice enforcement, as required.

Operational Mitigation

- 6.6.3 In order to mitigate the likely significant effects associated with the operation of the Proposed Development, the following secondary mitigation measures are proposed beyond the primary mitigation that has already been considered in the assessment:
- Mitigation Measure 1 – Implementation of a LEMP (refer to **Technical Appendix 6.5**); and

- Mitigation Measure 2 – Landscape enhancement and mitigation measures require residual maintenance to ensure establishment and longevity through the operational stage of Proposed Development.
- A Landscape Management Plan (LMP) – to be approved by WLC – is to be conditioned through Planning Approval to ensure that the intent of the LEMP is met.
- Following approval, and per condition, it will be the requirement and responsibility of the developer to ensure that a Landscape Maintenance Contract is established for the duration of operation of the Site.

Operational Monitoring

6.6.4 The following monitoring measures are proposed during the operational phase:

- Monitoring Measure 1 – Schedule of landscape / biodiversity monitoring of installed scheme is to be approved by WLC to ensure long-term viability of landscape mitigation / enhancement strategy.

6.7 Likely Residual Effects

6.7.1 The likely residual effects of the Proposed Development are those that will arise after any secondary mitigation has been taken into account.

6.7.2 The likely residual effects of the Proposed Development during the construction and operational phases are set out in **Table 6.7.1**.

Table 6.7.1: Summary of Residual Effects

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Secondary Mitigation Proposed?	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
Construction Phase									
Pentland Hills SLA	High	Visual effect	Local screening, and site management.	Negligible / Slight	Direct	Short-term	Temporary	Adverse	Minor
Almond & Linthouse Valleys SLA	High	Visual effect	Local screening	Negligible	Direct	Short-term	Temporary	Adverse	Minor
Ratho Hills SLA	High	Visual effect	Local screening, and site management.	Negligible	Direct	Short-term	Temporary	Adverse	Minor
Newlands	High	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
29 & 31 Newlands	High	Visual effect: Rear of property / garden views of construction operations (2no residences)	Site management.	Moderate	Direct	Short-term	Temporary	Adverse	Major / Moderate
Kirknewton	High	Visual effect	Site and road management.	No change	Direct	Short-term	Temporary	Adverse	Neutral
Belstane Farm	High	Visual effect	Site and road management.	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Leyden	High	Visual effect	Site management.	Slight	Direct	Short-term	Temporary	Adverse	Moderate

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Secondary Mitigation Proposed?	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
Leyden Farm Cottages	High	Visual effect	Site management.	Slight	Direct	Short-term	Temporary	Adverse	Moderate
Leyden Old House	High	Visual effect	Local screening	Slight	Direct	Short-term	Temporary	Adverse	Moderate
Birchwood & Rowanbank	High	Visual effect	Local screening, and site and road management.	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Belstane Farm (South)	High	Visual effect	Local screening, and site and road management.	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
The Byrny	High	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Burnbrae	High	Visual effect	Site and road management.	Moderate	Direct	Short-term	Temporary	Adverse	Major / Moderate
Greenburn	High	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral
Latch Farm Cottages	High	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral
Whitemoss Cottages	High	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Kirknewton House	High	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Ormiston Hill House & Ormiston Bungalow	High	Visual effect	Site and road management.	Negligible / Slight	Direct	Short-term	Temporary	Adverse	Minor

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Secondary Mitigation Proposed?	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
Ormiston Hill & Ormiston Farm Steadings	High	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Cockmylane	High	Visual effect	Site and road management.	Slight	Direct	Short-term	Temporary	Adverse	Moderate
Overton Farm & Overton Farm Cottages	High	Visual effect	Site and road management.	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Core Path 1	High	Visual effect	Local screening, and site and road management.	Negligible	Direct	Short-term	Temporary	Adverse	Minor
National Cycle Route (NCR) 75	High	Visual effect	Local screening, and site and road management.	Negligible	Direct	Short-term	Temporary	Adverse	Minor
Core Path 13	High	Visual effect	Local screening, and site and road management.	Negligible	Direct	Short-term	Temporary	Adverse	Minor
Core Path 15	High	Visual effect	Local screening	Negligible	Direct	Short-term	Temporary	Adverse	Minor
Kaimes Hill Fort	High	Visual effect	Site and road management.	Slight	Direct	Short-term	Temporary	Adverse	Moderate
Dalmahoy Hill (Fort)	High	Visual effect	Site and road management.	Slight / Negligible	Direct	Short-term	Temporary	Adverse	Moderate / Minor
Leyden Road	Medium	Visual effect	Site and road management.	Moderate	Direct / Indirect	Short-term	Temporary	Adverse	Moderate

