Chapter 5: Landscape and Visual Impact Assessment

Cossans Solar & BESS EIA Report

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Acronyms and Abbreviations

AC	Angus Council
BESS	Battery Energy Storage System
BNG	Biodiversity Net Gain
CEMP	Construction Environmental Management Plan
CLVIA	
GDL	Garden and Designed Landscape
GLVIA3	Guidelines for Landscape and Visual Impact Assessment (Third Edition)
ha	Hectares
HGV	Heavy Goods Vehicle
IEMA	Institute of Environmental Management
LCT	Landscape Character Types
LLA	River Esk and Aberlemno Local Landscape Area
LVIA	Landscape and Visual Impact Assessment
MW	Megawatt
MWAC	Megawatt Alternating Current
NPF4	National Planning Framework 4
NSA	National Scenic Area
OS	Ordnance Survey
RVA	Residential Visual Amenity
RVAA	Residential Visual Amenity Assessment
VP	Viewpoints
WHNCV	Woodland of High Nature Conservation Value
ZTV	Zone of Theoretical Visibility

5. Landscape and Visual

5.1 Introduction

Background

5.1.1 Stephenson Halliday was commissioned to prepare a landscape and visual impact assessment (LVIA) of a Solar Photovoltaic (PV) array and Battery Energy Storage System (BESS) (the 'Proposed Development') at Cossans, near Forfar, Angus (the 'Site').

5.1.2 This LVIA: defines the existing landscape and visual baseline environments; assesses their sensitivity to change; describes the key landscape and visual related aspects of the Proposed Development; and describes the nature of the anticipated changes and assesses the effects arising during construction, operation and decommissioning.

5.1.3 The LVIA considers the potential effects upon:

- landscape fabric;
- landscape character;
- the special qualities of any landscape designations; and
- visual receptors including residential, transport and recreational receptors.

5.1.4 The LVIA has been undertaken in accordance with published best practice; namely the Guidelines for Landscape and Visual Impact Assessment (Third Edition), Landscape Institute and IEMA 2013 (GLVIA3) and associated technical guidance notes published by the Landscape Institute (referenced as appropriate in **Technical Appendix 5.1**).

5.1.5 Although linked, landscape and visual effects are considered separately. Landscape effects derive from changes in the landscape fabric, which may result in changes to the character, whereas visual effects are the effect of these changes as experienced by people (visual receptors). Effects on the setting of any heritage assets are dealt with as part of **Chapter 8: Cultural Heritage**.

Competence

5.1.6 This report along with the design of mitigation of the Proposed Development has been prepared by Chartered Landscape Architects at Stephenson Halliday. The Practice has over 24 years of experience working on renewable energy proposals for both wind and solar farms throughout the UK. Key individuals working on the Proposed Development have over 10 years of experience as chartered landscape architects.

5.1.7 The Practice is a Landscape Institute and IEMA registered practice and all work is prepared and reviewed internally by senior highly experienced landscape planners with Public Inquiry experience.

The Site and Proposals

5.1.8 **Figure 5.1** places the Proposed Development within its local context. The Site is currently in Agricultural use and comprises of arable fields located adjacent to the hamlet of Drumgley and 1.6km west of Forfar in Angus. The Site is bordered by further arable fields to the north, east and south and by the Glamis Castle Garden and Designed Landscape (GDL) to the West. There are few existing vegetative features within the Site, including a thin boundary shelterbelt of trees which divides the eastern field, declining hedgerow and trees aligned to Core Path 272 as it intersects the western fields, a small block of woodland, garden trees and hedgerow associated with residential properties at Haughs of Cossans to the immediate south of the Site. The A94 passes to the south of the Site as close as 1.1km, with the A90 at 1.2km to the east. There are local roads at 0.3km east at the hamlet of Drumgley and 1.1km north at Mains of Ballindarg.

5.1.9 Topography on the Site is varied, with land sloping in several directions to channelised burns and drainage channels outside the Site. The eastern field is set on mostly flat ground, with a gentle slope to the south towards Dean Water. The western field is more undulating, with higher ground aligned to the core path and the western boundary. From Haughs of Cossans, land slopes toward Ballindarg Burn to the east and to a drainage channel to the north, then rises to the bund of a dismantled railway beyond the St Orland s Stone Monument. Land slopes southeast across the Site from the western boundary. There are few wooded areas surrounding the Site including the wooded border of Glamis Castle GDL to the west, roadside trees along the core path and some small shelterbelt blocks dispersed among fields. There is some thin scrub to the north surrounding the St Orland' Stone Scheduled Monument.

5.1.10 The Proposed Development is for ground-mounted solar PV array with an estimated export capacity of 50 MW and a maximum height of 2.87m, temporary construction and substation compound to the northeast of the Site, and a Battery Energy Storage System (BESS) located at the northern edge of the eastern field. The Site and Proposed Development would cover an area of 87 (ha), including associated infrastructure and mitigation. The solar array and infrastructure area would only cover 60.16 ha of land (including gaps in between rows) with the remainder left undeveloped or enhanced with additional landscaping.

5.2 Legislation, Policy & Guidance

5.2.1 The below national and local planning policy and guidance have been taken into consideration throughout the assessment of potential landscape and visual effects because of the Proposed Development.

National Planning Policy

5.2.2 National Planning Framework 4 (NPF4) was adopted and published in February 2023 and sets out the national spatial framework for Scotland articulated in detail within a series of national planning policies. The Planning Statement, which

accompanies this application, describes the key elements of national policy regarding sustainable places and energy development.

5.2.3 With regard to landscape and visual matters, NPF4 Policy 11 requires that inter alia energy development projects should show impacts are addressed, including *"…significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable."* In addition, NPF4 Policy 29 Rural Development states that, *"…Development proposals in rural areas should be suitably scaled, sited and designed to be in keeping with the character of the area…"*

5.2.4 Relevant to development in rural areas, Policy 29a) also outlines that: "*Development proposals that contribute to the viability, sustainability and diversity of rural communities and local rural economy will be supported, including: v. essential infrastructure…*"

Local Planning Policy

5.2.5 Current local planning policy is described in the Angus Local Development Plan, which was adopted in September 2016. Policies relevant to the Site and the Proposed Development are outlined below:

- Policy PV6: Development in the Landscape – outlines protection measures for all landscapes through setting requirements that development and land use change should be compatible with the distinctive characteristics and features of Angus's landscapes with reference to the Tayside Landscape Character Assessment. Accordingly, *"…development proposals will be supported where they do not conflict with the aim of to protecting and enhancing the quality of the landscape in Angus, its diversity (including coastal, agricultural lowlands, the foothills and mountains), its distinctive local characteristics, and its important views and landmarks."*

  In conforming to this policy, *"development which has an adverse effect on landscape will only be permitted where:*

  - *the site selected is capable of accommodating the proposed development;*
  - *the siting and design integrate with the landscape context and minimise adverse impacts on the local landscape;*
  - *potential cumulative effects with any other relevant proposal are considered to be acceptable; and*
  - *mitigation measures and/or reinstatement are proposed where appropriate."*

- PV9 Renewable and Low Carbon Energy Development – notes that "*opportunities exist across Angus to generate energy from renewable and low carbon sources contributing to a reduction in the output of greenhouse gases; sustainable economic growth; and a largely decarbonised society. This will have long term environmental benefits and help maintain residents' quality of life in the future."*

"Proposals for renewable and low carbon energy development will be supported in principle where they meet the following criteria:*

- *the location, siting and appearance of apparatus, and any associated works and infrastructure have been chosen and/or designed to minimise impact on amenity,*
- *landscape and environment, while respecting operational efficiency; access for construction and maintenance traffic can be achieved without compromising road safety or causing unacceptable change to the environment and landscape;*
- *the site has been designed to make links to the national grid and/or other users of renewable energy and heat generated on site;*
- *there will be no unacceptable impact on existing or proposed aviation, defence, seismological or telecommunications facilities;*
- *there will be no unacceptable adverse impact individually or cumulatively with other existing or proposed development on:*
- *landscape character, setting within the immediate and wider landscape (including cross boundary or regional features and landscapes), sensitive viewpoints and public access routes;*
- *sites designated for natural heritage (including birds), scientific, historic, cultural or archaeological reasons;*
- *any populations of protected species; and*
- *the amenity of communities or individual dwellings including visual impact, noise, shadow flicker.*
- *during construction, operation and decommissioning of the energy plant there will beno unacceptable impacts on:*
  - *groundwater;*
  - *surface water resources; or*
  - *carbon rich soils, deep peat and priority peatland habitat or geodiversity.*

Where appropriate mitigation measures must be supported by commitment to a bond commensurate with site restoration requirements.

Consideration may be given to additional factors such as contribution to targets for energy generation and emissions, and/or local socio-economic economic impact."

5.2.6 The above policies, along with local guidance and baseline studies listed below have helped to inform the parameters of the Proposed Development in relation to the consideration of adverse effects on the local landscape and views.

Guidance

5.2.7 The following documents have been included as guidance on landscape and visual matters where relevant:

5.2.8 **NatureScot pre-application guidance for solar farms (February 2025)** – which includes advice specific to assessment of landscape and visual impacts relative to

industry standard methodology set out in (GLVIA 3, and details matters which would be considered within the landscape and visual impact assessment.

5.2.9 The guidance seeks to ensure that LVIA is consistent for all new solar developments, detailing available guidance for the assessment of effects on national and local landscape designations, Wild Land Areas and sites visualisation guidance found in Landscape Institute Technical Guidance Note 06/19 Visual representation of development proposals.

5.2.10 **Angus Council Renewable and Low Carbon Energy Development Supplementary Guidance (June 2017)** - which contains detailed advice on how applicants should address the criteria of Policy PV9 when preparing and submitting applications.

5.2.11 Relative to Landscape, the guidance notes that "*Impact varies with the location, scale and type of renewable energy scheme proposed. Supporting information and accompanying visual/graphic information should be commensurate with the scale, location and potential impact (individually and cumulatively) of the proposal and should include options for mitigation where appropriate.*

5.2.12 All forms of renewable energy development should be considered within their landscape context taking account of relevant ALDP policies and advice and guidance from Scottish Natural Heritage and Historic Environment Scotland on assessing the impact of renewable energy developments on the landscape. The Council will seek advice from SNH and HES as appropriate."

5.2.13 The Guidance also offers consideration on the need for cumulative assessment, stating amenity as a key parameter when assessing the combined or additional effects of cumulative developments. The guidance provides a statement regarding designated sites in relation to energy development, noting that *"the integrity of such designations may be affected by activity beyond site boundaries*", and effects on designated sites and their identified qualities will be carefully considered when determining applications for energy development.

5.2.14 **Angus Council: Strategic Landscape Capacity Assessment for Solar Energy in Angus 2016** – This document details landscape capacity for Solar Energy Development within Angus Landscape Character Types (LCT). Within the study area, both Angus LCT and that of the 2019 NatureScot Landscape Character Assessment are spatially identical. The guidance has been referred to as supplementary information to compliment the NatureScot assessment.

5.2.15 **Angus Council: Forestry & Woodland Strategy 2024-2034** – This document details the spatial planning for woodland enhancements across Angus for the next decade up to 2034. The document identifies statutory Woodland of High Nature Conservation Value (WHNCV), and areas planned for regeneration. This document is referred to in the setting out of the landscape and ecological enhancements, as shown on **Figure 5.5a** and **5.5b.**

5.3 Consultation

5.3.1 Angus Council were consulted in relation to the selection of viewpoints (VPs) and the extent of the LVIA study area at the pre-application stage.

5.3.2 The key responses are detailed below in **Table 5.1**: Summary of Stakeholder Consultation.

Table 5.1: Consultation Responses

Consultee	Consultation Response	Applicant Action
Angus Council (consulted via email, response dated 27/02/2025)	Viewpoints & Receptors: *"The proposed VPs are acceptable. The impacts upon the Glamis Castle Garden and Designated Landscape will be an important and views to and from the Glamis Castle Garden and Designated Landscape will a key consideration. The area to the west is not only a Glamis Castle Garden and Designated Landscape but is also a Local Nature Conservation Site".*	An additional VP has been included from an area of potential visibility at the boundary of the Glamis Castle GDL. Matters regarding the Local Nature Conservation Site are referred to in the Ecology chapter (**Chapter 6** of the EIA Report). Matters relating to the cultural heritage of the Glamis Castle GDL referred to in the Cultural Heritage chapter (**Chapter 8** of the EIA Report).
	Heritage Elements: *"St Orland's Stone (SAM) is located nearby to the north and would be an appropriate additional VP."*	Additional wireline views have from St Orland's Stone and from within the Glamis Castle GDL have been produced to aid cultural heritage assessment. Matters relating to the cultural heritage of Scheduled Monuments referred to in the Cultural Heritage chapter (**Chapter 8** of the EIA Report).
	Landscape Character & Ecology: *"The western end of the site is abutted by statutory Woodland of High Nature Conservation Value (WHNCV) as detailed within the Angus Forestry & Woodland Strategy 2024-2034. In addition, WHNCV Regeneration Zones include part of the proposed site. "*	Proposed landscape and ecological enhancements include additional woodland on the western boundary to complement existing WHNCV adjacent to the Site, this includes proposed woodland within identified Regeneration Zones (as per the Angus Council Forestry & Woodland Strategy) in the northwestern corner of the Site, shown on **Figure 5.5a**
	Visual Receptors: *"Consideration to impacts upon nearby core paths and listed buildings."*	Two representative viewpoints (VP1 & VP2) are located on Core Path 272. Photomontage illustrating the Proposed Development and mitigation planting have been prepared (Refer to **Figures 5.6a-5.6f** and **5.7a-5.7c** in Volume 2b of the EIA Report).

Consultee	Consultation Response	Applicant Action
		Matters regarding Listed Buildings are referred to in the Cultural Heritage chapter (**Chapter 8** of the EIA Report).
	"You will find useful guidance contained within the Angus Council's Strategic Landscape Capacity Assessment for Solar Energy in Angus document."	Strategic Landscape Capacity Assessment for Solar Energy in Angus has been used for reference on landscape character matters, alongside the 2019 NatureScot Landscape Character Assessment.

5.4 Assessment Methods & Significance Criteria

5.4.1 This section provides a summary of the methodology adopted for the LVIA. Full details of the assessment methodology, including assessment criteria, are provided in **Technical Appendix 5.1**.

