



# **COYLTON BATTERY ENERGY STORAGE SYSTEM**

## **LANDSCAPE AND VISUAL APPRAISAL**

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# 1 Introduction

The proposed Coylton Battery Energy Storage System (the 'Proposed Development') is located at land south of Ayr Road (A70), Coylton, East Ayrshire, neighbouring the existing Coylton Substation ('the Site'). The Site is located 1.8km north-east of Drongan, 3.6km west of Ochiltree, and 5km east of Coylton. This Landscape and Visual Appraisal (LVA) of the Proposed Development has been prepared by TGP Landscape Architects Ltd, a firm of independent consultants. The LVA report has been prepared with the aim of identifying the predicted landscape and visual effects of the Proposed Development, comprising a comms house, aux transformer, stores, offices, battery storage infrastructure, a HV yard, and ancillary works including access, parking, landscaping, and grid connection.

The LVA is augmented by supporting text, graphics, and a series of panoramic visualisations within the appendices. This includes the following figures within **Appendix C**:

- Figure 1 – Zone of Theoretical Visibility and Viewpoints;
- Figure 2 – Landscape Character;
- Figure 3 – Landscape Designations, Ancient Woodland and Visual Receptors;
- Figures 4a-4f – Viewpoints; and
- Figure 5 – Landscape Plan.

## 1.1 Scope of the LVA

The LVA seeks to identify the potential landscape and visual effects that would occur as a result of the Proposed Development and is organised in the following sections:

- Guidance and Methodology – outlines the general methodology, with reference to established guidance (full version in **Appendix A**);
- Planning Policy Context;
- Baseline Description – including the fabric, character and quality of the local landscape which could be affected by the Proposed Development. This includes the special characteristics of landscape planning designations within the Study Area, as well as a description of the main visual receptors within the Study Area;
- Proposed Development and Mitigation – describes the aspects of the Proposed Development which have the potential to result in landscape or visual effects, and the measures incorporated into the project design to mitigate these potential effects;
- Zone of Theoretical Visibility (ZTV) map and Viewpoint Analysis – analysis of the geographic extents of visibility and the potential magnitude of change at a selection of viewpoints;
- Construction Stage Effects – assesses the effects of the Proposed Development during the temporary construction stage;
- Landscape Effects – assesses the effects arising from the Proposed Development on the landscape fabric, landscape character and quality of the landscape designations within the Study Area;

- Visual Effects – assesses the effects arising from the Proposed Development on the visual amenity of the receptors within the Study Area;
- Cumulative Effects - considers the combined effects of the Proposed Development in combination with other notable electrical infrastructure; and
- Conclusions – a summary of the LVA results.

## 1.2 Study Area

Taking a proportionate approach, a 3km radius Study Area has been adopted from the Proposed Development for the assessment of landscape and visual effects. This has been informed by analysis of the ZTV and an early appraisal of potential effects for a Proposed Development of this scale. It is considered that any notable landscape or visual effects would be confined within this geographical area.

## 2 Guidance and Methodology

### 2.1 Guidance

The methodology presented here is based on the following best practice guidance:

- *Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3)*; Institute of Environmental Management and Appraisal and the Landscape Institute, 2013;
- *Landscape Character Assessment: Guidance for England and Scotland*; Prepared on behalf of the Countryside Agency and NatureScot, Land Use Consultants, 2002;
- *Landscape Sensitivity Assessment - Guidance for Scotland (Consultation Draft)*; NatureScot, 2020; and
- *Visual Representation of Development Proposals; Landscape Institute Technical Guidance Note 06/2019* (2019).

In addition, reference has been made to other published guidance and the appraisal work has drawn on the following relevant baseline information:

- *National Landscape Character Assessment (web-based interactive map)*, NatureScot, 2019;
- Ordnance Survey Land ranger (1:50 000) and Explorer (1:25 000) maps;
- Field surveys; and
- Aerial photography.

### 2.2 Methodology

The LVA aims to identify and evaluate the potential landscape and visual effects arising from the Proposed Development. Wherever possible, identified effects are quantified, albeit the nature of landscape and visual appraisal requires interpretation by professional judgement. In order to provide a level of consistency to the appraisal, the prediction of magnitude and appraisal of the residual landscape and visual effects have been based on pre-defined criteria.

GLVIA3 states that: “Professional judgement is a very important part of the LVIA.” (para 2.23) “In all

cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others” (para 2.24).

Landscape and Visual Appraisals are distinct, though linked procedures. The appraisal of the landscape effects takes cognisance of the potential changes in the physical components of the landscape and associated changes in its character and how it is experienced, which may in turn affect the perceived value ascribed to the landscape.

Visual effects relate to changes in the composition of existing views as a result of changes to the landscape, to people’s responses to the changes and to the overall effects with respect to visual amenity.

#### Level of Effect

The level of any identified landscape or visual effect has been assessed in terms of being Major, Moderate, Minor or Negligible. Intermediate correlations are also possible and depend upon professional judgement, e.g. Major/Moderate. These categories are based on the juxtaposition of visual or landscape sensitivity with the predicted magnitude of change. This juxtaposition is not used as a prescriptive tool, rather it allows for the exercise of professional judgement. Thus, in some instances a particular parameter may be considered as having a determining effect on the analysis.

Where the landscape or visual effect has been classified as Major or Major/Moderate this is considered to be notable. Where Moderate effects are predicted, professional judgement is applied to ensure that the potential for notable effects arising has been thoroughly considered.

The complete appraisal methodology is set out in **Appendix A**.

### **3 Assumptions**

The following assumptions have been made in respect to the LVA:

- The Site – refers to the land located within the red line boundary. For the purposes of this assessment, the primary focus is on the main development area where the proposed buildings and infrastructure would be located (as illustrated in Figure 5). All distances listed within this LVA are in measured from the centre point of the red line boundary unless otherwise stated.
- The Proposed Development comprises the comms house, aux transformer, stores, offices, battery storage infrastructure, a HV yard, and ancillary works including access, parking, landscaping, and grid connection. The main components likely to contribute to landscape and visual impacts are described in greater detail in Section 7.
- For the purposes of the LVA, the Proposed Development is regarded as being permanent. The construction stage would be temporary, approximately 12-18 months in duration.
- The landscape proposals within the Site (including new planting and areas of habitat creation) form an integral component of the Proposed Development.
- Viewpoint locations included in the assessment are from publicly accessible locations.

- Visual effects are assessed on the basis of good visibility. Visual effects can be expected to vary e.g. poor visibility at times of low cloud, rainfall and dusk. At these times a reduction in visual clarity, colour and contrast would be experienced. Reduced visibility would limit the extent of view, particularly from mid to long distance views. Consequently, the assessment of effects is based on the worst-case scenario, where the Proposed Development would be most visible.

## **4 Consultation**

Consultation in relation to the Proposed Development has been undertaken with East Ayrshire Council (the Council). This comprises the submission of an EIA Screening Request in March 2023 incorporating an outline description of the proposals and an overview of potential receptors. The Council was also invited to comment on the viewpoint locations for the LVA which were submitted with a ZTV for information purposes (email dated 28 February 2023). However, the Council has not responded, and the Viewpoint locations are based on a logical set of views towards the Site from a variety of publicly accessible vantage points in the surrounding area.