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Secondary Mitigation Proposed?	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
B7031	Medium	Visual effect	Local screening	No change / Negligible	Direct	Short-term	Temporary	Adverse	Neutral / Neg
Operational Phase									
Newlands	High	Visual effect – increased landscape elements	Local screening	No change / Negligible	Direct	Long-term	Permanent	Beneficial	Neutral / Neg
29 & 31 Newlands	High	Visual effect: Rear of property / garden views of solar farm infrastructure – increased landscape elements	Mitigation hedge and tree planting	Slight	Direct	Long-term	Temporary	Adverse	Moderate
Kirknewton	High	Visual effect – increased landscape elements	Mitigation hedge and tree planting	No change / Negligible	Direct	Long-term	Temporary	Beneficial	Neutral / Neg
Belstane Farm	High	Visual effect – increased landscape elements	Mitigation hedge and tree planting	Slight	Direct	Long-term	Permanent (landscape)	Beneficial	Moderate
Leyden	High	Visual effect – increased landscape elements	Mitigation hedge and tree planting	Slight	Direct	Long-term	Permanent (landscape)	Beneficial	Moderate
Leyden Farm Cottages	High	Visual effect – solar infrastructure and increased landscape elements	Mitigation hedge and tree planting	Slight	Direct	Long-term	Permanent (landscape)	Adverse	Moderate
Leyden Old House	High	Visual effect – solar infrastructure and increased landscape elements	Local screening & mitigation	Slight	Direct	Long-term	Permanent (landscape)	Adverse	Moderate

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Secondary Mitigation Proposed?	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
			hedge and tree planting						
Birchwood & Rowanbank	High	Visual effect – increased landscape elements	Mitigation hedge and tree planting	No change / Negligible	Direct	Long-term	Permanent (landscape)	Beneficial	Neutral / Neg
Belstane Farm (South)	High	Visual effect – increased landscape elements	Mitigation hedge and tree planting	Negligible	Direct	Long-term	Permanent (landscape)	Beneficial	Negligible
The Byrny	High	Visual effect – increased landscape elements	Local screening	No change / Negligible	Direct	Long-term	Permanent (landscape)	Beneficial	Neutral / Neg
Burnbrae	High	Visual effect – solar / BESS infrastructure and increased landscape elements	Mitigation hedge and tree planting	Slight	Direct	Long-term	Permanent (landscape)	Beneficial	Moderate
Greenburn	High	Visual effect	Local screening	No change / Negligible	Direct	Long-term	Temporary (infrastructure)	Adverse	Neutral
Latch Farm Cottages	High	Visual effect	Local screening	No change / Negligible	Direct	Long-term	Permanent (landscape)	Adverse	Neutral
Whitemoss Cottages	High	Visual effect	Local screening	No change / Negligible	Direct	Long-term	Temporary (infrastructure)	Adverse	Neutral / Neg
Kirknewton House	High	Visual effect	Local screening	No change / Negligible	Direct	Long-term	Temporary (infrastructure)	Adverse	Neutral / Neg
Ormiston Hill House & Ormiston Bungalow	High	Visual effect – solar / BESS infrastructure and increased landscape elements	Mitigation hedge and tree planting	Negligible / Slight	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Neg / Minor

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Secondary Mitigation Proposed?	Magnitude of Impact (No change / Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
Ormiston Hill & Ormiston Farm Steadings	High	Visual effect – solar / BESS infrastructure and increased landscape elements	Local screening	No change / Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Beneficial	Negligible
Cockmylane	High	Visual effect – solar / BESS infrastructure and increased landscape elements	Mitigation hedge and tree planting	Slight / Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Moderate / Minor
Overton Farm & Overton Farm Cottages	High	Visual effect	Mitigation hedge and tree planting	No change / Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Negligible
Core Path 1	High	Visual effect	Local screening, and mitigation hedge and tree planting	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Minor
National Cycle Route (NCR) 75	High	Visual effect	Local screening, and mitigation hedge and tree planting	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Minor
Core Path 13	High	Visual effect	Local screening, and mitigation hedge and tree planting	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Minor
Core Path 15	High	Visual effect	Local screening	Negligible	Direct	Long-term	Permanent (landscape)	Adverse	Minor