5.4.2 In accordance with GLVIA3, the significance of landscape and visual effects is determined by considering, in tandem, the sensitivity of landscape and visual receptors (landscape elements, landscape character areas, landscape designations and groups of people who may be affected by changes in visual amenity) and the magnitude of effect arising from the Proposed Development.

Study Area

5.4.3 It is accepted practice within landscape and visual assessment work that the extent of the study area for a development proposal is broadly defined by the visual envelope of the Proposed Development. In this case a study area of 5 km has been used (as shown by **Figures 5.1-5.4**). Given the scale of the Proposed Development, and the visual envelope displayed on **Figure 5.3**, this study area is adequate to identify all non-negligible effects on landscape and views.

Site Visit

5.4.4 To inform the assessment, Site visits were made to various locations within the study area including, but not restricted to, representative viewpoints by Stephenson Halliday's assessment team between August 2024 and January 2025.

Sensitivity

5.4.5 Sensitivity (described as High, Medium or Low) is judged by combining component judgements about the value and susceptibility of the receptor, as illustrated in **Table 5.2** and **Table 5.3.** An explanation of how susceptibility and value has been determined is provided in **Technical Appendix 5.1**. Detailed susceptibility and value criteria for landscape receptors are established in **Technical Appendix 5.3** whilst detailed visual susceptibility and value criteria are set out in **Technical Appendix 5.1.** It should be noted that intermediate assessments of value or susceptibility may be applied (e.g. High/Medium, Medium/Low or National/Regional, Regional/Community). Likewise, when combining susceptibility and value to determine sensitivity, an intermediate assessment is adopted where overall sensitivity is judged to lie between levels. In all instances, professional

judgement is employed, and the tables below should not be interpreted rigidly to give a specific answer. A slightly greater weight is given to susceptibility in judging the sensitivity of visual receptors.

Table 5.2: Landscape Sensitivity

LANDSCAPE RECEPTORS		Susceptibility		
		High	**Medium**	**Low**
Value	**National**	High	High/Medium	Medium
	Regional	High/Medium	Medium	Medium/Low
	Community	Medium	Medium/Low	Low

Table 5.3: Visual Sensitivity

LANDSCAPE RECEPTORS		Susceptibility		
		High	**Medium**	**Low**
Value	**National**	High	High/Medium	Medium
	Regional	High/Medium	High/Medium	Medium/Low
	Community	High/Medium	Medium	Low

Magnitude

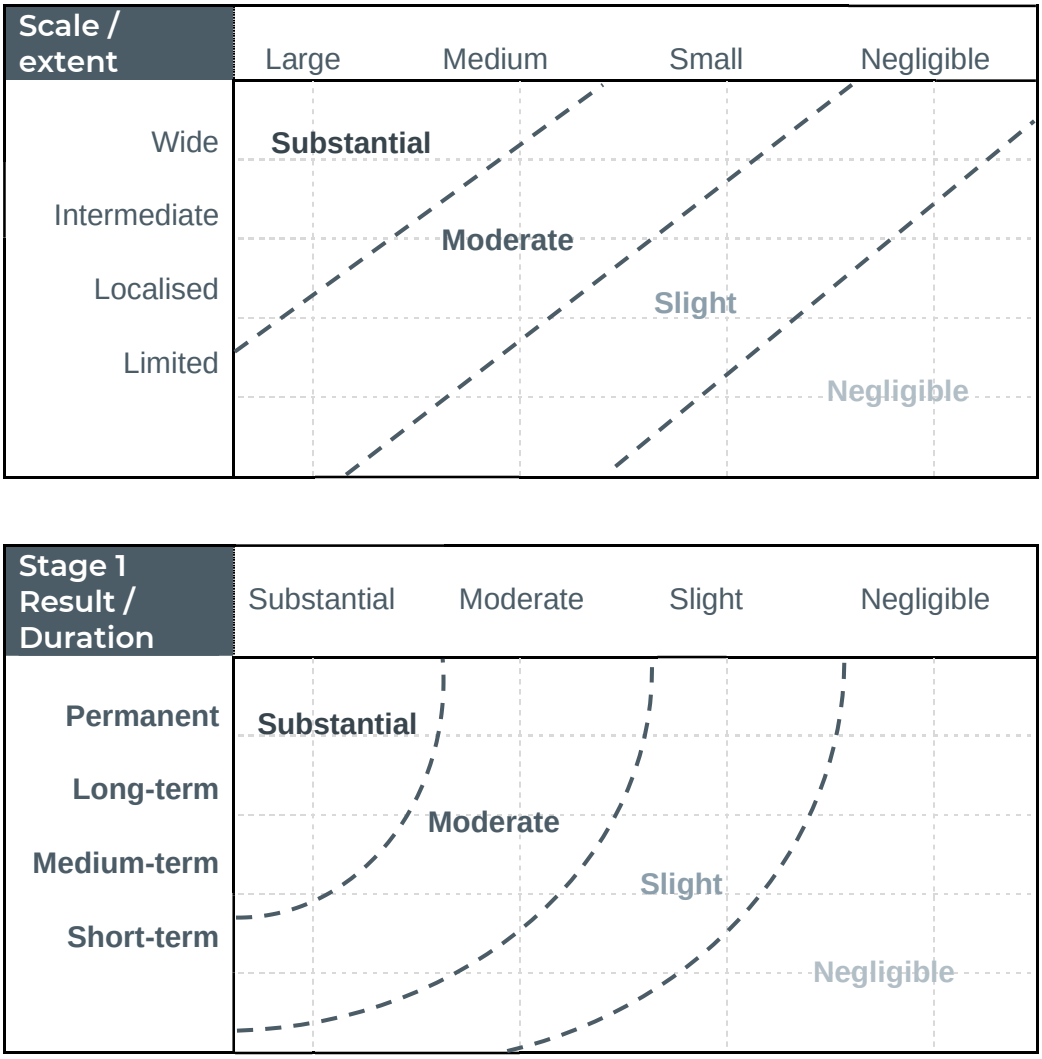
5.4.6 The magnitude of effect arising from the Proposed Development (described as Substantial, Moderate, Slight or Negligible) is assessed in terms of its scale, geographic extent of the area or receptor that is influenced and its duration.

5.4.7 Scale of change (expressed as Large, Medium, Small, Negligible) is the first and primary factor in determining magnitude. Geographical extent and duration of the effect are modifying factors to the overall magnitude judgement which may be higher if the effect is particularly widespread and/or long lasting, or lower if it is constrained in geographic extent and/or timescale.

5.4.8 The diagrams presented in **Plate 1** below illustrate in outline how these two modifying factors are considered in a two-stage process and further explanation is provided in **Technical Appendix 5.1**. Plate 1 is not intended to be interpreted rigidly as a chart to provide definitive answers; professional judgement is employed as appropriate to arrive at an overall judgement on the magnitude of effect. A definition of the terms used in the diagrams in **Plate 1** is provided in **Appendix 5.1**.

5.4.9 Where magnitude of effect (or other judgements) is judged to lie between levels, an intermediate assessment is adopted and is expressed as e.g. Moderate/slight.

Plate 1: Illustration of how Magnitude of Effect is Established



Significance of Effects

5.4.10 The significance of a landscape or visual effect (described as Major, Moderate, Minor or Negligible) is assessed using professional judgement, combining the sensitivity of the receptor with the predicted magnitude of effect, as summarised in **Table 5.4**. **Table 5.4** is not used as a prescriptive tool and illustrates the typical outcomes, allowing for the exercise of professional judgement. In some instances, a particular parameter may be considered as having a determining effect on the analysis. Where significance is judged to lie between levels, an intermediate assessment will be adopted for example 'Moderate/Minor'. Such a judgement indicates that the significance of effect is less than Moderate but more than Minor.

Table 5.4: Significance

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

5.4.11 Where the effect has been classified as Major or Major/Moderate, this is considered to be equivalent to a likely significant effect. Where 'Moderate' effects are predicted, professional judgement is applied to determine whether the effect is significant or not ensuring that the potential for significant effects to arise has been thoroughly considered and justification is provided for the judgement reached as appropriate. Effects of Moderate/Minor, Minor, Minor/Negligible or Negligible significance are considered to be not significant

Beneficial/Adverse

5.4.12 Landscape and visual effects can be beneficial or adverse and, in some instances, may be considered neutral. Neutral effects are those which overall are neither adverse nor positive but may incorporate a combination of both. Whether an effect is beneficial, neutral or adverse is identified based on professional judgement.

5.4.13 However, for the avoidance of doubt, in this assessment it has been assumed that where new infrastructure is introduced into the landscape or views, this will generally constitute an adverse effect. Any variation from this stance will be clearly justified.

Cumulative Assessment

5.4.14 Cumulative assessment relates to the effects of more than one development. The approach to cumulative assessment is set out alongside the assessment in **Technical Appendix 5.1**.

5.4.15 At the time of writing this report (25th March 2025), there were two consented solar developments identified within the study area. They are the Craignathro Solar Farm, located 3.8 km southeast of the Site and the Suttieside Solar Farm located 4.1 km east-northeast.

5.4.16 Cumulative developments within the study area which have been consented, and those which are formally proposed, via planning applications, are considered within this chapter. Cumulative developments which are currently at pre-application or screening stage are not considered as it is widely accepted that development schemes are likely to change prior to planning submission, along with the potential effects of any proposal.

5.4.17 These development sites are shown on **Figure 5.1**, with cumulative effects relative to the Proposed Development considered further in **Section 5.11**.

Night-time Assessment

5.4.18 The Proposed Development does not include a requirement for any permanent lighting that would be in regular use at night. Security and/or task lighting would be incorporated within the main substation compound although it would not be in regular use and would be sensor and/or user operated. No notable landscape or visual effects from lighting are anticipated to arise and this is not assessed further.

Residential Amenity

5.4.19 As set out within LI Technical Guidance Note 02//19 'Residential Visual Amenity Assessment (RVAA)':

5.4.20 "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.' …

5.4.21 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."

5.4.22 This chapter includes an assessment of effects on residential visual amenity. However, as it is judged that the Proposed Development would not give rise to effects meeting the threshold described above, a full RVAA is not required.

Distances

5.4.23 Where distances are given in the assessment, these are approximate distances between the nearest part of the Site and the nearest part of the receptor in question, unless explicitly stated otherwise.

Visual Aids

5.4.24 Seven representative viewpoints have been agreed with Angus Council (AC) in order to inform the assessment. The method of visualisation selected has been informed by Landscape Institute Technical Note 6/19 Visual Representation of development proposals and agreed with AC Annotated photographs (**Figures 5.6 – 5.12** in Volume 2 of the EIA Report) of the existing views are provided, with photomontages from **Viewpoints 1** and **2** (**Figures 5.6b, 5.6c, 5.6e, 5.6f 5.7b and 5.7c** in Volume 2 of the EIA Report) showing the Proposed Development within the landscape. The methodology of production for the visualisations is described within **Technical Appendix 5.2.**

5.5 Baseline

5.5.1 An overview of the baseline study results is provided in this section with the full baseline description of the individual landscape and visual receptors being provided alongside the assessment in **Section 5.10** for ease of reference.

5.5.2 This section identifies those landscape and visual receptors which merit detailed consideration in the assessment of effects, and those which are not taken forward for further assessment as effects *"have been judged unlikely to occur or so insignificant that it is not essential to consider them further"* (GLVIA3, para. 3.19).

5.5.3 Both this baseline section and the effects section describe landscape character and visual receptors before considering designated areas as it is common for designations to encompass both character and visual considerations within their special qualities or purposes of designation.

ZTV Study

5.5.4 A Zone of Theoretical Visibility (ZTV) study was generated based on the proposed design. This is shown on **Figure 5.3** and indicates areas of potential visibility. The analysis was carried out using a topographic model and including buildings and trees (with assumed heights of 15m for trees and 7.5m for buildings) as visual barriers in order to provide a more realistic indication of potential visibility.

5.5.5 The ZTV study was used to aid the identification of those receptors that are likely to be most affected by the Proposed Development and those that do not require detailed consideration.

5.5.6 The ZTV for the Proposed Development (**Figure 5.3**) shows that the main area of visibility extends north and south from the Site over open agricultural land and nearby core paths. There are some small breaks in visibility where there is some screening from landform at a dismantled railway 0.5km north of the Site and some small blocks of woodland between 0.6 and 1.0km south. Reduced visibility extends further north across a minor road before becoming patchy and breaking up, with a band of distant visibility located on more elevated ground to the south and west of Kirriemuir between 3 and 5km from the Site.

5.5.7 Potential visibility to the south is more widespread, extending beyond the A94 at Douglastown into elevated areas up to 5.5km from the Site. Visibility across lower areas to the south is varied, with most areas experiencing only partial visibility to the Proposed Development and an area of more comprehensive visibility located at approximately 2km south-southeast. Further comprehensive views are indicated around a series of core paths to the south of Forfar at 3.0-3.5km southeast. Visibility is limited to the east by screening landform, and to the west by woodland adjacent to the Site. There is some more distant visibility indicated to the southwest beyond the Glamis Castle GDL

5.5.8 Existing built form and tree cover in the study area has a notable effect on visibility, with localised features limiting views within the landscape and of the Site. Throughout the study area, site work indicated that localised screening by smaller

trees throughout the landscape, at roadsides and mature hedgerow boundaries has not been fully reflected by the modelling and that the visibility is likely to be slightly less than indicated by the ZTV study.

5.5.9 Effects on landscape or visual receptors outside the areas of visibility shown on the ZTV study would be Negligible and are not assessed in detail.

Landscape Character

5.5.10 Local landscape character areas in the study area are shown on **Figure 5.2** Landscape character for the study area is described in the 2019 NatureScot Landscape Character Assessment. Relevant extracts from this document relating to the host Landscape Character Type (LCT) are included as **Technical Appendix 5.3** to this assessment. In addition to the 2019 NatureScot study, assessment of LCTs and their sensitivity to the Proposed Development, this chapter also draws on information found in the online Strategic Landscape Capacity Assessment for Solar Energy from Angus Council and the Tayside Landscape Character Assessment (TLCA) to supplement the NatureScot study where required.