## **5 Planning Policy Context**

The Site and most of the Study Area are located within East Ayrshire. The small part of the Study Area that is located within South Ayrshire would not be physically or visually affected to any important extent and therefore reference has been made solely to East Ayrshire planning policy. The following section identifies the planning policy and other planning guidance material specifically relevant to the LVA. This includes consideration of the following:

- *National Planning Framework 4*, Scottish Government, 2023; and
- *East Ayrshire Local Development Plan (Adopted April 2017)*.

### **5.1 National Planning Framework 4 (NPF4)**

NPF4 recognises the distinctive landscapes across the regions of Scotland and respective areas of high landscape quality. Its overarching policies seek to protect the integrity of key landscapes and landscape features from significant adverse effects. There is also general support for proposals to enhance, expand and improve woodland and tree cover.

Policy 11 focuses specifically on Energy, and sets out high-level support for all forms of renewable, low-carbon and zero emissions technologies. This includes both energy generation and energy storage developments, such as battery storage. NPF4 acknowledges that significant landscape and visual impacts are to be expected for some forms of renewable energy. Where these impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable.

## 5.2 East Ayrshire Local Development Plan (2017)

The East Ayrshire Local Development Plan (LDP) sets out the Council's vision for the area alongside planning policy to guide development. Relevant landscape-related policies from the East Ayrshire LDP are as follows:

Overarching Policy OP1 states that all development proposals will require to meet the following criteria where relevant, or otherwise demonstrate how they contribute:

- (i) "Comply with the provisions and principles of the EALDP vision and spatial strategy, all relevant LDP policies and associated supplementary guidance and non-statutory guidance;*
- (ii) Be fully compatible with surrounding established uses and have no unacceptable impacts on the environmental quality of the area;*
- (iii) Ensure that the size, scale, layout, and design enhances the character and amenity of the area and creates a clear sense of place;*
- (iv) Where possible, reuse vacant previously developed land in preference to greenfield land;*
- (v) Be of the highest quality design by meeting with the provisions of SPP, the Scottish Government's policy statement Designing Streets, the Council's Design Guidance and any master plan/design brief prepared for the site;*
- (vi) Prepare Master Plans/Design Statements in line with Planning Advice Notes 83 and 68 respectively where requested by the Council and/or where this is set out as a requirement in Volume 2 of the EALDP;*
- (vii) Be compatible with, and where possible implement, projects shown on the EALDP placemaking maps;*
- (viii) Ensure that there is no unacceptable loss of safeguarded areas of open space/green infrastructure and prime quality agricultural land;*
- (ix) Protect and enhance natural and built heritage designations and link to and integrate with green infrastructure where possible;*
- (x) Ensure that there are no unacceptable impacts on the landscape character or tourism offer of the area;*
- (xi) Meet with the requirements of all relevant service providers and the Ayrshire Roads Alliance; and*
- (xii) Be accessible to all."*

Policy IND 3: Business and Industrial Development in the Rural Area states:

*"Outwith settlement boundaries, new business, industrial and commercial development, will be encouraged and supported by the Council only where the proposal relates to one or more of the following types of development:*

- (xiii) Identified Business and Industrial sites and Miscellaneous Sites, with the potential for business and industrial development as indicated on the Local Development Plan Maps;*

- (xiv) Developments relating to and supporting the traditional rural activities of agriculture and forestry where there is a demonstrated site specific locational need;*
- (xv) Sensitive developments relating to recreational, tourism, leisure and sporting sectors;*
- (xvi) Rail freight based industrial uses at existing coal disposal points or coal loading facilities within existing and/or former surface coal mines served by rail;*
- (xvii) Sympathetic farm diversification developments, supported by a 5 year business plan;*
- (xviii) Small scale business developments which operate entirely from rural residential properties or community based facilities;*
- (xix) Renewable energy developments within the Rural Area that have been subject to detailed consideration against identified policy criteria.”*

Policy RE1: Renewable Energy Developments states:

*“Proposals for the generation and utilisation of renewable energy in the form of new build development, infrastructure will be supported in standalone locations and as integral parts of new and existing developments where it can be demonstrated that there will be no unacceptable significant adverse impacts on all of the relevant Renewable Energy Assessment Criteria set out in Schedule 1 of the EALDP, that the scale of the proposal and its relationship with the surrounding area are appropriate and that all relevant policies are met.”*

## **6 Baseline Description**

### **6.1 Local Landscape Context**

**Figure 1** illustrates the geographic location of the Proposed Development, which is located in an undulating, rural landscape 1.8km north-east of Drongan. The local landscape comprises an area of rolling agriculture, with localised areas of tree cover. Fields are generally small to medium in scale and are often bound by post-and-wire fencing or gappy hedges, with a geometric shape. There are some ancient woodland belts to the north, and areas of screen planting associated with the Killoch Disposal Plant and open cast coal mine. There is an area of native species scrub and moorland associated with Plaid Loch in the south-eastern part of the Study Area, although most other areas are under mixed agriculture.

The Site is located on the south side of the localised watershed of the tributaries falling to the River Ayr to the north and the Waters of Coyle to the west, both of which drain to the sea 12km beyond the Study Area to the west. The small hill located 500m to the north-east of the Site forms the highest point at 168 m Above Ordnance Datum (AOD) within the Study Area. Small burns have eroded small and contorted valleys, forming the undulating landscape, the lowest area being 110m AOD in the south-west part of the Study Area. The Site itself slopes gently to the south, ranging between 145m AOD at the road access with the A70, and 125m AOD at the southern part of the Site.



The Site and its immediate environs are influenced by existing infrastructure of the Coylton Substation located adjacent to the western boundary of the Site. Several associated overhead power lines extend outwards from the substation in all directions. In addition, the Killoch open cast coalmine and disposal point is a large, industrial land use located within 600m to the north.

The largest settlement in the area, Droangan, is located 1.8km to the south-west of the Proposed Development. Other built form in the Study Area is generally limited to scattered dwellings and farmsteads. These properties are accessed via minor roads and access tracks, which converge with the B7046 and the A70, which form the main transport routes within the Study Area.

Due to the undulating nature of the landform, the visual attributes of the Study Area differ from place to place. The more elevated upland areas allow for expansive, long distance, panoramic views, whilst views from lower lying areas are typically more curtailed and therefore differ in terms of perceived scale. These variations reflect the nature of the topography and the arrangement of tree shelterbelts and plantations. From the most elevated and open locations there are long views to moorland and coniferous plantations on the horizon at distances over 5km to the south.