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Secondary Mitigation Proposed?	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
							Temporary (infrastructure)		
Kaimes Hill Fort	High	Visual effect – solar infrastructure and increased landscape elements	Mitigation hedge and tree planting	Slight	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Moderate
Dalmahoy Hill (Fort)	High	Visual effect – solar infrastructure and increased landscape elements	Mitigation hedge and tree planting	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Minor
Leyden Road	Medium	Visual effect – solar / BESS infrastructure and increased landscape elements	Mitigation hedge and tree planting	Moderate	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Moderate
B7031	Medium	Visual effect	Local screening, and mitigation hedge and tree planting	No change	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse	Neutral

6.8 Cumulative Effects

- 6.8.1 Consideration has also been given to the potential for likely significant cumulative effects to arise as a result of the Proposed Development alongside other identified cumulative schemes during the operational lifespan.
- 6.8.2 The cumulative schemes that are considered relevant to this technical assessment are shown in **Table 6.8.1**.

Table 6.8.1: Relevant Cumulative Schemes

Name	Proximity	Description	Status	Relevance
Selms Muir (0442/FUL/22)	710 m north-west (at closest point)	Up to 18 MW Solar and battery energy storage system (BESS) with associated access and infrastructure	Consented	Large-scale solar & BESS development, under 1 km from Proposed Development
Ormiston Farm (PPA-400-2066)	920 m north (at closest point)	500 kW Wind Turbine, 61 m Tip Height	Existing	Existing perception of renewable energy generation within rural LCT. Under 1 km from Proposed Development

- 6.8.3 As identified through the study of Proposed Development impacts and resultant effects on landscape and visual amenity, the short-term impacts of construction, given the nature of development, lead quickly into (and overlap with) the residual long-term impacts of the scheme.
- 6.8.4 As such, for concise reporting, the assessment of cumulative effects takes into consideration the residual effects of the Proposed Development during the operational phase along with any primary and secondary mitigation measures proposed for the cumulative schemes (e.g. that all developments have been / will be implemented with their approved strategies to minimise and / or remove adverse impacts).
- 6.8.5 Where the Proposed Development was assessed to result in adverse or beneficial residual effects of 'negligible' significance on the identified receptors, or residual effects were found to be of 'neutral' significance, it has been assumed that there is no potential for significant inter-development cumulative effects to arise and these are not considered in the sections below.

Operational Phase Cumulative Effects

Cumulative Landscape Effects

- 6.8.6 Lowland Plains LCT
- 6.8.7 The operational Ormiston Farm Wind Turbine and the consented Selms Muir Solar Farm are located in close proximity to one another on the northern side of Selm Muir Wood. Both developments exert / will exert notable effects on local landscape character in their own right. Based on their proximity, it is assessed that these effects will coalesce across the surrounding parts of the Lowland Plains LCT; predominantly focused on the northern side of Selm Muir Wood.
- 6.8.8 With reference to the main assessment, the Proposed Development would also result in localised notable effects on landscape character. However, the effects in

- combination with Ormiston Farm Wind Turbine and Selms Muir Solar Farm would be tempered by intervening tree cover, comprising woodland at Selm Muir Wood, linear shelter belt, and field trees. The Proposed Development would also be spatially separated by the intervening overhead power line.
- 6.8.9 On balance, there would be a slight increase in renewable infrastructure within the Lowland Plains LCT, extending south-east from the existing / consented developments. However, the combined effects would remain localised. The operational Ormiston Farm Wind Turbine would exert the most widespread influence with reference to its vertical scale (61 m to blade tip).
- 6.8.10 The cumulative magnitude of change across local parts of the Lowland Plains LCT would be Moderate, based primarily on the Ormiston Farm Wind Turbine. The resultant cumulative level of effect would be Moderate, adverse, and significant.
- 6.8.11 Across wider parts of the LCT, the existing landscape characteristics would re-exert themselves and the cumulative effects would steadily reduce. The cumulative level of effect would reduce to Moderate/Minor, adverse, and not significant.