5.5.11 The Site is situated in NatureScot LCT 384: Broad Valley Lowlands – Tayside. LCT 384 is a well settled landscape characterised by broad, arable straths with complex glacially formed topography and an overriding northeastern aspect. Adjacent hills form boundary objects to the lowland LCT which has open panoramic views to its internal extents due to a decline in tree cover and hedgerow. The LCT is intersected by a dense road network of major and minor routes connecting smaller hamlets and villages to larger towns. The LCT is home to some large estates and is rich with historical features. Solar development is an existing feature within the Host LCT at Padanaram, to the northeast of the Site within Strathmore.

5.5.12 Effects on the following character areas are considered within **Section 5.12**, with baseline description provided alongside the assessment of effects for ease of reference:

- **LCT 384: Broad Valley Lowlands** – Tayside;
- **LCT 382: Lowland Hill Ranges**; and,
- **LCT 386: Low Moorland Hills**.

Baseline Visual Environment

5.5.13 As shown on **Figure 5.1**, the Site is located 120m west of the hamlet of Drumgley and 1.7km west of Forfar in Angus across four agricultural fields with southern and northern aspect. Visibility to and from the Site is variable, though more widespread in the north and south of the study area. Low, rolling topography partially obscures views in the surrounding area and small blocks of woodland (both adjacent to the Site and throughout the south of the study area) provide local screening. Long, broad views are characteristic of the Broad Valley Lowlands, which are available from level and occasionally elevated sections of road, local routes and core paths surrounding the Site and from the southern edge of settlement at Forfar. Raised views across the Site and lowland agricultural area are available from a series of hills to the south and east of the Site, and from the north beyond the study area.

Landcover in the area is primarily agricultural, with pasture fields divided by some small areas of woodland, drainage channels and canalised burns with trees aligned to roadsides and occasionally to field boundaries. Larger areas of woodland are located within the Glamis Castle GDL to the west of the Site. Settlement is spread throughout the valley, with small towns and villages increasing the concentration of built form to the north and east of the Site. The operational Ecosse Solar Park development is located 1.6 km northeast of the Site. This is the only solar farm currently located within the study area, and is sited to the north of the A926 at Padanaram.

Visual Receptors

5.5.14 Visual receptors are "*the different groups of people who may experience views of the development*" (GLVIA, 3rd edition, para 6.3). In order to identify those groups who may be significantly affected the ZTV study, baseline desk study and site visits have been used.

5.5.15 The different types of groups assessed within this chapter encompass local residents; people using key routes such as roads; cycle ways, people within accessible or recreational landscapes; people using Public Rights of Way/Core Paths; or people visiting key viewpoints. In dealing with areas of settlement, Public Rights of Way/Core Paths and local roads, receptors are grouped into areas where effects might be expected to be broadly similar, or areas which share particular factors in common.

5.5.16 Representative viewpoints have been selected to aid the assessment of effects on visual receptors.

Visual Receptor Groups

5.5.17 The following visual receptor groups are located within the study area and are likely to have visibility of the Proposed Development, as shown on the ZTV study on **Figure 5.3** and are considered further in **Section 5.12**

- **Drumgley** – 0 adjacent to the Site access;
- **Cossans** – 0.3 km NW;
- **Lochmill to North Leckaway** – 0.8 – 1.3 km SE;
- **Ingliston to Mains of Brighton** – 1 km S;
- **Forfar**– 1.7 km, E;
- **Douglastown** – 2.1km S;
- **Jericho to Upper Hayston** – 2.5 km S;
- **Local road users and residents to the north of Site** - 0.7 – 3 km, N & NE.

5.5.18 As mentioned in paragraph **5.4.22** it is considered that effects would not reach the Residential Visual Amenity (RVA) Threshold described in LI Technical Guidance Note 02/19. One residential property is within the Site boundary and as such is likely to experience close range views to the Proposed Development. The design of the Proposed Development and mitigation scheme has been considered in response

to potential impacts on views from this property. The following residential property is assessed:

- **Haughs of Cossans** – 0 km S, adjacent to the Site boundary

5.5.19 All other residential properties are considered within the corresponding visual groups identified above.

5.5.20 There are also a number of receptor groups which are excluded from the detailed assessment, on the basis that visual effects are likely to be Negligible, for the reasons indicated below:

- **Glamis** – 2.8km SW.- As shown on the ZTV, there would be no visibility to the Proposed Development from within the settlement area at Glamis. This was confirmed by site survey work, and as such, impacts on Glamis are not considered further within this assessment.
- **Dispersed settlement between 1.3 and 3km northwest –** As shown on the ZTV, several properties to the northwest are outside of the visual envelope due to screening from topography and woodland. This includes areas around Logie, Ladywell and Flethcherfield. Impacts on these areas are not considered further within this assessment.
- **Kirriemuir & Southmuir** – 3.5-5 km N. - As shown on the ZTV, there would be very limited visibility from within the settled areas of Kirriemuir and Southmuir, restricted to areas at the southern and western edges of the settlement. Site surveys confirmed that there would be very limited visibility, with intervening distance and further additional screening from localised vegetation not accounted for on the ZTV reducing any potential effects considerably. Impacts on Kirriemuir and Southmuir are not considered further within this assessment.
- **Westmuir** – 4.5 km NW. - As shown on the ZTV, there would be limited visibility from within the settled area of Westmuir. Site surveys confirmed that there would be very limited visibility, with intervening distance and further additional screening from localised vegetation not accounted for on the ZTV reducing any potential effects considerably. Impacts on Westmuir are not considered further within this assessment.
- **Local roads and residents to the west of the Site** – As shown on the ZTV, there is very limited visibility from areas in the west of the study area, with views to the Proposed Development from this area very unlikely. Effects on receptors in the west of the study area between Glamis and Westmuir, Including the Glamis Castle Garden and Designed Landscape (GDL) will not be considered further within this assessment.
- **Local roads and residents in the northeast of the study area –** 1.0 – 5.0 km NE. As shown on the ZTV, there is very little visibility in areas to the northeast of the study area, including Padanaram and dispersed settlement and local roads north of Forfar and east of Kirriemuir. Effects on these areas are not considered further within this assessment.

Key routes

Roads and Rail

- **A94** (1.9 km S) - This is a key arrival route into Forfar via Glamis and Douglaston from the southwest.

- **A90** (1.2km E) – This is an arterial transport route connecting cities along the northeast coast of Scotland from Dundee to Fraserburgh.
- **A926** (1.52km NE) - This route connects Forfar to Kirriemuir through the northeast of the study area.

5.5.21 As shown on **Figure 5.1**, several additional local roads and other arterial routes pass through the study area which are outside of the ZTV. In addition to routes outside of the ZTV, travel routes in the outer limits of the study area and not mentioned above are by nature likely to receive negligible effects due to the general mode of travel and viewing distance to the Site. The following routes are likely to receive negligible effects as a result of the Proposed Development and are not considered further in this assessment.

- **A928** (1.73 km NW) – This route connects Glamis to Kirriemuir through the west and northwest of the study area. Visibility is indicated from a 1.3 km section of this route as distances between 1.7 km and 2.5 km north of the Site. It is expected that the Proposed Development would be barely discernible in the landscape from this section of the route due to screening from intermittent vegetation and that effects would be Negligible. As such the route is not considered further.

Recreational Routes

- **Core Path 272 (Drumgley to Glamis Station)** – (0km N and within the Site boundary) – This Core Path provides access between Drumgley and the Glamis Castle GDL.
- **Core Paths to the southeast of the Site** – (0.5 – 4km E & SE) This Core Path Network provides linkages between minor roads and charts recreational routes on the southern and eastern fringes of Forfar. This group includes the following Core Paths:
    - **294** (Balmashanner);
    - **297** (Craignathro to West Craig);
    - **298 (**Balmashanner to West Craig)
    - **300** (South Leckaway);
    - **301** (Orchardbank to Halkerton);
    - **302** (Glamis Road to Forfar Loch)
    - **303** (Forfar Loch)
    - **304** (Forfar Loch, south).

5.5.22 With the exception of Core Path 272, Individual Core Paths that are closely associated with settlement are assessed as part of receptor groups listed above. This includes Core Path 237 at Drumgley and Core Path 243 at Jericho to Upper Hayston.

5.5.23 There are a number of recreational route which are predicted to receive negligible effects due to being outside of the ZTV, located at a distance from which the

Proposed Development would not be readily discernible or are heavily screened by local vegetation, which is not accounted for on the ZTV, including:

- **Core Paths to the northwest of the Site** – (3.5 – 5 km north and NW) This Core Path Network provides linkages between minor roads and charts recreational routes between Kirriemuir and Westmuir. This Core Path network in located at 3.5 km north of the Proposed Development at its closest point. As determined by on site survey work, this path network is likely to receive negligible effects due to intervening distance and a large amount of localised screening elements including hedgerows, trees and shrub located along paths and roads, and around buildings throughout the network. As such, this Core Path network is not considered further in within this assessment

Specific Viewpoints

5.5.24 There is one specific panoramic viewpoint identified on Ordnance Survey (OS) maps within the study area, which is **Balmashanner Hill,** located 3.9 km east of the Proposed Development to the south of Forfar. This viewpoint has a predominantly northern outlook over the town of Forfar toward the Grampian Mountains, though does offer open views across Strathmore, the Site and study area.

5.5.25 Due to intervening distance, and a primary outlook to the north away from the Site, effects on this specific viewpoint are predicted to be Negligible and as such it is not considered further.

Designated Landscapes

5.5.26 There are no nationally or locally designated landscapes within the study area.

5.5.27 The nearest nationally designated landscape is the **Deeside and Lochnagar National Scenic Area (NSA),** which is located 26.8 km northwest of the Site and is not considered further.

5.5.28 The nearest locally designated landscapes are:

- **River Esk and Aberlemno Local Landscape Area (LLA)** - Angus located 5.4km NE;
- **Angus Glens LLA** - Angus, located 6.1 km NW, and:
- **Lundie Craigs to Auchterhouse Hill LLA** - Angus, located 8.4 km SW.

5.5.29 Due to intervening distance, a lack of predicted visibility and the unlikelihood that effects more than negligible would extend beyond the study area, the above locally designated landscapes are not considered further.

5.5.30 **The Glamis Castle GLD** borders the Site to the west. The neighbouring edge of the GLD is predominantly wooded, though there is a small area to the north of Bents Wood where open views across the western extents of the Site are available. Further detail of the GDL and potential impact of the Proposed Development are provided in **Chapter 9: Cultural Heritage.**

5.6 Future Baseline

5.6.1 The future baseline accounts for any development or change in landscape pattern within the study area that has been consented and is scheduled for construction, operation or implementation. These can include new residential developments, roads or infrastructural facilities as well as new woodland or forestry, or the felling and removal of forestry.

5.6.2 There are a small number of non-residential development proposals nearby to the Site, which comprise of outbuildings and agricultural structures to be added to existing residential and commercial properties.

5.6.3 The Angus Council Woodland Strategy notes that there are areas of Woodland of High Nature Conservation Value (WHNCV) located adjacent to the northwest and southwest corners of the Site within the Glamis Castle GDL with regeneration buffers extending int the Site. **Figures 5.5a** and **5.5b** show the intention to establish woodland within one of these zones within the Site.

5.6.4 As noted above in **Section 5.7**, there are two consented solar developments within the study area. These are assessed specifically in relation to cumulative effects with the Proposed Development within the Cumulative LVIA (CLVIA) in **Section 5.11** below.

5.7 Temporal Scope

5.7.1 The scope of this assessment accounts for short, medium and long-term effects as a result of the Proposed Development. It is expected that short term effect would arise during the construction and decommissioning phases, with medium term effects lasting from completion until mitigation planting reaches maturity. Residual, long-term effects would occur from when mitigation planting matures up to decommissioning, after which the Site would be restored to its previous agricultural use though much of the mitigation planting would be retained.

5.8 Environmental Measures Embedded into the Development Proposals

5.8.1 Embedded mitigation proposals are those mitigation measures that are inherent to the Proposed Development. Embedded mitigation includes all mitigation usually assumed to be in place during construction, operation and decommissioning, and is generally regarded as industry standard or Best Practice. Construction and environmental management plans are introduced in **Chapter 3: Proposed Development Description** with an outline Construction Environmental Management Plan (CEMP) provided in **Technical Appendix 3.1**: Outline CEMP.

5.9 Mitigation

5.9.1 The design approach is described in full within **Chapter 2: Site Selection and Design Iteration**. This section of the appraisal considers the fit with guidance

provided in Angus Council; Forestry & Woodland Strategy (2024) and the Angus Council Renewable and Low Carbon Energy Development Supplementary Guidance (2017) in respect of visual impact and landscape character The guidance notes that *'Solar farms can contribute to biodiversity and maintenance of land fertility through environmental management programmes.'* As such, an indicative landscaping scheme is shown on **Figures 5.5a and 5.5b** which sets out the arrangement and specification for new planting across the Site.

5.9.2 The proposed planting is multifunctional; providing mitigation to visual effects via screening views; limiting effects on landscape character by strengthening existing features and providing new, characteristic features to link them together; and providing ecological enhancements in line with Biodiversity Net Gain (BNG) requirements.

5.9.3 Proposed landscaping features include the following:

- 111 new native standard trees;
- 6,100 linear metres of new native hedgerow;
- 31,200 square metres of new native woodland;
- 771,850 square metres of new meadow grassland, and;
- 30,000 square metres of new wet meadow grassland.

5.9.4 In addition to the above mitigation, the Proposed Development includes an offsite wildlife area to the south of the Site, which is shown on **Figure 5.5a**. This area would provide further habitat creation and ecological enhancement. Further detail of the offsite enhancements are found in **Technical Appendix 6.5: Outline Biodiversity Enhancement and Management Plan.**

5.10 Landscape and Visual Effects

5.10.1 This section sets out the effects that the Proposed Development would have on landscape and visual receptors.

5.10.2 Effects are assessed for each landscape and visual receptor for the short-term construction, at completion of works and before mitigation planting matures (medium-term) and for the long term/permanent effects once mitigation planting has matured.

Effects on Site Fabric

5.10.3 The Proposed Development would include the installation of rack mounted solar panels across the Site. The racks would be driven directly into the ground and would require no constructed foundations. Once construction is complete the fields hosting the panel arrays would be managed as species rich grassland and wildflower meadow with the potential for agricultural use (grazing) to be retained as part of the management regime.

5.10.4 Hard standings would be created across localised parts of the Site, as foundations for the BESS, transformer station, substations and for vehicle parking. These are the only elements that will require foundations.