## 6.2 Landscape Character

**Figure 2** illustrates the Landscape Character Types (LCTs) within the Study Area as defined within NatureScot's National Landscape Character Assessment (2019), which represents the most up-to-date assessment of landscape character across the Study Area. The Site is located within the Agricultural Lowlands LCT 66. The key characteristics and sensitivities are as follows:

### Key Characteristics of the Agricultural Lowlands LCT 66

- *'Complex landform, gently increasing in height from the coastal fringe, dissected by many burns and streams draining to incised main river valleys to create an undulating lowland landscape;*
- *Geology dominated by coal measures, though basalt, sandstones, limestones, millstone grit and volcanic intrusions are also present;*
- *Generally small to medium scale landscape;*
- *Landcover is predominantly pastoral, with some arable on lower and better soils.*
- *Fields often regular in shape and enclosed by beech or hawthorn hedges, with mature hedgerow trees giving the landscape a surprisingly wooded character;*
- *Settlement pattern historic in origin based upon larger, more self-contained farmsteads set in a hinterland of fields;*
- *Number of larger towns and villages with historic cores surrounded by more modern development;*
- *Several major road corridors creating a degree of conflict between the rural character and presence of heavy traffic;*
- *Dense network of often very rural minor roads;*
- *Varying landscape character which ranges from very rural to more fragmented and developed landscapes on urban fringes; and*

- *Views tend to be dictated by the local topography and landcover.'*

The LCT is also described as the East Ayrshire Lowlands LCT 7c in the East Ayrshire Landscape Wind Capacity Study by Carol Anderson Landscape Associates. The summary description is a useful reference.

- *This character type covers a fairly extensive area across Ayrshire. Within East Ayrshire it forms the edge to generally smaller scale and often diverse Lowland River Valleys (9) which cut through it including the valleys of the Ayr, Lugar and Irvine.*
- *This landscape gradually merges with a more elevated landscape of rugged ridges and hills in the north-east at the transition with East Renfrewshire and with the relatively simple and more extensive uplands of the East Ayrshire Plateau Moorlands with Forestry and Wind Farms (18b) and the Foothills with Forest and Opencast Mining (17a);*
- *The gently rolling landform combines with the strongly enclosed field pattern and regularly spaced dispersed small farms, houses and woodlands to create a small to medium scale landscape, dependant on the complexity of landform and land cover pattern. Some small but prominent hills occur in places;*
- *A gently undulating to rolling landform with occasional more defined small hills forming prominent features and pockets of more complex interlocking drumlins enclosing narrow valleys and small flat areas of wetter pasture;*
- *This farmed landscape has small to medium sized pastures, strongly enclosed by intact hedgerows with field trees in places. Small mixed woodlands and shelterbelts are also a common feature;*
- *A regular and fairly dense pattern of small farms, these often located on low hill tops and ridges, is characteristic of this landscape together with some small settlements;*
- *This landscape is crossed by a concentrated network of roads and high voltage transmission lines...; and*
- *Opencast mining operations are evident in the southern part of this character type at the transition with the Foothills with Forest and Opencast Mining (17a).*

The sensitivity of the Agricultural Lowlands LCT 66 specific to the Proposed Development and its locality is assessed within **Appendix B** as being Low-Medium.

#### Relationship to Adjacent Character Types

The Agricultural Lowlands LCT 66 extends across the entire 3km Study Area other than a small area of LCT 68 Lowland River Valleys located close to the Waters of Coyle, nearly 3km to the west. There would be no visibility to the Site from this LCT and accordingly it has been discounted from further consideration within the LVA.

### **6.3 Landscape Designations**

Landscape planning designations and policies are considered in the determination of the sensitivity of landscape and visual receptors as they provide an indication of value ascribed to the landscape or visual resource. They are marked in **Figure 3**. The Site is not located within a landscape designation, and there are no landscape designations or Gardens and Designed Landscapes within the Study Area other than a small area of Sensitive Landscape located 2.6km to the west of the Site.

Trabboch Castle Scheduled Monument lies 2.4km to the north of the Site. The remains of the castle are located outside the ZTV and do not appear to be regularly visited as a recreational destination. This feature is therefore not considered further in the LVA.

With reference to **Figure 3**, there are also fragments of ancient woodland located 1-3km from the Site, particularly in the vicinity of the A70.

#### **6.4 Visual Baseline and Receptors**

The following section describes the visual receptors within the 3km Study Area, which are illustrated in **Figure 3**.

##### Local Residents

The village of Drongan is located 1.8 km to the southwest of the Site. There are no other settlements within the Study Area.

Other residents within the Study Area are limited to dispersed farmsteads and dwellings (single or grouped). Those within 1km of the Site, and within the ZTV, are illustrated in **Figure 3**. The potential visual effects that would be experienced by residents at these dwellings are considered within the following appraisal.

Residential properties are considered as being of high sensitivity to the Proposed Development in all cases due to the importance that individuals place on the view from their homes.

##### Recreational Receptors

Recreational routes and outdoor destinations / attractions within the Study Area are listed below:

- Core path network C7, C9 and D19 between Drongan and Lessnessock, 255m to the south of the Site at the closest point; and
- Core paths D1-D3 located to the north and west of Drongan, 2km to the west of the Site at the closest point. This route is located outwith the ZTV. Accordingly, there would be no views of the Proposed Development, and the effects on users of Core Paths D1-D3 are not considered further.

There are no regionally promoted cycle or walking routes within the Study Area.

Whilst the potential visual effects on tourists, or those engaging in recreation activities, may be brief in nature by passing through the area by vehicle, or on horse, foot or bike, their sensitivity to landscape and visual change is considered to be high on the basis their purpose/activity is to enjoy the landscape and surroundings.

##### Road and Rail Receptors

Potential vehicular receptors within the Study Area are limited to road users as follows:

- A70, located adjacent to the northern boundary of the Site;
- B7046, located 1.27 km to the south-west at the closest point;

- B730, located 1.8 km to the west at the closest point;
- The minor road located 300m to the south-east at the closest point;
- The minor road north of the A70 1.5 km to the north-east at its closest point; and
- The railway located 280m west of the Site at its closest point.

Users of minor roads are considered to be of medium sensitivity, whilst users of A roads (travelling at greater speed) are considered to be of low sensitivity. Users of roads to the north of the A70 have been scoped out of the LVA due to lack of ZTV coverage / visibility to the Site.

## 6.5 Night Time Baseline

In general, light pollution within the Study Area is limited to the lights of Drongan, lights of scattered residential dwellings, and those of vehicles on roads. The Proposed Development would be unlit, excepting for motion sensor security lighting, therefore no further assessment has been made within the LVA on the impact of the lighting of the Proposed Development.

## 6.6 Future Baseline

It is not anticipated that the baseline conditions as described above would be different to those encountered today, due to the dominant land use of the area being rough grazing, and the likely continued land used of Coylton Substation located to the west side of the Site.

# 7 Proposed Development and Mitigation

This section describes the aspects of the Proposed Development with the potential to cause landscape and visual effects within in the Study Area.

## 7.1 Proposed Development Description

The location of the Proposed Development is illustrated in **Figure 1**. The site layout and landscape proposals are set out in **Figure 5: Landscape Plan**. Further details of the Proposed Development are illustrated on TNEI drg no. 15627-022: Site Layout Plan – Detailed, and the associated Planning Statement.