Cumulative Visual Effects

- 6.8.12 As described above, the Proposed Development would be physically and visually separated from the consented Selms Muir Solar Farm by established tree cover at Selm Muir Wood.
- 6.8.13 Combined visibility may be possible from areas around Ormiston, approximately 1.5 km north of the Site, however due to intervening woodland and field boundary / tree cover, significant combined views of both solar developments from static locations, or transitionally along the Leydon Rd and local path routes is assessed as unlikely.
- 6.8.14 There are no notable vantage points in between the consented Selms Muir Solar Farm and the Proposed Development which would afford a rotational view of both solar developments.
- 6.8.15 Given the vertical nature of the Ormiston Farm Wind Turbine within the lowland landscape, it is an established recognised feature in itself within many views along Leyden Road travelling south from Ormiston, and north of the covered water reservoir at Burnbrae.

Transitional Cumulative Effects - Leyden Road

- 6.8.16 Travelling north from Belstane Farm, and as illustrated in Visualisation VP1 (see **Technical Appendix 6.6**), within close proximity to the western array of the Proposed Development (at approx. 251 m AOD) there is little to no direct visibility of new infrastructure through existing roadside / field boundary hedging. Infill / restoration planting is proposed to repair gaps, while maintenance will ensure that hedgerow height is maintained as is, or allowed to grow further. This vegetation also restricts views across the valley towards Selms Muir Solar Farm.
- 6.8.17 Further north as the road descends to approx. 236 m AOD, while the western parcel of the Proposed Development remains predominantly screened, filtered views across the valley take in the upper extent of Selms Muir Solar Farm. The eastern

- parcel of the Proposed Development is fully screened by the belt of woodland adjacent to Leyden Rd.
- 6.8.18 At a lower 209 m AOD, level with the tree-screened north-western corner of the eastern Proposed Development parcel, the northern extent of the western Proposed Development parcel is evident while Selms Muir Solar Farm is now screened by the intervening Selm Muir Wood.
- 6.8.19 Notable combined visibility of renewable energy development will occur to the north of Selms Muir Wood at the road access to Burnbrae where northerly direction of travel allows for open views northwest that encapsulate both the turbine and the eastern extent of Selm Muir Solar Solar Farm (array groupings 1, 2, 3, and 4 from approved layout). The Proposed Development is to the south of the viewer.
- 6.8.20 Travelling south from Ormiston, there are no direct views of the Selms Muir Solar Farm infrastructure due to topography. Within views in direction of travel, the Ormiston Farm Wind Turbine nacelle and blades are visible above the crest of ridge. This is the most noticeable energy infrastructure, with direct views towards the Proposed Development obscured by local variations in topography and intervening tree cover.
- 6.8.21 At the Paddocks residence and entrance to Ormiston Farm Steadings (approx. 182 m AOD), the turbine remains the prominent energy feature, with no direct single or combined views of Selms Muir Solar Farm or the Proposed Development.
- 6.8.22 Further south at approx. 180 m AOD in the vicinity of the Cockmylane property, glimpsed and filtered views through field boundary trees of the Proposed Development in combination with the Ormiston Farm Wind Turbine are achieved. At this distance to The Site (1.10 km), and with the intervening tree cover, the Proposed Development is barely noticeable.
- 6.8.23 Following a series of road bends, and with the wind turbine now behind direction of travel, a straight section of road allows for direct views of solar and BESS infrastructure within the eastern Proposed Development parcel, partially screened by a broken line of field-boundary trees. The western parcel is screened by Selm Muir Wood.
- 6.8.24 Continuing to travel south past the covered water reservoir and Burnbrae road access, there are continued views into the eastern Proposed Development parcel. This is not in combination with any further energy infrastructure, although baseline pylons and OHLs are key landscape character features.
- 6.8.25 At Selm Muir Wood, and as illustrated by Visualisation VP2 (see **Technical Appendix 6.6**), there are continued views into the eastern parcel of the Proposed Development, with direct views south into the western parcel, partly screened by the wood. These views are in combination with large-scale pylons and OHLs.
- 6.8.26 Continuing south as the elevation begins to rise, views into the eastern parcel are obscured, while roadside vegetation and field boundary hedging filter and screen direct views into the western parcel. Passing under the line of pylons, expansive

views into the western parcel are obtained, while the eastern parcel remains screened by existing hedgerow and roadside woodland.