5.10.5 Around 4.8 km of new wire mesh fencing (up to 2.4 m in height) would be erected around the perimeter of the panel array. Palisade fencing of the same height would be erected around the BESS and substation area, with CCTV cameras installed at regular intervals along fence lines around the Site.

5.10.6 At the point of decommissioning, it is anticipated that all electrical equipment and infrastructure, along with hard standings, would be removed from the Site. The mature hedgerows and trees comprising the landscape mitigation would remain, along with the access tracks, and the Site would be returned to agricultural uses.

Viewpoint Analysis

5.10.7 Viewpoint analysis has been undertaken from a total of 7 viewpoints. The final list of viewpoints was prepared to aid in documenting and describing the Proposed Development.

5.10.8 The viewpoint locations are illustrated on **Figures 5.1 - 5.4**. The visualisations, comprising baseline photographs of the existing view from all viewpoints and photomontages from **Viewpoints 1** and **2 (Figures 5.13** and **5.14.**

5.10.9 The full viewpoint analysis is contained within **Technical Appendix 5.4: Viewpoint Analysis**. The findings are summarised below in **Table 5.5 Viewpoint Analysis Summary**. In each case, distances are listed in relation to the Proposed Development.

5.10.10 Please note that **Technical Appendix 5.4: Viewpoint Analysis** considers the nature of changes to character and views at each viewpoint location only. The sensitivity of receptors and wider extent of the effect (beyond the individual viewpoint location) and its duration are considered in the main body of the assessment text below as part of the consideration of the magnitude and significance of effects.

Table 5.5: Viewpoint Analysis Summary

Viewpoint No.	Viewpoint	Distance / direction	Scale of Landscape Effect	Scale of Visual Effect
1	Core Path 272, north of Site	0.21 km North	Construction/short-term: Large Long-term/permanent: Large/medium	Construction/short-term: Large Long-term/ permanent: Large/medium
2	Core Path 272, east of Site	0.00 km East	Construction/short-term: Large Long-term/permanent: Large/medium	Construction/short-term: Large

				Long-term/ permanent: Large/medium
3	Minor road west of Mains of Ballindarg	1.09 km North	Construction/short-term: Small Long-term/ permanent: Small/negligible	Construction/short-term: Small/Medium Long-term/ permanent: Small
4	A94 West Ingliston	1.83km South	Construction/short-term: Small/negligible Long-term/ permanent: Negligible	Construction/ short-term: Small Long-term/ permanent: Small
5	Douglastown	2.10 km South	Construction/short-term: Small/negligible Long-term/ permanent: Negligible	Construction/ short-term: Small Long-term/ permanent: Small
6	Mains of Glamis, A94	2.38 km South	Construction/short-term: Small/Negligible Long-term/ permanent: Small/Negligible	Construction/short-term: Small/Negligible Long-term/ permanent: Small/Negligible
7	Forfar, Dundee Road	3.16 km East	Construction/short-term: Small/Negligible Long-term/ permanent: Small/Negligible	Construction/short-term: Small/Negligible Long-term/ permanent: Small/Negligible

5.10.11 Each of the viewpoints is a ‘sample’ of the potential effects, representing a wide range of receptors – including not only those actually at the viewpoint, but also those nearby, at a similar distance and/or direction. From these viewpoints it can be seen that the distribution of effects would be as follows:

Effects on Character

5.10.12 Large-scale effects are limited to the Site and its immediate surrounds, given the change in use of the current fields and addition and extent of the solar farm; the scale of effect within this area would remain into the long-term as proposed planting would provide some, although limited mitigation within close proximity.

5.10.13 Medium scale effects would occur outside of the immediate context of the Site up to 0.6km from the Site boundary, spread across neighbouring fields mainly to the north and south, and to a lesser extent to the east where the change in use would be noticeable within its immediate agricultural context. Land patterns are more discernible in open views from adjacent fields to the south, east and southeast, with tree belts and hedgerow layering with topography to obscure landscape patterns from the north. Where patterns are discernible, there would be a distinct chance in character from agriculture to solar energy production, with the Proposed Development covering a broad area in southern and northern views due to the shape of the Site. The proposed planting along the Site boundary would help to reduce the presence of the solar farm from all directions, with the sides of the panels

becoming partially screened by mitigation planting in the long term. However, views to panel tops may remain into the long term in areas where the site slopes toward the view and from elevated locations on more distant hills to the south.

5.10.14 Beyond 0.6 km of the Site effects would be of a small to negligible scale as the change to the landscape would be barely discernible given the separation distances; mitigation planting would reinforce hedgerows and tree belts along field boundaries, which would complement existing vegetation in the area, appearing as a subtle addition to the landscape. Small/negligible scale effects on landscape fabric would remain in the long term from local roads to the north, where the Site again appears across a broad section of views toward the Sidlaw Hills, albeit only partially, due to existing vegetation, with further screening as proposed mitigation matures. Similar effects would remain from the A94 and surrounding area to the south up to 2 km, where the roadway is slightly elevated with open views to the north where landscape patterns are clearly readable. Mitigation would work to partially screen the Proposed Development from this direction though the changes within the Site would remain evident.

5.10.15 The assessment indicates that overall effects on landscape character would be limited to a localised area due to a combination of existing landform and woodland that curtail its wider influence, the layout of the Proposed Development and proposed mitigation planting.

Effects on views:

5.10.16 Similar to effects on landscape character, large-scale effects on views would be limited to the Site and its immediate surroundings, from where there would be open and uninterrupted views of the Proposed Development. Views would be segmented, with few instances where all elements including solar panels, BESS enclosures and transformer stations are visible from the same location. These effects would reduce slightly in the long-term with mitigation planting heavily screening the Proposed Development from nearby recreational receptors to the north, east and within the Site boundary (Core Path 272). Although planting would significantly screen views, it would also truncate existing open views from the Core Path to the south and across the Site.

5.10.17 Medium-scale effects would occur within approximately 0.6 km of the Site from the north in views toward the Sidlaw Hills from nearby residents to the northeast and east, the area surrounding St Orland's Stone and from the south in views across neighbouring fields. These areas would experience clear vies into the Site due to facing slopes and elevated outlooks. Maturing mitigation would screen the panels to a degree, though some panel tops would remain visible in the long term. The Proposed Development would appear partially where visible from the north, due to existing vegetation, though would be more openly visible from the south where there are fewer screening obstacles present.

5.10.18 Small-scale effects would be experienced from between approximately 0.6 – 1.2 km to the south and north. While visible, the Proposed Development would not form a focal point nor would it compete with views to the Sidlaw Hills, the Grampian

Mountains or views across Strathmore. Further Small/Negligible and Negligible effects would occur from over 1.5 km to the north and south where the Proposed Development would only be partially visible, and over 2.5 km to the south where elevated views would be available to the entire panel array though it would not compete with the broad open views over Strathmore.

5.10.19 The assessment indicates that overall effects on views would be limited, occurring in a localised area due to a combination of screening by existing landform, trees and woodland that interrupt visibility from the wider area, the layout of the Proposed Development and proposed mitigation planting.

Effects on Landscape Character

5.10.20 Descriptions for each of the assessed character types (LCT) are briefly summarised below, along with further observations from site-based work and predicted effects on landscape character as a result of the Proposed Development.

LCT 384: Broad Valley Lowlands – Tayside (Strathmore Unit)

5.10.21 As shown on **Figure 5.2**, this character type is located on low ground within Strathmore. It includes the site and extends beyond the study area to the northeast, north, northwest and southwest. **Viewpoints 1-3** and **5-7** are located within this LCT. Key characteristics are identified within NatureScot National Landscape Character Assessment (2019) as:

- '*Broad straths formed by glacial erosion, loosely enclosed by the foothills and massif to the north, and lower locals hill ridges to the south*
- *Overriding southwest to northeast orientation*
- *Complex local topography caused by glacial deposition, including outwash terraces, eskers and dry valleys*
- *Distinctive red soils and red building stone, contribute to a colourful mosaic of large fields particularly in the earlier months when crops are immature*
- *Influence of large estates, particularly in terms of mature woodland and policies defined field boundaries and enclosed estate houses.*
- *Dominance of arable and root crops, in large fields typically enclosed by post and wire fencing, which contribute to the overriding horizontal landform and large to medium scale.*
- *Tree and hedge loss weakening landscape character increasing openness of landscape, and increasingly ineffective in mitigating the dust bowls in dry months*
- *Well-settled landscape with strong hierarchy of settlement types from large towns to small villages, located within a well-populated agricultural landscape*
- *Wide, panoramic views across the breadth of the strath, running along and up to the enclosing hills. In particular there are unrivalled views from Strathmore up to the foothills and uplands of the Grampian Mountains to the north*. '

5.10.22 The characteristics listed above can be found throughout the Strathmore Unit character type. Characteristics represented within the Site and its surrounds include

the complex glacial topography of smooth, rolling hills with open, broad views to both the Sidlaw Hills and the Grampian Mountains and an overriding horizontal landform within the strath. As evidenced by site work, there is some weakening of hedgerows which affords some open views across low lying areas within the study area.

5.10.23 The Proposed Development would have limited direct effects on the landform, with small changes to accommodate the BESS enclosure, inverter stations, tracks and SuDs Pond within the Site and no effects on woodland and hedgerow immediately surrounding and beyond the Site. Given the gentle topography of the Site and height of the Proposed Development, the solar panels and associated infrastructure would appear above the skyline from Core Path 272, interrupting views to the Sidlaw Hills, which is a noted feature. This would be the only instance of the Proposed Development rising above the skyline.

5.10.24 Although solar PV development is present within this LCT, with the Ecosse Solar Farm located to the northeast of the site at Padanaram The most notable change to landscape character would be the introduction of the solar panels and associated infrastructure to the fields, which would result in a large scale of change, limited to the Site itself, and would increase the concentration of solar PV development within this section of the Strathmore unit. However, other features that form part of the Proposed Development would provide a degree of integration with the surrounding landscape, include new tree, woodland and hedgerow planting and mosaic meadow grassland.

5.10.25 As described in paragraph **5.10.11** above, large and medium-scale effects would arise within and up to 0.6 km from the Site in the short term, reducing into operation and as mitigation matures. These indirect effects relate to the visual change, where solar panels would be apparent in views within the LCT from the south, east and north. The influence of the Proposed Development would be reduced by the screening effect of boundary vegetation and shelterbelt woodland which would appear to overlap, obscuring both the Proposed Development and the general landscape pattern to a degree, and increasingly with distance.

5.10.26 As appraised in **Technical Appendix 5.3**, the susceptibility of this character area is judged to be Medium/Low, with agricultural land use and openness being the main factors contributing to susceptibility to the Proposed Development. By contrast, the low, gentle rolling landform intersected by drainage channels and small waterways within the strath provides varied visual containment which is strengthened by screening elements including hedgerow and dispersed woodland. Hedgerow is however in occasionally poor condition in the area, allowing for filtered views through the landscape. The landscape within this character area is judged to be of Regional/Community Value and, considering susceptibility and value together the sensitivity is judged to be **Medium/Low**.

5.10.27 Changes during construction would be of a Medium scale in the short term across a localised extent of the LCT. Changes would amount to a physical change from agricultural land to solar energy installation over a relatively small area of this

expansive LCT. Effects would be of a Moderate/slight magnitude, leading to a Moderate/Minor adverse impact which would be **Not Significant.**

5.10.28 Changes at Operational year 1 would reduce to a Medium/Small scale across a localised extent in the medium term. The reduction in effects is due to the absence of construction movement, with all infrastructure and mitigation planting installed. Effects would be of a Moderate/Slight magnitude leading to a Moderate/Minor adverse impact which would be **Not Significant.**

5.10.29 At operational year 10, mitigation planting would be well established, with new mature hedgerow boundaries, tree belts and woodland surrounding the Site. These new landscape features would complement existing character and reduce the impact of the new infrastructure, aiding with integrating the solar arrays into the landscape. Year 10 changes would be of a Small scale in the long term across a localised extent. Effects would be of a Slight magnitude leading to Minor adverse impacts which would be **Not Significant.**

LCT 382: Lowland Hill Ranges.

5.10.30 As shown on **Figure 5.2**, this LCT is aligned with the bottom of the Sidlaw Hills, with the closest boundary point set at 2.3 km south of the Proposed Development at the A94. The LCT extends to the southeast and southwest, outside of the study area over elevated areas found in the Sidlaw Hills. Key characteristics relative to this area of the LCT are:

- *'Recognisable shapes, peaks and slopes, and ridge profiles, the presence of which is emphasised by their location set within low lying agricultural landscape to the north and south.*
- *Short burns and rivers flowing from dramatic, short steep glens.*
- *Several large glens through the hills.*
- *Often distinctive and conspicuous scarp and dipslopes.*
- *Generally open medium scale landscapes of almost conical summits dominated by grass moorland and upland pasture.*
- *Sweeping patchwork of regular but not geometric patterns on the dipslopes.*
- *Some areas of extensive forestry.*
- *Popular use for informal recreation by nearby large centres of population.*
- *A sense of relative tranquillity.*
- *Importance as a backdrop to many settlements in the surrounding low-lying agricultural landscapes.*
- *Views within, across and up to this character type.'*

5.10.31 The Lowland Hill Ranges LCT is judged to have a Medium/Low susceptibility to the Proposed Development due to its dramatic, large-scale landforms, imposing dip slopes and open upland areas. This LCT is judged to be of a Regional value considering its distinct landforms which form a backdrop from surrounding areas, its recreational function and the scenic quality of views within and from the LCT.

Overall, the LCT is judged to have a **Medium sensitivity** to the Proposed Development.

5.10.32 The key characteristics would not be affected by the Proposed Development as there would be no direct change to the physical nature of this LCT. Views within and from the LCT are noted as a key feature, with broad views over Strathmore toward the Grampian Mountains available from the southern extents of the study area. The Proposed Development would be apparent within these views, though would appear low in the landscape in an adjacent LCT and would be seen to align to existing boundary patterns within the agricultural landscape. Seaward views over Dundee and the Firth of Tay are also noted as a key feature of this character area, which are available form elevated areas outside of the study area and would remain uninfluenced by the presence of the Proposed Development.