The Proposed Development would involve localised areas of ground clearance to facilitate construction within the Site. This includes the removal of up to 40m of hedge on the northern edge of the Site to form the access from the A70 (and associated visibility splay), as well as a short section of gappy hedge further south to form the access track close to the compound. There is also likely to be some very localised vegetation loss on the western boundary of the Site to facilitate the routing of the grid connection.

The Proposed Development would comprise the introduction of the following key elements:

- 24no. battery storage unit blocks with a max height of 4m (H) x 28m (L) x 15m (W) (420m<sup>2</sup> footprint) located in the southern part of the Site;

- Comms house, 5.63m (H) x 18.8m (L) x 14.2m (W);
- AUX transformers, 2.5m (H) x 2.6m (L) x 1.6m (W);
- HV Equipment, max height 8m, within dedicated compound (40.42m x 20.78m);
- Storage containers 2.6m (H) x 6.10m (L) x 2.4m (W) and storage areas;
- Underground cables connecting the Site to the National Grid substation to the north;
- Office cabins, each 3.60m (H) x 9.80m (L) x 3.1m (W);
- 4.5m high perimeter gate (close boarded);
- 3.4m palisade gate for internal HV yard;
- 4.5m high noise attenuation/security perimeter fencing;
- CCTV cameras and security lighting (6m pole);
- Porous crushed aggregate access track, 4m wide road with tarmac bell mouth at entrance to A70, and a culvert crossing of the drain north of the compound.
- Porous crushed aggregate hard standing within the compound and associated staff parking; and
- Landscape planting and mitigation features.

The HV Transformer and array of Battery Storage units are the main elements of the Proposed Development with the potential to affect the landscape and visual amenity of the Study Area. This is based on their height and spread across the Site. However, the LVA also takes cognisance of the other elements listed above and makes reference to them within the appraisal where relevant.

The area within the Site boundary totals approximately 13.1 hectares ('ha').

The construction and installation of the Proposed Development will take approximately 12-18 months. The proposed landscape planting would be introduced at the first available planting season following completion of the works.

## **7.2 Landscape Design and Mitigation**

The Proposed Development would be sited adjacent to and be visually associated with the existing substation located on its western boundary. This also marks the convergence of a series of four high voltage overhead power lines. Accordingly, the Proposed Development exerts its primary influence over a local landscape already substantially characterised by existing development and avoids the spread of infrastructure into wider parts of the surrounding landscape. The main compound would be sited in the lower-lying, southern part of the Site, approximately 125-130m AOD, 330m south of the A70. The Site also avoids any notable ridgelines or visually prominent sections of skyline, and the undulating landform of the site context contains the visual envelope largely to the south. This is reflected by the extremely limited ZTV coverage to the north.

In terms of design, the proposals seek to incorporate a comprehensive mitigation strategy to effectively integrate the Proposed Development into the surrounding landscape. This involves consideration of the scale, design and siting of the Proposed Development, and the most appropriate methods of lessening its potential influence on landscape and visual amenity. It also involves

Biodiversity Net Gain (BNG) and improved quality of landscape character. To this end, the Proposed Development has been designed to achieve the following landscape objectives:

- Land clearance and occupation would be limited to necessary areas only to minimise the geographic spread of the infrastructure and limit the potential impact on the local landscape fabric;
- The layout of the compound and orientation of the track and new or retained planting would reflect the existing adjacent field patterns;
- The main compound would be located at the lowest altitude of the Site, within the southern portion and the compound and the tallest elements within it would be sited adjacent to the existing line of trees on the western boundary to maximise their screening qualities;
- In terms of colour and materials, the comms house, stores, offices, HV Transformer, gates and fencing would be a recessive colour where practical (green, grey or brown, or similar approved) to assist blending in with the surrounding landscape;
- The existing line of trees and scrub located on the western boundary would be maintained and supplemented with a continuous line of woodland edge planting, establishing a link between the areas of existing natural regen scrub to the north and south of the Site. A hedge comprising mixed native species would also be planted along this line;
- New hedge and woodland edge would be established on the northern and eastern sides of the compound to screen and soften views from the north and east and augment the existing field pattern;
- Woodland edge species would be established alongside a proposed SUDS feature on the southern sides of the compound, creating a continuation of the existing, naturally regenerated vegetation to the south of the Site. This would also help screen and soften views from the south;
- Where localised sections of the existing hedge is lost at the Site entrance on the A70, two sections of hedge (with hedge trees) would be established, helping screen views into the Site.
- Tree planting within the hedgerows and woodland edge mix would be based on a mix of native species. This would include Select Standards (3.0 – 3.5m height) and feathers (up to 1.75m height) to provide instant height, screening and softening of views at an early stage;
- Areas of wildflower meadow would be established on the periphery of the BESS compound, providing ecological and landscape character enhancement. This includes areas of wet meadow mix in the locality of the proposed SUDS feature in the southern part of the Site, providing a range of habitat types; and
- Elsewhere existing agricultural land use would be reinstated within the Site.

All new planting would comprise native, broad leaf species characteristic of the local area. New hedges would be based on a 55% Hawthorn (*Crataegus Monogyna*) content, augmented with other flowering and berry-producing native species for enhanced wildlife benefit. Planting approach and management details are set out in **Figure 5**.

Existing trees to be retained would be protected via temporary tree protection fencing, in accordance with BS 5837:2012 Clause 6.2. The fencing would be constructed prior to commencement of construction works and there would be no works, vehicular over-run, or storage of materials within

the extents of the tree protection fencing area.

## **8 ZTV and Viewpoint Analysis**

The potential landscape and visual effects arising from the Proposed Development have been analysed in two ways:

- ZTV analysis, to provide a general overview of the geographical extent of visibility of the Proposed Development within the Study Area; and
- Analysis of the potential effects at key viewpoints.

### **8.1 Zone of Theoretical Visibility Analysis**

Theoretical visibility mapping of the Proposed Development is illustrated in **Figure 1**. The ZTV illustrates the maximum overall visibility of the proposed structures and is modelled on building heights of 8m and BESS height of 4m. The ZTV has been prepared on the basis of 'bare ground' and does not take into account the potential screening effects of surrounding vegetation / woodland.

With reference to the ZTV, the geographical extent of potential visibility would be continuous within approximately 500m, predominantly encompassing grazed farmland. At greater distances, ZTV coverage is limited to southern parts of the Study Area, where it reflects a series of ridges which are broadly aligned east to west. This pattern continues southwards to the edge of the Study Area, albeit visibility becomes increasingly limited at greater distance from the Site.

### **8.2 Viewpoint Analysis**

Viewpoint analysis has been carried out on a selection of key viewpoint locations to assess the likely level of effects arising as a result of the Proposed Development. With reference to the geographical extent of visibility illustrated within the ZTV, a total of six viewpoints have been selected as being representative of the main views from publicly accessible locations within the Study Area (see **Figure 1** and **Table 1**).

Viewpoints 1 – 2 are located in closest proximity to the Proposed Development and are illustrated as photomontages. Viewpoints 3 – 6 (located at greater distance) are illustrated as existing view and wirelines.