Surrounding Accessible Uplands

- 6.8.27 From upland vantage points, such as Kaimes Hill, there would be views of the Proposed Development in combination with both cumulative developments. However, the current perception of the rural landscape is one of a landscape with views of occasional energy production and electricity transmission infrastructure.
- 6.8.28 The Proposed Development, experienced cumulatively with consented and existing energy infrastructure, would not result in a notable alteration to the perception of this landscape.
- 6.8.29 In summary, the magnitude of physical change or alteration to viewer perception of the agricultural lowlands through the cumulative association of assessed development is deemed to be **Slight**.
- 6.8.30 The resultant cumulative level of effect on overall visual amenity would be **Moderate/Minor**. This is deemed to be adverse and not significant.
- 6.8.31 The Proposed Development is assessed to be of a suitable scale, with sufficient visual separation distance from other development within the landscape. The existing cumulative baseline is deemed suitable to accommodate identified developments without significantly altering character or perception.
- 6.8.32 An assessment of the likely significant cumulative effects upon the relevant sensitive receptors is provided in **Table 6.8.2**.

Table 6.8.2: Summary of Cumulative Effects

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Relevant Cumulative Schemes	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanance of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
Operational Phase									
Pentland Hills SLA	High	Combined	Proposed Development / Selms Muir Solar Farm / Ormiston Wind Turbine	Slight	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Moderate
Almond & Linthouse Valleys SLA	High	Combined	Proposed Development / Selms Muir Solar Farm / Ormiston Wind Turbine	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Minor
Ratho Hills SLA	High	Combined	Proposed Development / Selms Muir Solar Farm / Ormiston Wind Turbine	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Minor
29 & 31 Newlands	High	Transitional / sequential	Proposed Development / Ormiston Farm Wind Turbine (wider transitional)	No change / Negligible	Direct	Long-term	Temporary	Adverse (infrastructure)	Neutral / Neg
Belstane Farm	High	Transitional	Proposed Development /	Negligible	Direct	Long-term	Temporary	Adverse (infrastructure)	Minor

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Relevant Cumulative Schemes	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanance of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
			Selms Muir Solar Farm / Ormiston Wind Turbine					Beneficial (landscape)	
Leyden	High	Transitional / sequential, combined	Proposed Development / Selms Muir Solar Farm	Negligible	Direct	Long-term	Temporary	Adverse (infrastructure) Beneficial (landscape)	Minor
Leyden Farm Cottages	High	Transitional / sequential, combined	Proposed Development / Selms Muir Solar Farm	Negligible	Direct	Long-term	Temporary	Adverse (infrastructure) Beneficial (landscape)	Minor
Leyden Old House	High	Transitional / sequential, combined	Proposed Development / Selms Muir Solar Farm	Negligible	Direct	Long-term	Temporary	Adverse (infrastructure) Beneficial (landscape)	Minor
Burnbrae	High	Transitional / sequential	Proposed Development / Ormiston Farm Wind Turbine (wider transitional)	Slight	Direct	Long-term	Permanent (landscape)	Adverse (infrastructure) Beneficial (landscape)	Moderate
Ormiston Hill House & Ormiston Bungalow	High	Transitional / sequential	Proposed Development / Ormiston Farm Wind Turbine (wider transitional)	Negligible / Slight	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Neg / Minor

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Relevant Cumulative Schemes	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanence of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
Cockmylane	High	Transitional / sequential, combined	Proposed Development / Ormiston Farm Wind Turbine	Slight	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Moderate
Core Path 1	High	Transitional / sequential	Proposed Development / Selms Muir Solar Farm	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Minor
National Cycle Route (NCR) 75	High	Transitional / sequential	Proposed Development / Selms Muir Solar Farm	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Minor
Core Path 13	High	Transitional / sequential	Proposed Development / Selms Muir Solar Farm	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Minor
Core Path 15	High	Transitional / sequential	Proposed Development / Selms Muir Solar Farm	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Minor
Kaimes Hill Fort	High	Transitional / sequential, combined, rotational	Proposed Development / Selms Muir Solar Farm / Ormiston Wind Turbine	Slight	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure)	Moderate