5.10.33 Changes during construction would be of a Small/Negligible scale in the short term across a limited extent of the LCT. Changes would amount to construction activity in the adjacent LCT visible from a small area of this LCT to the south of the A94 around Templebank. Effects would be of a Negligible magnitude, leading to a Minor Negligible adverse impact which would be **Not Significant.**

5.10.34 Changes at Operational year 1 would reduce to a Negligible scale across a limited extent in the medium term. The reduction in effect resulting from the absence of construction movement in the adjacent LCT. Effects would be of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.35 At operational year 10, mitigation planting would be well established, with new mature hedgerow boundaries, tree belts and woodland surrounding the Site. These new landscape features would integrating the solar arrays into the landscape. Year 10 changes would be of a Negligible scale in the long term across a Limited extent. Effects would be of a Negligible magnitude leading to Negligible adverse impacts which would be **Not Significant.**

LCT 386: Low Moorland Hills.

5.10.36 As shown on **Figure 5.2**, this LCT is aligned with the bottom of the Sidlaw Hills, with the closest boundary point set at 1.4km southeast of the Proposed Development close to the A94. The LCT extends to the southeast, outside of the study area, over sloping and elevated areas to the south of Forfar; and in a small, elevated area on the outer northeastern edge of the study area to the north of Forfar. **Viewpoint 4** is located within this LCT. Key characteristics relative to this area of the LCT are:

- '*Eastern outliers of the Sidlaws orientated north-eastwards, as a series of locally pronounced hill tops along a relatively low ridgeline.*
- *Combination of low, rounded hills and craggy, ridged upland, the prominence of which is reinforced by the distinctive summit crags and low elevation of agricultural context.*
- *Moorland character evident in areas of heather and gorse on the upper slopes and summit which contrasts with the enclosed farmland on lower slopes.*

- *Some areas of extensive woodland in particular on Montreathmont Moor, which blankets the lower elevation hill and creates a simple dark horizon in views.*
- *Settlement on the Low Moorland Hills is limited to a dispersed pattern of farmsteads on the open part of Montreathmont Moor, many with modern agricultural buildings. More recent settlement appears on the transition into neighbouring lower landscapes.*
- *Views from the elevated summits are wide and panoramic across the neighbouring straths and up to the mountains to the north.'*

5.10.37 The Low Moorland Hills LCT is judged to have a Medium/Low susceptibility to the Proposed Development due to its medium to large scale elevated landform, varied open and forested summits and extensive views to the north, east and west. It is judged to be of a Regional/Community value due to its composite agricultural and moorland qualities and localised recreational function. Overall, the LCT is judged to have a **Medium/Low sensitivity** to the Proposed Development.

5.10.38 The key characteristics would not be affected by the Proposed Development as there would be no direct change to the physical nature of this LCT. Views from elevated summits across neighbouring straths are noted as a key characteristic of the LCT. The Proposed Development would appear as a new feature within the neighbouring agricultural landscape within these views, aligning with existing field patterns. Within these broad views, the Proposed Development would occupy a small area of the northwestern outlook from a small area of the LCT, away from more prominent summits to the east of Forfar.

5.10.39 Changes during construction would be of a Small/Negligible scale in the short term across a limited extent of the LCT. Changes would amount to construction activity in the adjacent LCT from small area of this LCT around the A94 to the south of the Site, at Douglastown and Mains of Brighton. Effects would be of a Negligible magnitude, leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.40 Changes at Operational year 1 would reduce to a Negligible scale across a limited extent in the medium term. The reduction in effects is due to the absence of construction movement in the adjacent LCT. Effects would be of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.41 At operational year 10, mitigation planting would be well established, with new mature hedgerow boundaries, tree belts and woodland surrounding the Site. These new landscape features would integrating the solar arrays into the adjacent landscape, though partial views to panel tops may remain in the long term from northwest facing slopes to the east of Douglastown. Year 10 changes would be of a Negligible scale in the long term across a Limited extent. Effects would be of a Negligible magnitude leading to Negligible adverse impacts which would be **Not Significant.**

Visual Effects

5.10.42 This assessment focuses on effects on groups of visual receptors listed in **Section 5.5**, incorporating effects on views from public spaces and streets within neighbourhoods, Key routes and recreational receptors. The assessment of effects focuses on the visual amenity of public spaces, though views from groups of dwellings will also be noted in the descriptions. Effects on private residential amenity are a separate matter, and as set out at **Section 5.5** above do not merit detailed assessment in respect of this development.

Receptor Groups

Drumgley *(0.1 km E km)*

5.10.43 This receptor consists of the residents of Drumgley including, Sparrowmuir and Nether Drumgley, Upper Drumgley, Easter Drumgley, Cotterton of Drumgley, road users and Core Path 237 at Easter Drumgley. The group is judged to have a **High/Medium** sensitivity to change. Land in this area slopes gently to the south, with primary outlook to the southwest across Strathmore to the Sidlaw Hills. Views to the Proposed Development are highly likely throughout the group, though local vegetation features, hedgerow and trees would provide some screening in the northeast of the group. Viewpoint 2 (**Figure 5.7a-5.7c**) is representative of views from Core Path 272 at the western edge of this group.

5.10.44 Settlement, hedgerow and tree cover would provide screening to the western outlook toward the Site from Nether Drumgley, though some oblique views to the panel arrays would be available in the southern outlook from the property at the southwestern edge of Nether Drumgley. Views to the Proposed Development from Sparrowmuir would be filtered through the existing tree belt aligned to Core Path. Two of the three properties at Upper Drumgley (0.35 km N) would experience broad views towards the Proposed Development to the south and west, although the existing tree belt at Core Path 272 would filter views to a degree. Slightly more distant views would occur at Easter Drumgley and Core Path 237 (0.66 km NE) though roadside and field edge vegetation at the minor road to Nether Drumgley would provide additional screening of views to the Proposed Development. From each of these areas, including users of the local road network travelling south toward Nether Drumgley, the Proposed Development would appear in frame with key views toward the Sidlaw Hills to the south and southwest. Views to the Proposed Development would be largely screened around Cotterton of Drumgley by layered roadside and field edge vegetation.

5.10.45 All construction effects would be experienced in the short term. Construction would be noticeable in available views throughout the group, though mainly in closer range views from Sparrowmuir and the property at the southwestern edge of Nether Drumgley, with telehandlers visible during the installation of the panel array, fencing and CCTV. Heavy Goods Vehicles (HGV) deliveries would access the Site via the minor road at Nether Drumgley and Core Path 272 at Nether Drumgley. Properties at Sparrowmuir and Nether Drumgley are accessed via the proposed HGV delivery route on the local road and Core Path 272.

5.10.46 The scale of change during construction at Sparrowmuir would be Large, across an intermediate extent, with effects of a Moderate magnitude leading to a Major/Moderate adverse impact which would be **Significant.** Large scale changes would also occur over a localised extent from the property at the southwestern edge of Nether Drumgley, with effects of a Moderate magnitude leading to a Major/Moderate adverse impact which would be **Significant.** Medium scale changes would occur across an intermediate extent from Upper Drumgley, with effects of a Moderate/Slight magnitude leading to a Moderate Impact which would be **Significant.** Small scale changes would occur across a limited extent from Easter Drumgley and Core Path 237, and from properties at the north and east of Nether Drumgley, with Slight/Negligible effects leading to Moderate/Minor adverse impacts which would be **Not Significant.** Small/Negligible changes would occur across a limited extent at Cotterton of Drumgley, with effects of a Negligible magnitude leading to a Minor/Negligible impact which would be **Not Significant.**

5.10.47 At operational year 1, All construction would be complete, including the installation of mitigation planting which would be clearly visible beside the Proposed Development on the eastern and northern Site boundaries from Sparrowmuir and the property at the southwestern edge of Nether Drumgley. Changes during Operational year 1 would occur in the medium turn, reducing as mitigation planting establishes.

5.10.48 At operational year 1, changes at Sparrowmuir would be Medium/Large, across an intermediate extent, with effects of a Moderate magnitude leading to a Moderate adverse impact which would be **Significant.** Medium/Large scale changes would also occur over a localised extent from the property at the southwestern edge of Nether Drumgley, with effects of a Moderate magnitude leading to a Moderate adverse impact which would be **Significant.** Medium scale changes would occur across an intermediate extent from Upper Drumgley, with effects of a Moderate/Slight magnitude leading to a Moderate/Minor Impact which would be **Not Significant.** Small scale changes would occur across a limited extent from Easter Drumgley and Core Path 237, and from properties at the north and east of Nether Drumgley, with Slight/Negligible effects leading to Minor adverse impacts which would be **Not Significant.** Small/Negligible changes would occur across a limited extent at Cotterton of Drumgley, with effects of a Negligible magnitude leading to a Minor/Negligible impact which would be **Not Significant.**

5.10.49 At operational year 10, mitigation planting would be fully established, with hedgerow managed to a height of 3m, standard trees reaching a height of 6-8m and woodland reaching a varied canopy heigh between 4-7m. Planting would provide screening to panels and infrastructure at the northerns and eastern Site boundaries, limiting the visible extent of the Proposed Development from receptors throughout this group. Effects at Operational year 10 would be experienced in the long term.

5.10.50 The scale of change at year 10 from Sparrowmuir would be Medium, across an intermediate extent, with effects of a Moderate magnitude leading to a Moderate adverse impact which would be **Significant.** Medium scale changes would also occur over a localised extent from the property at the southwestern edge of Nether Drumgley, with effects of a Moderate/Slight magnitude leading to a Moderate

adverse impact which would be **Significant.** Small scale changes would occur across an intermediate extent from Upper Drumgley, with effects of a Slight magnitude leading to a Moderate/Minor Impact which would be **Not Significant.** Small/Negligible scale changes would occur across a localised extent from Easter Drumgley and Core Path 237, and from properties at the north and east of Nether Drumgley, with Slight/Negligible effects leading to Minor adverse impacts which would be **Not Significant.** Negligible changes would occur across a limited extent at Cotterton of Drumgley, with effects of a Negligible magnitude leading to a Minor/Negligible impact which would be **Not Significant.**

Cossans *(0.25 km NW)*

5.10.51 This cluster of receptors is located to the north of the western end of the Site at the end of a dismantled railway along Core Path 272. This group is judged to have a High/Medium sensitivity to the Proposed Development. Outlook is varied from the group, though there are views to the north toward the Grampian Mountains and south toward the Sidlaw Hills.

5.10.52 Views from properties are partially contained by garden vegetation, with tall trees channelling views to the south from the property at the eastern end of the group, where the Proposed Development would be visible in a neighbouring field. Views here would mainly be of panel sides, with landform of the Site sloping away from the group to the southeast. The panel array would appear in view below the Sidlaw Hills, which are partially visible behind woodland in the Glamis Castle GLD. Properties to the east along Core Path 272 would be more contained, with some channelled views to the north available from properties to the north of the Core Path. The Proposed Development would not be visible from the eastern end of the group due to containment from garden trees and woodland in the Glamis Castle GDL.

5.10.53 Construction activity would be noticeable in channelled views from the property at the western end of the group, with movement of telehandlers during the installation of panels, fencing and CCTV at the northwestern edge of the Site. The scale of change during construction would be Medium in the short term. Changes would be across a localised extent. Effects would be of a Moderate/Slight magnitude, leading to a Moderate/Minor adverse impact which would be **Not Significant.**

5.10.54 Operational year 1 effects would be slightly reduced form construction effects due to visibility restricted to the northern edge of the Site, though the lack of movement associated with construction. The scale of change at operational year 1 would be Small/Medium in the medium term across a localised extent. Effects would be of a Moderate/Slight magnitude, leading to a Moderate/Minor adverse impact which would be **Not Significant.**

5.10.55 Operational year 10 changes would be notably reduced as mitigation planting matures, with woodland and hedgerow at the northern Site boundary growing to screen the Proposed Development. Mitigation planting would tie in with existing woodland at the Glamis Castle GDL, extending the treeline to the west across the view. Small scale changes during operation associated with new woodland which would reduce the southern outlook, would be long term, across a localised extent.

Effects would be of a Slight Magnitude, leading to a Moderate/Minor adverse impact which would be **Not Significant.**

Lochmill to North Leckaway *(0.8 –1.3 km SE)*

5.10.56 This receptor group is comprised of a group of properties and local roads to the southeast of the Site including Lochmill, Whitewell and North Leckaway. This group is judged to be of High/Medium sensitivity to the Proposed Development. Views toward the Site are varied throughout the group, with few screening elements present.

5.10.57 Partial views to the panel arrays would be visible in northwestern views from the local road to the south of Lochmill when travelling toward the Site between 0.8 and 1.3 km, though roadside vegetation would heavily filter views to the Proposed Development on approach to Drumgley from Lochmill. Lochmill (0.8 km SE) itself is sited on open land with views all around, though roadside vegetation on the local road to Drumgley would provide some minor screening of the panel array. Outlook from Leckaway Cottages and North Leckaway (1.2 km SE) is more open, panel arrays would be clearly visible, albeit more distant from these properties, appearing low in the landscape in the primary outlook toward the Grampian Mountains to the north. Agricultural buildings would largely screen views to panels from Whitewell (1.1 km SE) at the east of the group, with some partial oblique views still available to the northwest.

5.10.58 Construction activity would be noticeable at the eastern end of the Site from throughout this group where views are available, with movement of telehandlers visible during the installation of the panel array, fencing and CCTV. HGV deliveries would pass along the minor road through the group on approach to Site. The scale of change during construction would be Medium in the short term across a localised extent. Effects would be of a Moderate/Slight Magnitude, leading to a Moderate/Minor adverse impact which would be **Not Significant**.

5.10.59 At operational year 1, the scale of change would reduce to Medium/Small due to the absence of movement within and around the Site, including deliveries via the minor road within the group. Changes would be medium term across a localised extent. Effects would be of a Slight magnitude leading to a Moderate/Minor adverse impact which would be **Not Significant.**

5.10.60 Small scale changes would remain at Operational year 10 from Lochmill and North Leckaway, with mitigation planting maturing to compliment field boundaries and screen panel sides. There would be some screening to panel tops in the centre of the eastern fields from new trees and woodland don the southern boundary, with partial views to panel tops remaining. Small scale changes at year 10 would be long term, across a limited extent, of a Slight/Negligible magnitude, leading to a Moderate/Minor adverse impact which would be **Not Significant.**

Ingliston to Mains of Brighton *(1 km S)*

5.10.61 This receptor group is comprised of a group of properties and local roads set on a north facing slope to the south of the Site either side of the A94, including West

Ingliston, Easter Ingliston and Mains of Brighton. This group is judged to be of High/Medium sensitivity to the Proposed Development. Views toward the Site are open from the north of the A94, with vegetation providing visual breaks at roadsides along the A94 and to the south. **Viewpoint 4** (**Figure 5.9**) is representative of views from this group.