**Table 1: Appraisal Viewpoints**

Viewpoint Number and Name	Reason for Selection	OS Grid Reference
1. A70 at East Tarelgin	Illustrates close proximity views to the north of the Site, including the entrance. It is representative of views experienced by residential receptors East Tarelgin and road users on the A70.	246689 619828
2. Core Path (C9) near Clydenoch	Illustrates close proximity views from the landscape to the south. It is representative of views experienced by recreational users / walkers of Core Path (C9).	246867 619120
3. Core Path (C9) at Treesmax	Illustrates views from the south-west, representative of views experienced by recreational users / walkers of Core Path (C9).	246261 618722
4. Minor Road near Rodinghead	Illustrates more distant views from the south, representative of those experienced by minor road users.	246656 617978
5. Minor Road at Provost Mount	Elevated views from the landscape to the east, representative of views experienced by minor road users.	247654 219846
6. Minor Road and Core Path (D19) at Carston	Illustrates distant views from the south-west. Representative of views experienced by minor road users and walkers on Core Path D19.	245459 618224

All of the viewpoints are located within Agricultural Lowlands LCT 66.

Viewpoint 1: A70 at East Tarelgin

This viewpoint is located approximately 80m to the north-east of the Site and represents views experienced by local residents at East Tarelgin and East Tarelgin Bungalow, and road users of the A70. With reference to **Figure 4a**, the existing views to the south are characterised by open, rolling farmland, with a field pattern demarcated by post and wire fencing, some hedges and trees. Distant wooded hills (located approximately 9km to the south) form the backdrop and horizon to the view. The view is also characterised by elements of existing built form. These comprise the structures of Coylton Substation, which are visible 500m to the south-east, and the associated HV pylons, wood poles and lines, which extend outwards across the wider surrounding landscape. The A70 transport



corridor and associated fast-moving traffic represents an additional human influence within the foreground of the view.

#### *Predicted View*

The Proposed Development would be visible at close proximity beyond the intervening road side hedge. The visible extents of the Proposed Development would be restricted by the underlying landform, which slopes away from the viewpoint, and would account for a limited proportion of view within wider vistas incorporating existing large-scale infrastructure. The transformer structure would be the tallest new element, but would not break the skyline and would be seen in close association with the (much larger-scale) HV pylons beyond. The BESS compound would form an associated area of low-lying development, back-clothed by rolling farmland beyond. The existing vegetation would exert limited screening effect. However, the proposed perimeter fencing surrounding the compound would be recessive in colour and provide a degree of visual containment to the proposed infrastructure within. The proposed landscape planting measures, in particular the new tree planting and woodland edge mix extending along the northern and eastern edges of the compound, would provide additional screening of the proposed infrastructure, which would steadily soften views of the BESS over time.

The new road entrance / access on the A70 would also be visible at this viewpoint, where it would replace a section of existing hedge located on the right-hand side of the view. Replanting new sections of hedge would help to mitigate effects over time.

#### *Effects on Visual Amenity*

The sensitivity of residents is assessed as being High and the sensitivity of road users is Low. At completion of the works, prior to establishment of planting measures (hereafter referred to as 'Year 1'), the magnitude of change would be Moderate. This is based on the proximity of view, balanced by the presence of existing infrastructure within the surrounding context, which is of much larger scale than the Proposed Development and accordingly exerts a greater influence upon the view. The resultant level of effect on residential receptors would be Major/Moderate (notable). The effect on road users would be Moderate/Minor.

After approximately fifteen years post-completion (hereafter referred to as 'Year 15'), the establishment of the native hedgerow and tree planting within the Site would result in the partial screening of the proposed infrastructure beyond. As a result, the magnitude of change would reduce to Slight at most. The level of effect on residential receptors would reduce to Moderate, and not notable based on the limited extent of the BESS that would be visible and its low-lying position within the view. The level of effect on road users would reduce to Minor.

#### *Landscape Effects*

The Agricultural Lowlands LCT is assessed as being of Low to Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the

local agricultural landscape, albeit in the context of existing large-scale elements of infrastructure and human activity. At this proximity the Proposed Development would represent a new, low-lying feature with similar visual characteristics to the existing infrastructure associated with Coylton Substation. The magnitude of change would be Moderate at most and the effect on landscape character would be Moderate/Minor to Moderate, and not notable. By Year 15 the magnitude of change would reduce to Slight and effects would be Minor to Moderate/Minor.

#### Viewpoint 2: Core Path (C9) south of the Site

This viewpoint is located in a position that is elevated above that of the BESS part of the Site, on an unmetalled track and Core Path C9, 280m south-east of the Site. It is representative of views experienced by recreational users of the track. With reference to **Figure 4b**, the existing view to the north comprises grazed agricultural fields, which are rectangular in pattern and delineated by hedges and trees. The existing Coylton Substation forms the dominant element in the view, and the associated large-scale HV pylons form additional focal points on the skyline. Other built form within the view includes the smaller-scale wood poles that characterize the wider parts of the view. The traffic of the A70 is visible beyond the Site and a number of farm buildings punctuate the view including the white-coloured residence of East Tarelgin.

#### *Predicted View*

Most parts of the Proposed Development would be visible beyond the brow of the intervening hillside, which would screen the southern-most BESS units. The existing pastoral field in the southern part of the Site would change to the proposed BESS compound, including hard standing and proposed buildings / infrastructure. These elements would be visible against the existing vegetation extending along the western boundary and in front of the complex structures of the Coylton Substation. The proposed infrastructure would be located at a lower elevation and accordingly would not break the skyline. The access track would be visible to the north of the BESS as far as the A70 entrance.

Existing vegetation would have little screening effect in this view although the perimeter fencing (with muted colour) would provide partial visual containment of the proposed infrastructure within the compound. In addition, the proposed vegetation would soften the appearance of the Proposed Development and steadily screen the BESS area over time.

#### *Effects on Visual Amenity*

Recreational users use this route in part because of the views to open countryside, and accordingly their sensitivity is assessed as being High. The magnitude of change caused by the Proposed Development would be Moderate given the proximity and horizontal extent of the view affected by new built development within what is currently an agricultural landscape with existing elements of large-scale infrastructure. The resultant level of effect on recreational receptors would be Major/Moderate (notable).

At Year 15, the establishment of the native hedgerow and tree planting along the eastern and

southern boundaries of the BESS area would result in the partial screening of the proposed infrastructure beyond. As a result, the magnitude of change would reduce to Slight. The main focus of view would be the existing substation and associated pylons. The level of effect on recreational receptors would reduce to Moderate, and not notable.

#### *Landscape Effects*

The Agricultural Lowlands LCT is assessed as being of Low to Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the local agricultural landscape, albeit in the immediate visual context of the existing elements of infrastructure at Coylton Substation and associated infrastructure. At this proximity the Proposed Development would represent a new, lower-lying feature that would share a number of visual characteristics associated with Coylton Substation. The magnitude of change would be Moderate at most and the effect on landscape character would be Moderate/Minor to Moderate, and not notable. The greatest magnitude of change after 15 years of operation would be Slight and effects would be Minor to Moderate/Minor.