Receptor	Sensitivity (Low / Medium / High)	Likely Effect	Relevant Cumulative Schemes	Magnitude of Impact (No change/ Negligible / Slight / Moderate / Substantial)	Nature of Effect (Direct / Indirect)	Temporal Scale (Short / Medium / Long)	Permanance of Effect (Temporary / Permanent)	Type of Effect (Adverse / Beneficial)	Residual Significance (Neutral / Neg / Minor / Moderate / Major)
Dalmahoy Hill (Fort)	High	Transitional / sequential, combined, rotational	Proposed Development / Selms Muir Solar Farm / Ormiston Wind Turbine	Negligible	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure)	Minor
Leyden Road	Medium	Transitional / sequential, combined	Proposed Development / Selms Muir Solar Farm / Ormiston Wind Turbine	Moderate	Direct	Long-term	Permanent (landscape) Temporary (infrastructure)	Adverse (infrastructure) Beneficial (landscape)	Moderate

6.9 Summary

- 6.9.1 The Proposed Development is located in an area of gently rolling arable farmland, subject to visual containment by the underlying landform and surrounding woodland / tree cover. The Proposed Development would result in the introduction of solar array, battery storage and associated infrastructure to the Site, as well as embedded landscape planting and ecological enhancement measures. This includes new areas of native woodland, trees, hedgerows and species-rich grassland.

Landscape

- 6.9.2 In terms of landscape fabric and character effects, the containment by landform and vegetation means that adverse effects are localised and predominantly restricted to the Site, and within 1 km of the surrounding area. Through the transition of rotational agricultural land to agri-energy, the most notable effect would be primarily focused across the Site, with perception of this landscape change noticeable locally from the north. This accounts for a limited area of the host Lowland Plains LCT. There would be no significant effects on wider parts of the LCT, or neighbouring LCTs.
- 6.9.3 The level of effect on the overarching character of the lowland landscape would be **Moderate/Minor**, with localised level of effect on local landscape fabric and character being **Moderate**, adverse, and not significant.
- 6.9.4 Additionally, there would be no notable adverse effects on sensitive Special Landscape Areas to the west, south, and north. The perception of the complexity of the lowlands with mosaic of land use and overlay of energy transmission infrastructure when viewed from surrounding uplands would not be significantly altered by the introduction of type, or scale, of Proposed Development.

Visual

- 6.9.5 Visual effects are also restricted through Site location, with Proposed Development being spatially remote from sizeable residential settlements, and physically separated from most other receptors by woodland and tree cover in the majority of cases. As identified and assessed, the most notable effects would be experienced by residents at Nos. 29 and 31 Newlands, Leyden Farm Cottages (nos. 1, 2, 3, & 4), and Burnbrae. The significance of adverse visual effects arising from the introduction of Proposed Development into the agricultural setting would steadily reduce over time in accordance with the establishment of proposed embedded planting measures within and around the Site. Accordingly, the residual effects on views from the rear of Nos. 29 and 31 Newlands, and Leyden Farm Cottages (nos. 1, 2, 3, & 4) would be reduced to not significant. There would be no significant effects on any other residential property within the Study Area.
- 6.9.6 There would be no significant adverse effects on views from recreational routes or attractions, or from main A-roads within the Study Area. The most significant adverse visual effects would be experienced from users on Leyden Road in close proximity to the Site, most notably when travelling south past Selm Muir Wood.

There would be no significant effect on any other transport route within the Study Area.

- 6.9.7 Overall residual visual level of effect on those sensitive receptors as identified and assessed would be **Moderate/Minor**, adverse, and not significant.

Cumulative

- 6.9.8 In terms of cumulative effects, the Proposed Development would augment the presence of the existing Ormiston Farm Wind Turbine and consented Selms Muir Solar Farm within the Study Area. The cumulative influence of the Proposed Development on the landscape and visual resource, both in combination and transitionally, would be restricted by the presence of intervening woodland and tree cover. As such, cumulative effects in association with the Ormiston Farm Wind Turbine and Selms Muir Solar Farm would be very localised.
- 6.9.9 There would be a slight increase in renewable infrastructure within the Lowland Plains LCT, extending southeast from the existing / consented developments (where the localised effects would be notable). However, the Proposed Development, in combination with consented and existing energy infrastructure, would not result in a notable alteration to wider landscape character or the visual perception of this landscape.
- 6.9.10 Cumulative level of effect would be **Minor/Moderate**, adverse, and not significant.