5.10.62 Properties at West Ingliston and Eastern Ingliston (1.0 km S) would have broad views to the Proposed Development from the south. The panel arrays would cover a large section of the view with the BESS facility clearly visible, occupying low agricultural land in key outlooks to the north toward the Grampian Mountains and northwest. The Proposed Development would appear low in the view, with a small amount of screening provided by dispersed trees in fields to the north and from vegetation within the Site. Views from minor roads adjoining the A94 would be more distant and partially screened by overlapping boundary vegetation and trees at West and Easter Ingliston along with field edge vegetation further towards the Site, as illustrated from Viewpoint 4 (**Figure 5.9**). Views from Mains of Brighton (1.64 km SW) would be truncated despite the elevated position and northern aspect. From here the Proposed Development would be heavily filtered and screened by large trees both at the A94 and aligned to the private road to Mains of Brighton itself.

5.10.63 Construction activity would be clearly noticeable in fields to the north and northwest from West and Easter Ingliston, with the with HVG deliveries and telehandlers visible during the installation of the panel array, fencing and CCTV throughout the Site. Activity would be less noticeable from Mains of Brighton due to screening, and the separation provided by the A94. There would be a Medium scale of change from the West and Easter Ingliston and a Small scale of change from Mains of Brighton. Changes overall would be Medium/Small in the short term, across an intermediate extent. Effects would be of a Slight magnitude leading to a Moderate/Minor adverse impact which would be **Significant.**

5.10.64 At operational year 1, the scale of change would reduce to Medium/Small due to the absence of movement within and around the Site. All infrastructure would be visible from Ingliston, including mitigation planting on the southern boundary. Changes would be medium term across an intermediate extent. Effects would be of a Slight magnitude leading to a Moderate/Minor adverse impact which would be **Not Significant.**

5.10.65 Small scale of change would remain at operational year 10 from West and Easter Ingliston in the long term, with mitigation planting maturing to screen the sides of the panels to the north, with more comprehensive screening to the northwest which would over time partially screen the BESS facility form West Ingliston. The scale of change at Mains of Brighton would reduce to Negligible over time, with mitigation planting integrating the Proposed Development into the landscape and providing supplementary screening to existing trees. Changes would be long term, across an intermediate extent of views. Effects would be of a Slight magnitude leading to a Moderate/Minor adverse impact which would be **Not Significant.**

***Forfar** (1.7 km, E)*

5.10.66 This receptor consists of the residents of Forfar, road users and pedestrians within the town and is judged to have a Medium sensitivity to the Proposed Development. The town is set on undulating and flat ground, with a general northeastern aspect, sloping down to Loch Forfar beside the A90. Views to the Site are limited to higher ground at the southern edge of the town. **Viewpoint 7** (**Figure 5.12**) is representative of views from this group

5.10.67 As indicated by the ZTV, there would be some visibility to the Proposed Development from residential properties at the southern end of the town off the Dundee Road. Viewpoint 7 (**Figure 5.12**) is representative of views from this area from which the Proposed Development would be partially visible at a distance of 3.16 km, occupying a narrow area of agricultural lowland within Strathmore. This area is the only instance of potential visibility to the Proposed Development from within the town. With a combination of topography, trees and settlement screening views elsewhere throughout the town.

5.10.68 Due to the distance from the Site, the presence of construction activity would be minimal from this receptor. Distant movement of delivery vehicles and telehandlers during the installation of the solar panel array and associated infrastructure would appear in gaps between layered boundary vegetation and small groups of trees throughout the landscape. There would be a Negligible scale of change from the group in the short term across a limited extent. Effects of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.69 At operational year 1, the scale of change would remain in line with construction due to visual separation and a general lack of visibility across the group. There would be a Negligible scale of change from the group in the Medium term across a limited extent resulting in effects of a Negligible magnitude and leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.70 Operational year 10 effects would be less noticeable than that of the construction and year 1, with the Proposed Development appearing as a stationary object low in the view from the edge of the settlement. Mitigation planting would mature to further screen the Proposed Development, though some panel tops may remain visible in the western fields in distant views. Changes at operational year 10 would be Negligible in the long term across a limited extent. Effects would be of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

Douglastown (2.1km S)

5.10.71 This receptor consists of the residents of Douglastown, road users and pedestrians within the village and is judged to have a High/Medium sensitivity to change. Areas of the northern half of the village have an open outlook to the north toward the Site. **Viewpoint 5** (**Figure 5.10**) is representative of views from this group

5.10.72 As illustrated from **Viewpoint 5** (**Figure 5.10**), the Proposed Development would appear in the landscape at a distance of 2.1 km and would be visible between

layered boundary vegetation, woodland and trees in views to the north. Though potential visibility is indicated throughout the village on **Figure 5.3**, local screening elements including large trees, roadside hedgerow, property boundaries and buildings provide considerable screening to views from areas to the south of the A94. Where visible, the Proposed Development would appear low in the landscape with the Grampian Mountains rising in the distance behind. Despite spanning broadly across the northern outlook, the Proposed Development would have little influence over key views to the north due to screening elements and would remain screened from the southern extents the village.

5.10.73 Construction activity would be noticeable in the distance from this receptor, with partial views, primarily associated with the movement of telehandlers during the installation of the solar panel array, BESS, fencing and CCTV, most notably in the eastern fields which are closer to the village. There would be a Small scale of change from the group in the short term across a localised extent. Effects of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.74 At operational year 1, the scale of change would remain in line with construction due to intervening distance. There would be a Small scale of change from the group in the Medium term across a limited extent. Effects of a Slight magnitude leading to a Minor adverse impact which would be **Not Significant.**

5.10.75 Operational year 10 effects would be less noticeable than that of the construction and year 1 due to the lack of movement across the Site, with the Proposed Development appearing as a stationary object low in the view when viewed from the edge of the settlement. Changes would reduce to Small/Negligible in the long term across a localised extent. Effects would be of a Slight/Negligible magnitude leading to Minor adverse impact which would be **Not Significant.**

Jericho to Upper Hayson *(2.5 km S)*

5.10.76 This receptor consists dispersed settlement located on a north facing hill to the south of the A94 including Jericho, Thornton, Plains of Thornton, Templebank and Upper Hayston. The group includes road users and pedestrians in the area and users of Core Path 243 leading south from Jericho. The group is judged to have a high/medium sensitivity to the Proposed Development. Potential visibility is likely from all areas throughout the group given the elevated position, open northern outlook and overall lack of screening vegetation.

5.10.77 As indicated by the ZTV on **Figure 5.3**, visibility to the Proposed Development from the northern half of the group would be partial due to lower elevation and screening from landform and vegetation. From areas between Jericho, the northern end of Core Path 243 and Plans of Thornton (2.2-2.4 km S), the panel arrays and BESS would be partially screened through overlapping boundary vegetation and by gently undulating landform. Visibility would increase with distance from Thornton (2.4 km S), Templebank (2.9 km S) and the middle section of Core Path 243, where properties are more elevated with open views to the north though some partial screening from woodland would remain. Clear views to the Proposed Development

would be available from the southern more distant Upper Hayston and the southern end of Core Path 243 (3.2 – 3.4 km S), where the high, north facing slope offers broad views over Strathmore and to the Grampian Mountains. From this section of the group, the Proposed Development would be visible in full, aligned with existing landscape patterns in the agricultural landscape below. All elements would be clearly visible, though the Proposed Development would have little influence over available views due to the viewing distance, the vast outlook and long-distance views to mountains to the north.

5.10.78 Construction activity would be most noticeable from elevated areas to the south of the group at a distance, with the movement of delivery vehicles and telehandlers visible during the installation of the Solar panel array and associated infrastructure. Changes during construction would be Small/Negligible in the short term across an intermediate extent. Effect would be of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.79 At operational year 1, effects would be in line with construction due to intervening distance. Changes would be Small/Negligible in the medium term across an intermediate extent. Effect would be of a Slight/Negligible magnitude leading to a Minor adverse impact which would be **Not Significant.**

5.10.80 At operational year 10, views to the Proposed Development would be limited to partial, glimpses from lower areas to the north of the group and long-distance open views from the elevated areas to the south. Mitigation planting would provide additional screening and be seen to integrate the Proposed Development into the landscape from open, elevated views. The scale of change would reduce to Negligible in the long term, across an intermediate extent. Effects would be of a Slight/Negligible magnitude leading to Minor adverse impacts which would be **Not Significant.**

Local road users and residents to the north of Site *(0.7 – 3 km, N & NE).*

5.10.81 This receptor comprises residential properties and road users on local roads from the A926 to Muir of Drumshade, and Ballindarg to Maryton. This group is judged to have a high/medium sensitivity to the Proposed Development. As indicated on **Figure 5.3**, visibility of the Proposed Development would be widespread yet varied across the group. With intermittent screening from topography, woodland, roadside vegetation and small groups of trees dispersed throughout the landscape. The primary outlook from this group is mainly directed south across Strathmore toward the Sidlaw Hills, though northern views to the Grampian Mountains are also available from some sections of minor roads. **Viewpoint 3** (**Figure 5.8**) is representative of views from this group.

5.10.82 Views to the Proposed Development would be clearest from the minor road to Ballindarg, between 1.1 and 1.5km north and northwest. As illustrated from **Viewpoint 3**, views from the road would be sequential due to roadside vegetation, small groups of trees & shelterbelt in the landscape to the south and from trees at the northern edge of the Site. Views would be screened by landform and properties at the southwestern end of the group including Redwell (0.7 km N) and Burnside

(1.3 km NW); and by woodland in the south and centre of the group including West Mains of Ballindarg (0.8 km N), Mains of Ballindarg (1.2 km N) and North Mains of Ballindarg (1.3 km N).

5.10.83 More distant views to the Proposed Development would be available from the minor road to Maryton, from which there would be sequential views for travellers heading south toward Ballindarg between 1.5 and 3.2 km north of the Site. Roadside vegetation would screen views, along with some small pockets of woodland, though the panel arrays would occasionally appear above the road. Views form properties along the road are occasionally screened, though there would be some partial views from Dameye (2.8 km N) and more distant from the southern edge of Maryton (3.4 km N).

5.10.84 Construction activity would be noticeable from the southern extents of the group, mainly from the minor road to Ballindarg. From here the movement of telehandlers during the installation of the solar panels and fencing and CCTV on the northern boundary would be visible. Glimpses of movement may be available from properties along the road though views would be largely screened. Construction would be less noticeable from the minor road to Maryton and associated residential properties, with views from Maryton itself barely noticeable due to distance. Overall, Small scale changes would arise during construction in the short term across a localised extent. Effects would be of a Slight/Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant.**

5.10.85 Changes at year 1 would reduce to Small/Negligible scale changes over the medium term and across a localised extent. The Proposed Development would be visible, though without construction movement. Effects would be of a Slight/Negligible magnitude leading to a Minor adverse impact which would be **Not Significant**

5.10.86 Operational year 10 changes would be less noticeable, with mitigation growing to screen the Proposed Development from the minor road to Ballindarg. Some distant elevated views to panel tops in the centre of the Site may remain from the minor road to Maryton, and from Dameye and Maryton, though these would be partial and would not have influence over the southern outlook toward the Sidlaw Hills. Negligible changes would occur in the long term over a limited extent. Effects would be of Slight/Negligible magnitude leading to a Minor adverse impact which would be **Not Significant.**

Nearby Residential Properties

Haughs of Cossans *(0 km S)*

5.10.87 The property is situated adjacent to the Site boundary, to the south of the central proposed solar array. The dwelling is accessed via private track (Core Path 272) and is oriented to the south with some heavily filtered views toward the Sidlaw Hills through mature garden trees, which is the primary outlook. This property is judged to have a high sensitivity to the Proposed Development The property has open

aspects to the west, north and northeast into the Site, The property includes large agricultural buildings to the east, which contain the eastern outlook.

5.10.88 Panels would be visible to the north and west from this property as close range, with the nearest panels set 60 metres from the northern and western facades of the dwelling. Land slopes away from the dwelling to the north and northeast, which would limit visibility to panel tops in this direction, though the top of panels would be visible on rising ground to the northwest and west. Outbuildings would provide some screening to nearby panels to the east.

5.10.89 During construction, activities within the Site would be visible in views to the north and west from the dwelling at a distance of 20 metres or greater. The erection of fencing, creation of access roads and installation of panel arrays would comprise visible activities. The scale of change during construction would be Large in the short term across an intermediate extent, when considering the primary southern aspect. Effects would be of a Moderate magnitude leading to Major/Moderate adverse impacts which would be **Significant**

5.10.90 At operational year 1, the scale of change would reduce slightly due to the absence of movement on the Site. The panel arrays, access tracks, fences, CCTV and mitigation planting would be visible at close range. Large/Medium scale changes would occur in the medium term across an intermediate extent. Effects would be of a Substantial/Moderate magnitude leading to Major/Moderate adverse impacts which would be **Significant**

5.10.91 At operational year 10, mitigation planting around the property would be well established with hedgerow reaching a maintained height of 3m and trees up to 8m. Trees have been set back from the property boundary into the Site to the north and west of the property to retain a degree of openness whilst still providing screening to the solar array. There may be views of the edge of panels through the hedge although any such views would be intermittent, with views to panels at close range unlikely in the long term. There may be some more distant panels visible at the northwestern edge of the array, though mitigation tree planting would grow to completely screen these over time. The primary southern outlook from this property would remain unchanged. The scale of change in during operation would be Medium in scale and long term across an intermediate extent, when considering the primary southern aspects. Effects would be of a Moderate magnitude leading to a Moderate adverse impact which would be **Significant.**

Key Routes

A94 *(1.2 km S)*

5.10.92 This is a key arrival route into Forfar via Glamis and Douglastown from the southwest. The route is judged to have a medium/low sensitivity to change. As indicated on the **Figure 5.3**, there would visibility to the Proposed Development for an approximately 2.8 km section of this route between Glamis and Forfar as it passes through Douglastown, between 1.8 km south and 1.1 km southeast of the

Proposed Development. Viewpoints 4, 5, and 6 (**Figures 5.9, 5.10** and **5.11**) are representative of this route.