#### Viewpoint 3 Core Path (C9) at Treesmax

This viewpoint is located on an unmetalled track and Core Path C9, 590m south-west of the Site. It is representative of views experienced by recreational users of the track. With reference to **Figure 4c**, the existing view to the north-east is across a shallow valley and sloping ground with a series of grazed agricultural fields which are rectangular and delineated with some hedges and trees. The long shed at Macquittiston, and infrastructure at Coylton Substation form the notable elements within the view. However, the large-scale HV pylons that extends outwards, broaching the skyline, form the dominant elements in the foreground of the view. Other built form / human influences include wood poles, traffic on the A70, and scattered dwellings including the white-coloured farm buildings of East Taregin.

#### *Predicted View*

Most parts of the BESS compound and the southern part of the access track would be visible beyond the gappy trees on the western boundary of the Site. They would be experienced beyond the existing pylons and would appear of notably smaller scale than a number of the existing elements. The hedge and trees that are proposed on the western boundary would steadily screen the BESS area over time.

#### *Effects on Visual Amenity*

Recreational users use this route in part because of the views to open countryside, and accordingly their sensitivity is assessed as being High. The magnitude of change caused by the Proposed Development would be Slight given the presence of existing built elements in the view (including large-scale pylons in the foreground). The resultant level of effect on recreational receptors would be Moderate, and notable in this instance based on the incremental increase in built form within the view.

At Year 15, the establishment of the native hedgerow and tree planting along the western and southern boundaries of the BESS area would reduce the magnitude of change to Negligible. The level of effect on recreational receptors would reduce to Minor (beneficial).

#### *Landscape Effects*

The Agricultural Lowlands LCT is assessed as being of Low to Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the local landscape, albeit in the immediate visual context of the existing elements of infrastructure at Coylton Substation and associated large-scale infrastructure. The magnitude of change would be Slight and the effect on landscape character would be Minor to Moderate/Minor. By Year 15 the magnitude of change would reduce to Negligible, and effects would be Negligible to Minor/Negligible (beneficial).

#### Viewpoint 4 Minor Road near Rodinghead

This viewpoint is located on a minor road 1.3km south of the Site. It is representative of views experienced by users of the road, which are assessed as having Medium sensitivity. With reference to **Figure 4d**, the existing view to the north is across a shallow valley and sloping ground with a series of grazed agricultural fields which are rectangular in pattern and delineated by hedges and field trees. The landscape is open in character overall. Although primarily agricultural, the view contains a number of industrial-scaled elements including large sheds at Treesmax, the long shed at Macquittiston, infrastructure at Coylton Substation and a number of large-scale HV electricity pylons, which punctuate the skyline and form the dominant elements in the view. The traffic of the A70 is visible in the distance beyond the Site and the white-coloured farm buildings of East Tarelgin are also visible.

#### *Predicted View*

Parts of the BESS compound and the access track would be visible beyond the existing vegetation located along the field boundaries on the western and southern edges of the Site. The Proposed Development would increase the level of built form within the view, albeit would be lower-lying and smaller in scale than many of the existing elements. Due to the distance of view, the proposed infrastructure would affect a relatively small proportion of the view. The perimeter fence around the BESS would be of muted colour, and provide partial visual containment of the infrastructure within the compound. The proposed hedge and trees proposed on the Site boundaries would further soften views and steadily screen the BESS area over time.

#### *Effects on Visual Amenity*

Road users have a Medium sensitivity to the Proposed Development. The magnitude of change caused by the Proposed Development would be Slight at most based on the distance of view, and comparative prominence of existing large-scale elements of built elements in the view. The resultant level of effect would be Moderate/minor.

At Year 15, the establishment of the native hedgerow and tree planting along the western and southern boundaries of the BESS area would reduce the magnitude of change to Negligible. The level of effect on road users would reduce to Minor/Negligible.

### *Landscape Effects*

The Agricultural Lowlands LCT is assessed as being of Low to Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the landscape, albeit in the immediate visual context of the existing elements of infrastructure at Coylton Substation and associated large-scale infrastructure in the intervening landscape. At this proximity the Proposed Development would represent a relatively minor addition to the background landscape, which would remain largely open and agricultural in character. The Proposed Development would share a number of visual characteristics with the existing infrastructure associated with Coylton Substation, albeit would be located in a more discreet location well-below the horizon. The magnitude of change would be Slight/Negligible and the effect on landscape character would be Minor. At Year 15 the magnitude of change would reduce to Negligible and effects on landscape character would be Minor/Negligible to Negligible.

### Viewpoint 5: Minor Road at Provost Mount

This viewpoint is located on a minor road 1,060m to the east of the Site. It is representative of views experienced by users of the road, which are assessed as being of Medium sensitivity to the Proposed Development (coniferous vegetation fully screens views towards the Site from the nearby residential dwelling of Provost Mount). With reference to **Figure 4e**, the existing view to the west comprises rolling farmland demarcated by hedgerows and fencing. Built form within the view encompasses the upper structures of the Coylton substation and the intervening network of large-scale electricity pylons, which punctuate the skyline and exert a characterizing influence on the local agricultural landscape. Other built form within the view includes scattered dwellings and wood poles, which extend across wider parts of the landscape. The moving traffic on the A70 is visible within the right-hand side of the frame. Views towards the Site are partly screened by the intervening rolling landform, in combination with scattered vegetation.

### *Predicted View*

The Proposed Development would be experienced in the close context of existing large-scale electricity pylons, as well as the upper parts of the structures of Coylton Substation, agricultural buildings of Macquittiston, and residential settlement at Drongan. The Proposed Development would form a localised new element of built form within the view, albeit in a low-lying position, well-below the skyline. The proposed perimeter fence would be muted in colour and provide partial visual containment of the infrastructure within the compound. The access track would be screened.

Whilst the Proposed Development would increase the spread of built form within the view, it would appear as relatively compact, low-lying element beneath the rows of pylons. The proposed hedge and

tree planting along the eastern Site boundary would soften views of the proposed infrastructure and steadily screen the Proposed Development over time.

#### *Effects on Visual Amenity*

Road users at this viewpoint are assessed as being of Medium sensitivity. The magnitude of change caused by the Proposed Development would be Slight at most given the comparative dominance of existing built elements in the view, which are of much larger scale. The resultant level of effect on road users would be Moderate/Minor.

At Year 15, the establishment of the native hedgerow and tree planting along the eastern boundary of the BESS area would screen most of the built structures within the Site. Accordingly, the magnitude of change would reduce to Negligible, and the level of effect on road users would reduce to Minor/Negligible.