5.10.93 Road users would experience visibility of the Proposed Development mainly when travelling northeast toward Forfar along the route, though oblique views would also be available on departure from Forfar to the southwest. The solar array would be visible at a distance of over 1.2 km, appearing low in the landscape between overlapping boundary vegetation and trees below the Grampian Mountains in the distance, which are a prominent feature in views from this open section of the route. There would be some intermittent screening from roadside vegetation as road users progress along the route, comprised of hedgerow and occasional trees, resulting in sequential views to the Proposed Development to the north.

5.10.94 Construction activity would be noticeable in the distance to the north, with some on Site activity evident during the installation of the Solar panel array and associated infrastructure. The scale of change during construction would be Smallin the short term across a limited extent. Effects would be of a Slight/Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

5.10.95 At Operational year 1, the scale of change would remain in line with construction. Small/Negligible changes would occur in the medium term across a limited extent. Effects would be of a Slight/Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

5.10.96 At year 10, mitigation planting would be established to screen and integrate the Proposed Development where visible. The scale of change would reduce to Negligible in the long term across a limited extent. Effects would be of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

A90 *(1.4km E)*

5.10.97 This is an arterial transport route connecting cities along the northeast coast of Scotland from Dundee to Fraserburgh. The route is judged to have a medium/low sensitivity to change. As indicated on the **Figure 5.3**, the main area of visibility to the Proposed Development is for an approximately 850 m section of this route south of the A94m and southwest of Forfar, between 1.5 km and 2.3 km southeast of the Proposed Development. There are some smaller areas of very partial visibility located 1.9 east and 4.8 km northeast.

5.10.98 Road users would experience visibility of the Proposed Development when travelling north toward along the route around Forfar. The solar array would be visible as the road emerges from a cut at a distance of over 1.5 km to the northwest, appearing low in the landscape between overlapping boundary vegetation and woodland below the Grampian Mountains in the distance, which are a prominent feature in views form this short, open section of the route. There is no roadside vegetation to the west of the road along this short section of the route, leaving views open into Strathmore. The road enters another cut which screens views as the route rounds Forfar and continues northeast out of the study area. There may be some

very partial views from the east and northeast when travelling south toward Dundee, though it is likely that the Proposed Development would not be discernible form these locations due to the speed of travel and screening from topography.

5.10.99 Construction activity would be noticeable in the distance in views to the northwest from the route to the south of the A94, with some on Site activity evident during the installation of the Solar panel array and associated infrastructure. The scale of change during construction would be Small/Negligible in the short term across a limited extent. Effects would be of a Slight/Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

5.10.100 At Operational year 1, the scale of change would remain in line with construction. Small/Negligible changes would occur in the medium term across a limited extent. Effects would be of a Slight/Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

5.10.101 At year 10, mitigation planting would be established to screen and integrate the Proposed Development where visible. The scale of change would reduce to Negligible in the long term across a limited extent. Effects would be of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

A926 *(1.52km NE)*

5.10.102 This route connects Forfar to Kirriemuir through the northeast of the study area. The route is judged to have a medium/low sensitivity to change. As indicated on the **Figure 5.3**, the route would have varied levels of visibility to the Proposed Development for an approximately 3.4 km section of this route between Padanaram and Kirriemuir, between 1.5 and 3.6 km northwest and north of the Site. Visibility is also indicated to the east of Kirriemuir, for a further 4.2 km section of the route, though views would be at a distance of over 4.3 km to the northwest of the Proposed Development. Users of this route will experience some minor influence in views from the operational Ecosse Solar Farm which is visible to the north of the road when passing through Padanaram.

5.10.103 Road users would experience visibility of the Proposed Development in oblique views when travelling southeast toward Padanaram, with the most open views toward the Site indicated for an 800m stretch, located 2 km northeast of the Proposed Development. From here, the solar array would be visible off the road to the southwest, though would be heavily filtered by overlapping boundary vegetation along local roads and field edges. Though visible, the proposed development would be much less noticeable than the existing Ecosse Solar farm to the north of the road at Padanaram. Partial views would be available from areas further north on the route toward Kirriemuir, though these would reduce with intervening distance. Where visible, the Proposed Development would appear low in the view within the agricultural centre of Strathmore, with the Sidlaw Hills rising above in the distance. More distant views are indicated from the west of Kirriemuir along this route, and whilst the road is open from screening elements in the area, it is unlikely that the

panel arrays and infrastructure would be discernible, due to the mode of travel and the viewing distance of over 4.3 km north of the Proposed Development

5.10.104 Construction activity would be noticeable in the distance in views to the southwest from the route to the west of Padanaram, with some on Site activity evident during the installation of the Solar panel array and associated infrastructure. The scale of change during construction would be Small/Negligible in the short term across a limited extent. Effects would be of a Slight/Negligible magnitude leading to a Negligible adverse impact which would be **Not Significant.**

5.10.105 At operational year 1, the scale of change would remain in line with construction. Small/Negligible changes would occur in the medium term across a limited extent. Effects would be of a Slight/Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

5.10.106 At year 10, mitigation planting would be established to screen and integrate the Proposed Development where visible. The scale of change would reduce to Negligible in the long term across a limited extent. Effects would be of a Negligible magnitude leading to a Minor/Negligible adverse impact which would be **Not Significant**

Recreational Receptors

Core Path 272 - Drumgley to Glamis Station *(0 km N)*

5.10.107 This Core Path provides access between Drumgley and the Glamis Castle GDL and is judged to have a high sensitivity to the Proposed Development. The Core Path is aligned to the Site boundary for 2.3 km from Drumgley to Haugh of Cossans, then passes through the western fields of the Site before continuing north out of the Site and west along the northern boundary of the Glamis Castle GDL. Visibility is indicated for a continuous stretch of 3.6 km of this route, which is 5.7 km long form end to end, with the western end screened by woodland. The path has open views to both the south toward the Sidlaw Hills and north toward the Grampian Mountains throughout.

5.10.108 Close range views to the Proposed Development would be available for the eastern section of the route between Drumgley (Viewpoint 2) and Haugh of Cossans. For this section, solar panels and the BESS enclosure would be visible as close as 20 m to the south through perimeter fencing. There would also be some visibility of panels in the field to the north of Haugh of Cossans when walking west. The Proposed Development would appear in sections, with an existing line of trees to the east of the BESS, and a small block of woodland in the centre of the Site acting as visual breaks along the core path. From this eastern section of the Core Path, views would be sequential, of individual fields within the development rather than of the overall development. The open outlook to the north toward the Grampian Mountains would be retained for the eastern section of the route.

5.10.109 The Proposed Development would be visible in fields to the north of the track on approach to Haugh of Cossans from an easterly direction and after passing woodland in the centre of the Site. For this section, solar panels and the BESS

enclosure would be visible beside the path through perimeter fencing and an existing declining hedgerow beside the path. Panels would also be visible above the path to the west in fields beyond Haugh of Cossans. The main outlook from this central section of the path is to the south toward the Sidlaw Hills, away from the Proposed Development

5.10.110 The Proposed Development would cover the southwestern and northeastern outlooks with occasional screening from shrubs and trees on either side of the path along the western section within the Site boundary. From this area, panels would appear in adjacent fields as close as 25m. Landform generally slopes to the southeast along the core path, with the path at times raised above field level and at times cut into the ground slightly. Views will be sequential from this section of the track through gaps in the hedgerow on either side of the path. Beyond the Site the track is aligned in a north south direction, with open views to the western fields of the Site. As illustrated from viewpoint 1 (**Figure 5.6**), views to the panels would cover the southern outlook, with panel tops visible across the array to the southeast toward Haugh of Cossans, and southwest toward the wooded edge of the Glamis Castle GDL. From this section of the path, the western panel arrays would be visible below the viewpoint in front of the Sidlaw Hills on the horizon in the distance.

5.10.111 Construction activity would be visible at close range along 3.6 km of this route from Drumgley, past Haugh of Cossans and through the western fields of the Site. More distant views to construction activity would be available around viewpoint 1 on the northwestern section of the route. HGV deliveries would arrive to the Site along the eastern section of the Core Path form Drumgley, using both the Core Parth itself and newly formed access tracks to the north and south of the path. Elsewhere, construction activity would comprise the movement of telehandlers and the installation of all panel arrays and infrastructure including the BESS enclosure, Substation, Transformer Stations, fencing and CCTV. The scale of change during construction would be Large in the short term across a wide extent. Effects would be of a Substantial/Moderate magnitude leading to a Major/Moderate adverse impact which would be **Significant.**

5.10.112 Operational year 1 changes would reduce to Large due to the absence of movement and vehicles along the Core Path and within the Site. Panel arrays and infrastructure would be clearly visible including close range views to the BESS, substation and transformer stations. Mitigation planting would be visible at the side of the Core Path, though would not yet provide screening to the Proposed Development. Large/Medium changes would occur in the medium term across a wide extent. Effects would be of a Substantial magnitude leading to a Major adverse impact which would be **Significant.**

5.10.113 At operational year 10, mitigation planting along the Core Path would be well established with hedgerow reaching a maintained height of 3m, woodland between 4 and 7m and trees up to 8m in height. To compliment exiting trees along the core path, the southern edge of the eastern section of the route from Drumgley would be lined with hedgerow and trees, which would screen the Proposed Development from views along this section of the route. Views to the Sidlaw Hills in the south would be truncated by mitigation planting along this section of the path. Panels and

infrastructure would still be visible through gaps in mitigation planting at access track entrances to the Site. Hedgerow and trees would also provide screening to panels visible to the west on approach to Haugh of Cossans, though some panel tops may remain visible in the distant northwest of the array on the high point of the Site. Panel sides would be largely screened along the western section of the route through the Site, with hedgerow and trees complimenting existing vegetation beside the path. Intermittent views to panel tops may remain from the southwest and northeast due to changeable topography along this section of the route. Views to panel tops in the field to the north of Haugh of Cossans may remain from the northwestern section of the route around Viewpoint 1, though woodland would mature to screen the panels to the southwest. The scale of change during operation would be Large/Medium in scale and long term across an intermediate extent, when considering all available views from the Core Path. Effects would be of a Substantial/Moderate magnitude leading to a Major/Moderate adverse effect which would be **Significant.**

Core Paths to the southeast of the Site *(2.2 – 4km E & SE)*

5.10.114 This Core Path Network provides linkages between minor roads and charts recreational routes on the southern and western fringes of Forfar, and to the southeast of the A90 along minor roads and farm tracks and is judged to have a high sensitivity to the Proposed Development. Visibility is indicated from sections of this network to the south and southeast of Forfar, between 2.3 and 4 km southeast of the Proposed Development.

5.10.115 Visibility of the Proposed Development would be intermittent from this network, with the nearest views would be from Core Path 300 to the west of South Leckaway at 1.2 km southeast of the Site. From this area, solar panel arrays of the Proposed Development would be visible low in Strathmore between overlapping boundary vegetation and occasional trees and would appear beside key views to the Grampian Mountains to the north and northwest. Partial views would be available form Core Path 301 to the north of Halkerton at 1.5 km east of the Proposed Development, where the tops of a small section of the array would be visible, with topography screening the eastern end of the array. Further, more distant visibility is indicated to the east of Dundee Road on the southern fringe of Forfar, including the area surrounding Balmashanner Hill monument. Existing vegetation and settlement screen views intermittently throughout these Core Paths (294, 297 and 298), with heavily filtered views and occasional open views available across Forfar and Strathmore. Where views are available, the proposed panel array would be barely discernible as a distant object in agricultural land beyond the town of Forfar.

5.10.116 Construction activity would be noticeable form Core Path 300 at South Leckaway, with the movement of telehandlers and delivery vehicles seen during the installation of the panel arrays and associated infrastructure. Elsewhere within this Core Path network, views of construction activity would be distant and within views which are primarily directed over Forfar to the north. There would be a Small/Negligible scale of change in the short term across a limited extent of the core paths, when considering the broad outlooks available across Strathmore and over Forfar. Effects

would be of a Negligible magnitude leading to a Minor adverse impact on views which would be **Not Significant.**

5.10.117 At Operational year 1, the scale of change would remain in line with construction. Small/Negligible changes would occur in the medium term across a limited extent. Effects would be of a Slight/Negligible magnitude leading to a Minor adverse impact which would be **Not Significant**

5.10.118 At operational year 10, mitigation planting would be well established round the southern and eastern boundary, as viewed from this Core Path network, obscuring the panel arrays to a degree and integrating the Proposed Development into existing landscape patterns. There would be a Negligible scale of change in the long-term during operation across a localised extent of available views, when considering broad outlooks available across Strathmore and over Forfar. Effects would be of a Negligible magnitude leading to a Minor adverse impact on views which would be **Not Significant.**

5.11 Assessment of Cumulative Effects

5.11.1 It is noted that there are two consented solar developments a in the LVIA study area, namely the consented Suttieside Solar Farm and the consented Craignathro Solar Farm. Potential cumulative effects (operational phase only) of the Proposed Development are considered scenario 1 below.

5.11.2 **Scenario 1:** Effects of the Proposed Development in addition to the consented Suttieside Solar Farm and Craignathro Solar Farm.

Cumulative ZTV Study

5.11.3 A cumulative ZTV study has been prepared in line with cumulative scenario 1 as noted above. **Figure 5.4** shows the visual envelope of the Suttieside Solar Farm and Craignathro Solar Farm developments along with that of the Proposed Development. As indicated on the ZTV, the visual envelopes of the three schemes are largely separate, with some areas of overlap with visibility of the Proposed Development as detailed below. Combined visibility of the three schemes would be restricted to one area at Kincaldrum Hill at 4.7 km south of the Site.

5.11.4 **Figure 5.4** indicates that the visual envelope of Suttieside Solar Farm will be mainly contained to open agricultural land to the north of Forfar, contained by landform at Carse Grey to the north and settlement and landform at the edge of Forfar to the south. Visibility to Suttieside will extend to the west across the A90 covering agricultural fields up to the eastern edge of Kirriemuir, with intermittent screening from intervening landform and dispersed woodland. Though mainly contained to the northeast of the study area, visibility of Suttieside is also indicated to cover smaller, isolated areas outside of the main area including:

- an area between Padanaram and Drumgley in the inner east of the study area;
- on open ground along the A926 to the east and west of Westmuir in the northwest of the study area;

- the north facing slope at Mains of Brighton and Halkerton in the inner southeast;
- elevated aeras to the south of Forfar including Balmashanner Hill in the far southeast, and;
- and across a band of high ground at the edge of the Sidlaw Hills from Thornton and Hunters Hill to Kincaldrum Hill, extending outside the southern edge of the study area.

5.11.5 **Figure 5.4** indicates that the main area of visibility to Craignathro Solar Farm will be contained by landform to agricultural land to the south of Forfar, between Balmashanner Hill to the north and Fotheringham Hill to the south. Further visibility of Craignathro Solar farm will cover elevated areas on the summit and the northeastern facing slope of Kincaldrum Hill, extending outside the southern edge of the study area and on the north and western slopes of Berry Hillock at the southwestern edge of the study area.

5.11.6 Combined visibility of the Proposed Development and the consented schemes would mainly occur with Suttieside, with overlapping visual envelopes for the Proposed Development and Suttieside Solar Farm indicated at the following locations

- Mains of Brighton between 1 and 2.5 km southeast of the Site;
- across the A926 and the minor road to Ballindarg at 1.6 km north of the Site;
- at Thornton, Templebank, Upper Hayston and the A94 at 2.2 km south of the Site, and;
- to the east and west of Kirriemuir and west of Westmuir as close as 3.2 km north of the Site extending outside the northwest edge of the study area.

5.11.7 Smaller, more partial combined visibility with Suttieside is indicated along the minor road to Ballindarg at 1.1 km north of the Site and to the north of Easter Drumgley at 0.4 km northeast of the Site.

5.11.8 Combined visibility of the Proposed Development and Craignathro Solar Farm is indicated on the northern slope of Kincaldrum Hill at 4.3 km south of the Site, and in a small area to the south of Forfar at 3.2 km southeast of the Site, where only partial, distant combined visibility would be available.

Cumulative Effects on Landscape Character

Scenario 1

5.11.9 The consented Suttieside Solar Farm development is located within the Broad Valley Lowlands LCT, which is the host LCT for the Proposed Development. The consented Craignathro Solar Farm is located in the adjacent Low Moorland Hills LCT, to the east of the Host LCT.

5.11.10 In the scenario that Suttieside and Craignathro Solar Farms were already present in the landscape, there would be some, additional cumulative effects to landscape character from the addition of the Proposed Development. In this scenario, solar development would already have become an established feature of the northeast

and southeast of the study area and would be closely associated with the fringe and setting of Forfar, along with elevated areas to the south of the town, albeit the influence of Craignathro would be limited due to the small scale of the scheme and its location within the adjacent Low Moorland Hills LCT. The addition of the Proposed Development would extend the influence of solar development into more rural areas across Strathmore and toward the Glamis Castle Estate. Arable farming would remain the dominant land use, though solar development would be a notable feature of this area within the Host LCT.

5.11.11 The Proposed Development was assessed on a solus basis (i.e. the effects of the Proposed Development alone) as having an overall Moderate/Minor adverse effect as mitigation planting matured. It is expected that the effects of Suttieside on landscape character would be similar to the assessed effect of the Proposed Development (albeit extending over a different area in closer proximity to settlement), noting that these schemes would also include mitigation measures which would limit effects. Effects of the Craignathro scheme would be less than that of Suttieside or the Proposed Development, due to its smaller scale and contained location within rolling hills to the south of Forfar.

5.11.12 The additional impacts on the Broad Valley Lowlands LCT of the Proposed Development, should it be introduced into a landscape where Suttieside and Craignathro are already present, would inevitably be greater than if any one of them was constructed in isolation. It is understood that both schemes have mitigation built into the proposal to reduce landscape effects in the long term. It is likely that there would still be an overall Moderate/Minor adverse effect on the host LCT though over a larger extent than if any one of the schemes was constructed in isolation. The additional impact caused by the Proposed Development on the Broad Valley Lowlands LCT would be Small/Negligible in the long term.

5.11.13 Due to the small amount of potential visibility to the Proposed Development from the neighbouring Low Moorland LCT, and predicted Negligible effect as a result of the Proposed Development on characteristics of the Low Moorland LCT, it is predicted that there would be no cumulative effects on the characteristics of the Low Moorland Hills LCT as a result of the addition of the Proposed Development into a landscape where both Suttieside and Craignathro are present. The additional impact caused by the Proposed Development on the Low Moorland Hills LCT would be Small/Negligible in the long term.

Cumulative Visual Effects

Scenario 1:

5.11.14 The cumulative ZTV in **Figure 5.4** suggests that combined visibility of the Proposed Development with Suttieside and Craignathro Solar Farms would not occur in the immediate surround of the Site, as detailed above in paragraph **5.6.8**. In reality, as ascertained from field work, it is likely that the combined visibility in the inner 2 km of the study area, particularly the north and northeast would be largely screened by local vegetation. Clearer views to all three developments may be available from higher ground in the Sidlaw Hills, though intervening distance would reduce effects.

5.11.15 Most areas of combined visibility indicate that the Proposed Development and one of the consented development should be visible from the same location, though not In the same frame of view. This is indicated along the A926 and the minor road to Ballindarg, where Suttieside would be visible to the east and the Proposed Development would be visible to the southwest. This type of combined visibility also occurs between Easter Drumgley and Upper Drumgley, at Mains of Brighton and around Westmuir. This type of combined visibility also occurs with the Proposed Development in addition to Craignathro, to the south of Forfar.

5.11.16 The only instance in the study area where at least two of the three schemes would be visible in the same frame of view would occur between Thornton and Kincaldrum Hill. In this area, the Proposed Development would have combined visibility with Suttieside around Templebank, Thornton and Upper Hayston, while combined visibility with Craignathro would occur on the northeastern slope of Kincaldrum Hill. Combined visibility of the three schemes would occur at the summit of Kincaldrum Hill. When visible from these locations, the schemes would be seen in the same frame of view, with the Suttieside at over 7km northeast beyond Forfar, associated with the northern settlement, Craignathro visible at over 5 km northeast south of Forfar, associated with rolling moorland hills and the Proposed Development seen low in the agricultural Strathmore at over 4 km south.

5.11.17 The Proposed Development alone is assessed to have a Moderate to Minor/Negligible impact on views within the area of cumulative visibility located in the inner east of the study area. Combined visibility of the scheme would largely present as sequential visibility, particularly from recreational routes and roads, where one scheme would be visible for a stretch of the route, then another for a further stretch of the route, though not at the same time. This would occur on the A90 to the east of Forfar, where the Proposed Development would be visible to the west, and then Suttieside to the east. Sequential visibility to Suttieside and the Proposed Development is also indicated on the A928 and the minor road to Ballindarg to the north of the Site and the A94 to the south. Sequential views to Craignathro and the Proposed Development are indicated on the Core Path network to the south of Forfar, though it is likely that views to the Proposed Development would be screened by local vegetation in this area.

5.11.18 The Proposed Development was assessed on a solus basis to have an overall Moderate adverse effect on views from residential, road and recreational receptors within 1 km. Cumulative views of the Proposed Development and Suttieside or Craignathro, or both indicated on local roads and Core Paths to the northeast of the Site would be heavily screened by topography and vegetation. Visibility to one or both of the consented schemes with the Proposed Development from the southern edge of the study area and the A94 would have little influence due to local screening in low areas and intervening distance form elevated hillsides. Where they occur, the additional impact of the Proposed Development in views with Suttieside or Craignathro, or both would be Small/Negligible in the long term.

5.12 Summary of Landscape and Visual Effects

5.12.1 Effects on landscape and visual receptors are summarised in **Table 5.6**.

Effects on Landscape Character

5.12.2 Notable effects on landscape character would be localised and confined to the Site itself and its immediate surrounds. There would be limited effects on the existing landscape fabric, with small changes to the landform to enable the construction of the BESS facility, substation, hardstanding and field transformers. Vegetation, in the form of field boundary planting, new standard trees, woodland, shrub and grassland would be implemented both as mitigation and landscape enhancement, which would enrich vegetation patterns in the area and encourage biodiversity in the long term. An off-site wildlife area adjoining the Site boundary to the south is proposed to provide further habitat and biodiversity benefit to the Site and surrounds. Direct effects on the Broad Valley Lowlands (host LCT) would be localised and limited to the Site and its immediate surrounds. The Proposed Development would result in a slight increase in the concentration of solar PV development within the Strathmore unit of the host LCT.

5.12.3 The Proposed Development would result in a short-term, adverse effects of Moderate significance on landscape character, particularly as a result in the change of land use from agriculture to solar energy generation. Effects would be most discernible in areas where the pattern of the landscape is most evident at close range and from where and a continuity of agricultural land is visible. Effects would reduce in the long term, with a Moderate/Minor adverse impact on landscape character, which would be **Not Significant.**

5.12.4 Indirect effects on characteristics of the adjacent LCT 382: Lowland Hill Ranges and LCT 386 Low Moorland Hills would arise from the Proposed Development introducing a new, man-made element into the adjacent lowland landscape; with intervisibility being a noted characteristic from the Sidlaw Hills and from elevated areas to the southeast of Forfar surrounding Balmashanner Hill. These effects would be subtle in influence, and limited to small areas of northern facing slopes, of which there are few, resulting in long term Minor/Negligible adverse impacts which would be **Not Significant.**

Effects on Visual Receptors

5.12.5 Notable visual effects would arise mainly from areas directly adjacent to the Site and up to 150 m from the Site boundary, including properties to the south at Haugh of Cossans and east at Sparrowmuir and Nether Drumgley. Moderate adverse impacts on adjacent properties with views over the Site are predicted in the long term due to the close proximity of the Proposed Development. Generally, these views would in time be screened by mitigation planting, which is more robust in areas adjacent to nearby properties. The outlook from these properties is largely open, with the Proposed Development appearing within or adjacent to key views, the predicted change in views from these receptors would be Moderate in magnitude and would be **Significant**.

5.12.6 Effects on further nearby residential properties and property groups within 600 m would be no greater than Moderate/Minor and **Not Significant** at Year 10 due to the screening effects of existing planting along with the proposed mitigation

planting, the set back of the array from the main views from properties and properties oriented facing away from the Site.

5.12.7 The Proposed Development would have less influence over views from road users. Clear views experienced from adjacent roads to the south would result in long term, Minor/Negligible adverse impacts Which would be **Not Significant**. Users of roads to the north and east would also experience at most Minor/Negligible adverse impacts in the long term, with localised vegetation screening and filtering views to the Proposed Development from closer routes, and intervening distance limiting impacts from more distant, open sections of road. These would be **Not Significant.**

5.12.8 Views from Core Path 272 would be subject to Major/Moderate impacts in the long term which would be **Significant**, with the Proposed Development and mitigation planting screening key outlooks from sections of the path, and some residual views over the Proposed Development. Core paths to the east, south and inner northeast of the study area would be subject to impacts no more than Moderate/Minor impacts which would be **Not Significant**, with notable screening from localised vegetation and topography, while impacts form more distant, elevated routes would be limited by intervening distance.

Table 5.6: Summary Table

Receptor	Description	Sensitivity	Magnitude	impact	Beneficial / Adverse
Landscape Character					
LCT 384: Broad Valley Lowlands – Tayside (Strathmore Unit)	*Direct effects on landscape patterns within the Site, with limited effects extending beyond the Site where landscape patterns are evident.*	*Medium/Low*	*Slight*	*Minor*	*Adverse*
LCT 382: Lowland Hill Ranges.	*Indirect effects on intervisibility with adjacent landscapes*	*Medium*	*Negligible*	*Negligible*	*Adverse*
LCT 386: Low Moorland Hills	*Indirect effects on intervisibility with adjacent landscapes*	*Medium/Low*	*Negligible*	*Negligible*	*Adverse*
Nearby Residential Properties and Receptor Groups					
Drumgley	*Effects on views from properties adjacent to the Site and in the inner northeast of the study area including Core Path 237.*	*High/Medium*	*Moderate from Sparrowmuir and southwest Nether Drumgley.* *Moderate/Slight from Upper Drumgley* *Slight/Negligible from Core Path 237 and Easter Drumgley* *Negligible From Cotterton of Drumgley*	*Moderate from Sparrowmuir and southwest Nether Drumgley.* *Moderate/Minor from Upper Drumgley* *Minor from Core Path 237 and Easter Drumgley Negligible From Cotterton of Drumgley*	*Adverse*
Cossans	*Impacts on southern outlook from where available from residential*	*High/Medium*	*Slight*	*Moderate/Minor*	*Adverse*

Receptor	Description	Sensitivity	Magnitude	impact	Beneficial / Adverse
	properties at the east of the group				
Lochmill to North Leckaway	*Impacts on outlook from residential properties and minor road*	*High/Medium*	*Slight/Negligible*	*Moderate/Minor*	*Adverse*
Ingliston to Mains of Brighton	*Impacts on outlook from residential properties and minor road*	*High/Medium*	*Slight*	*Moderate/Minor*	*Adverse*
Forfar	*Impacts on settlement on the southern fringe of the town*	*Medium*	*Negligible*	*Minor/Negligible*	*Adverse*
Douglastown	*Impacts on residential properties at the northern edge of the village*	*High/Medium*	*Slight/Negligible*	*Minor*	*Adverse*
Jericho to Upper Hayson	*Impacts on outlook from residential properties and minor roads and Core Path 243.*	*High/Medium*	*Slight/Negligible*	*Minor*	*Adverse*
Local road users and residents to the north of Site	*Impacts on outlook from residential properties and minor roads*	*High/Medium*	*Slight/Negligible*	*Minor/Negligible*	*Adverse*
Haugh of Cossans	*Impacts on the setting and outlook of residential property*	*High*	*Moderate*	*Major/Moderate*	*Adverse*
Key Routes					
A94	*Impacts on views from road users*	*Medium/Low*	*Negligible*	*Minor Negligible*	*Adverse*

Receptor	Description	Sensitivity	Magnitude	impact	Beneficial / Adverse
A90	*Impacts on views from road users*	*Medium/Low*	*Negligible*	*Minor Negligible*	*Adverse*
A926	*Impacts on views from road users*	*Medium/Low*	*Negligible*	*Minor Negligible*	*Adverse*
Core Path 272 - Drumgley to Glamis Station	*Impacts on views from the route*	*High*	*Substantial/Moderate*	*Major/Moderate*	*Adverse*
Core Paths to the southeast of the Site	*Impact on views from the path network*	*High*	*Negligible*	*Minor*	*Adverse*

5.13 References

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