#### *Landscape Effects*

The Agricultural Lowlands LCT is assessed as being of Low to Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the local landscape, albeit in the immediate visual context of large-scale HV Lines and the existing elements of infrastructure at Coylton Substation. At this proximity, the Proposed Development would represent a relatively minor addition to the landscape, which would remain characterised by a blend of open agriculture with large-scale infrastructure elements. The magnitude of change would be Slight and the effect on landscape character would be Minor to Moderate/Minor. As the proposed trees and hedges within the Site steadily establish (in particular those located on the eastern boundary) they would form new linear vegetative structures in the landscape, which are typical of the existing hedges and tree belts in the LCT, thereby exerting a net beneficial effect. By Year 15, the magnitude of change would be Negligible and the effects on landscape character would be Minor/Negligible, and beneficial.

#### Viewpoint 6: Minor Road and Core Path (D19) at Carston

This viewpoint is located on a minor road that shares the same route as Core Path D19, 1.5km south-west of the Site. It is representative of views experienced by users of the road and recreational walkers, which are assessed as being of Medium sensitivity and High sensitivity to the Proposed Development respectively. Potential views from the nearby residential property at Carston are screened by intervening buildings. With reference to **Figure 4f**, the existing view to the north-east encompasses a shallow valley and sloping ground with a series of grazed agricultural fields which are rectangular and delineated with some hedges and trees. The long shed at Macquittiston farm and infrastructure at Coylton Substation form notable elements of built form within the view. However, it is the associated rows of large-scale pylons, that break the skyline and form the dominant elements in the view. In addition, the wider view is influenced by wood poles, scattered farm buildings, and moving traffic on the A70.

### *Predicted View*

The Proposed Development would be partially visible beyond the gappy row trees extending along the western boundary of the Site. The Proposed Development would increase the spread of built form in the view, albeit the proposed perimeter fence (which would be muted in colour) would partially contain the infrastructure within the BESS compound. The proposed hedge and trees within the Site, in particular those proposed on the western boundary, would soften the appearance of the Proposed Development and steadily screen the BESS area over time.

### *Effects on Visual Amenity*

Recreational walkers use this route in part because of the views to the open countryside, and accordingly their sensitivity is assessed as being High. The sensitivity of road users would be Medium. The magnitude of change caused by the Proposed Development would be Slight at most given the distance of view, partial screening by intervening tree cover, and the comparative dominance of existing large-scale built elements within the view. The resultant level of effect on recreational receptors would be Moderate, not notable based on the visually discreet location of the Proposed Development below the skyline. The effect on road users would be Moderate/Minor.

At Year 15, the establishment of the native hedgerow and tree planting along the western and southern boundaries of the BESS area would screen the infrastructure from view and represent new landscape features of value within the view. The resultant magnitude of change would reduce to Negligible. The level of effect on recreational and road receptors would reduce to Minor and Minor/Negligible respectively, beneficial.

### *Landscape Effects*

The Agricultural Lowlands LCT is assessed as being of Low to Medium sensitivity to the Proposed Development. The Proposed Development would introduce additional elements of built form to the local landscape, albeit in the immediate visual context of the existing large-scale HV Lines and elements of infrastructure at Coylton Substation. At this distance, the Proposed Development would represent a relatively minor addition to the landscape, which would remain characterised by a blend of open agriculture with large-scale infrastructure elements. The magnitude of change would be Slight at most and the effect on landscape character would be Minor to Moderate/Minor. As the proposed mitigation planting matures, views of the proposed infrastructure would be steadily screened and replaced by what would appear to be a new tree belt, strengthening the existing characteristic of trees within this LCT. By Year 15, the magnitude of change would be Negligible and effects would be Negligible to Minor/Negligible, beneficial.

The viewpoint appraisal is summarised in **Table 2**. Effects are considered adverse unless otherwise stated. Notable effects are underlined.

**Table 2: Appraisal Viewpoints**

<b>Viewpoint Number and Name</b>	<b>Receptor Sensitivity</b>	<b>Magnitude of Change Year 1, Year 15</b>	<b>Effect Year 1, Year 15</b>
1. A70 at East Tarelgin	Residential: High  Main Road: Low	Yr1: Moderate, Yr15: Slight	Yr1: <u>Major/Moderate</u> Yr15: Moderate Yr1: Moderate/Minor Yr15: Minor
	LCT 66: Low-Medium	Yr1: Moderate, Yr15: Slight	Yr1: Moderate/Minor to Moderate Yr15: Minor-Moderate/Minor
2. Core Path (C9) near Clydenoch	Recreational: High	Yr1: Moderate, Yr15: Slight	Yr1: <u>Major/Moderate</u> Yr15: Moderate
	LCT 66: Low-Medium	Yr1: Moderate, Yr15: Slight	Yr1: Moderate/Minor to Moderate Yr15: Minor to Moderate/Minor
3. Core Path (C9) at Treesmax	Recreational: High	Yr1: Slight, Yr15: Negligible	Yr1: <u>Moderate</u> Yr15: Minor (Beneficial)
	LCT 66: Low-Medium	Yr1: Slight, Yr15: Negligible	Yr1: Minor to Moderate/Minor Yr15: Negligible to Minor/Negligible (Beneficial)
4. Minor Road near Rodinghead	Minor Road: Medium	Yr1: Slight, Yr15: Negligible	Yr1: Slight Yr15: Minor/Negligible
	LCT 66: Low-Medium	Yr1: Slight/Neg. Yr15: Negligible	Yr1: Minor Yr15: Minor/Negligible to Negligible
5. Minor Road at Provost Mount	Minor Road: Medium	Yr1: Slight, Yr15: Negligible	Yr1: Moderate/Minor Yr15: Minor/Negligible (Beneficial)
	LCT 66: Low-Medium	Yr1: Slight, Yr15: Negligible	Yr1: Minor to Moderate/Minor Yr15: Minor/Negligible (Beneficial)
6. Minor Road and Core Path (D19) at Carston	Minor Road: Medium	Yr1: Slight, Yr15: Negligible	Yr1: Moderate/Minor Yr15: Minor/Negligible (Beneficial)
	Recreational: High		Yr1: Moderate Yr15: Minor (Beneficial)
	LCT 66: Low-Medium	Yr1: Slight, Yr15: Negligible	Yr1: Minor to Moderate/Minor Yr15: Negligible to Minor/Negligible (Beneficial).



## 9 Construction Stage Effects

Whilst it is the operational stage of the Proposed Development that would give rise to prolonged landscape and visual effects, temporary effects at the construction stage would also occur based on the following operations:

- Erection of temporary perimeter fencing;
- Installation of temporary construction compound (including storage and welfare facilities);
- Creation of temporary laydown areas;
- Site clearance and excavation works for foundations;
- Increased vehicular movement within the Site;
- Gradual introduction of proposed buildings; and
- Reinstatement works, including the removal of the temporary accommodation.

The works detailed above would give rise to some landscape and visual effects. The detailed construction program is not known at this stage. These effects would however be temporary and would mainly arise through the removal of the existing pasture vegetation, and the gradual introduction of the proposed buildings/infrastructure within the Site. The effects arising from other operations, including the vehicle movement, construction of the fencing and excavation works would be localised, and whilst potentially visible, would not appear prominently in views from the surrounding areas. As such, the construction phase effects would be limited in extent and duration.

### 9.1 Construction Stage Landscape Effects

During the construction stage, areas of the existing grass ground cover within the Site would be removed. There would be localised areas of excavation required for the parking and access, foundations of the buildings and cable routes, resulting in a change to the current landscape fabric within the Site. There would also be a short term, temporary increase in vehicle movements to and from the Site. There would be loss of two short sections of existing hedging although no other landscape features of value would be removed.

In terms of landscape fabric, the existing agricultural ground cover within the Site is considered to be of Low sensitivity to the Proposed Development due to its relative commonality, its ability to regenerate in a short period of time, and the absence of features of landscape value. Whilst some sections of native species hedge would be removed to form the road entrance and access track, all trees and remaining hedges would be retained. Northern parts of the Site would remain predominantly undisturbed (retaining existing pasture or natural vegetation ground cover). Instead, the construction changes would be limited in extent and primarily focused on the route of the access track and the BESS compound itself. The landform of the Site would remain broadly the same. The magnitude of change the fabric of the Site would be Moderate, resulting in a Moderate/Minor effect.

In terms of landscape character, the construction stage effects would be limited to a very localised part of the Agricultural Lowlands LCT 66, which is considered to be of Low-Medium sensitivity to the

Proposed Development with reference to the sensitivity assessment in **Appendix B**. The magnitude of change associated with the disturbance of the existing ground cover and additional presence of vehicles within the Site would be tempered by the working nature of the agricultural landscape which predominates throughout the local area. Within the surrounding landscape, vehicle movements and variations in field-pattern colour and texture (including the turnover of topsoil) is considered to be a standard occurrence. In addition, the magnitude of change would also be limited by the close geographical location of the Site in relation to the existing Coylton Substation and Killoch Colliery and Disposal Point, located within 575m to the north, which both incorporate built form with similar characteristics to those proposed within the Proposed Development, and which affect larger areas of ground. The influence of construction activities on landscape character would be tempered by reinstatement works and the introduction of new areas of planting within the Site. On balance, the magnitude of change on LCT 66 during the construction stage would be Moderate within the Site itself, and Negligible when considered in the context of the landscape character of the Study Area. The resulting effects would be Moderate/Minor to Moderate within the Site, and Minor/Negligible across wider parts of the LCT within the Study Area.

## **9.2 Construction Phase Effects on Visual Amenity**

The visual effects of the activities during the construction phase would be temporary, intermittent, and limited to localised areas in the vicinity of the Site due to the screening effects of the trees located on the western boundary (particularly during periods of leaf cover); and the existing structures to the north in combination with the low-lying nature of construction activities associated with site clearance / excavation.

In more open views, the construction activities would be seen within a local context which comprises large scale pylons, Coylton electricity substation, and the traffic on the A70.

Based on the relatively low-lying elevation of the Site, the associated construction activities would typically be seen below the skyline, backed by farmland and scattered tree cover. Views would be predominantly limited to the following receptors:

- Residents in isolated dwellings in closest proximity to the Site (of High sensitivity);
- Users of the A70 to the north-east (of Low sensitivity);
- Users of the minor roads to the south-west, south and south-east (of Medium sensitivity); and
- Users Core Path C9 and D19 located to the south-west, south and south-east (of High sensitivity).

In addition to the site clearance, excavation activities, material storage and an increase in traffic movement at the Site, the visual effects would occur primarily from the gradual appearance of the buildings and other structures within the landscape (which are considered below under 'Operational Effects'). The influence of construction activities on existing views would be tempered by the reinstatement of top soil within the Site. The effects would be further reduced through good site

management and the temporary nature of the construction activities. The greatest effects would occur on a limited number of receptors located within 500m of the Site as follows:

- Residents at R2: East Taregin Bungalow and R3: East Taregin, located 80m north-east of the Site;
- R7: Bungalow east of Clydenoch, located 630m east;
- Static views of users of the Core Path (C9) from localised sections near Clydenoch up to 300m to the south-east, and Core Path (C9) at Treesmax up to 590m to the south-west; and
- Sequential views of users of the Core Paths C7, C9 and D19 when considered within the 3km Study Area.

Beyond these locations changes in views to the construction activities of the Site would not be of great enough magnitude to cause 'notable' level effects.

## **10 Operational Landscape Effects**

This section examines the effects arising as a result of the Proposed Development with reference to landscape fabric within the Site, landscape character and landscape designations.

### **10.1 Effects on Landscape Fabric**

The landscape within the Site comprises working agriculture, which is void of any notable features of landscape value, and accordingly is assessed as being of Low sensitivity to the Proposed Development.

The Proposed Development would result in the permanent loss of a small area of farmland within the Site and its replacement with the proposed areas of hard surface and a series of buildings and other structures including a HV Transformer, Battery Storage units and associated infrastructure. This would be located within the context of the existing adjacent Coylton substation to the north-west, a series of large-scale HV pylons, and an expansive area of farmland. On completion of the works, any areas of disturbed ground within the Site would be reinstated to species-rich grassland / meadow at the first available season, and would establish rapidly thereafter. The Proposed Development would also incorporate new areas of native tree and hedgerow planting, which would represent the addition of beneficial landscape features to the local area that would exert increasing influence over time as they become more established. The new hedge trees, woodland edge trees and hedges would follow the existing alignment of similar features within the local landscape, providing corridors that link existing areas of naturally regenerated vegetation located to the south of the Site, and within the Coylton Substation area in the northwestern part of the Site.

On balance, the magnitude of change on the fabric within the Site would be Substantial, giving rise to a Moderate/Minor effect, which is not considered to be notable in this instance based on the overall footprint of development. Whilst the loss of pastoral grassland and its replacement with hard-standing and built form is regarded as adverse, the introduction of new areas of meadow habitat, and native trees and hedgerow represent beneficial change. Overall, the effects would be adverse.

## 10.2 Effects on Landscape Character

The effect of the Proposed Development on landscape character largely depends on the key characteristics of the receiving environment; the degree to which the Proposed Development may be considered to be consistent with or at odds with it; and how the proposal would be perceived within its setting.

### Agricultural Lowlands LCT 66

The Proposed Development would be located within the Agricultural Lowlands LCT 66, which is described above in Section 6.2. With reference to sensitivity analysis within **Appendix B**, the Agricultural Lowlands LCT 66 is assessed as being of Medium physical sensitivity, Low perceptual and Low-medium visual sensitivity, with an overall Low-Medium sensitivity to the Proposed Development. The effects on this LCT would be direct (predominantly affecting the Site itself) and indirect (affecting the visual and perceptual characteristics of the wider landscape).

The existing ground cover of the Site comprises agriculture which is currently pasture. Areas of this ground cover would be replaced by built structures which would share similar physical characteristics with the neighbouring substation structures. This is typical of the local landscape within the LCT and would not result in a notable loss of valued natural features to facilitate introduction of the proposed buildings or associated infrastructure.

Elsewhere on the Site, areas of native trees / woodland edge habitat would be established, and the Site boundary would be reinforced with native species hedging and further tree planting which would be typical of existing field patterns, enhancing a key characteristic of Agricultural Lowlands LCT 66. The beneficial influence of these proposed hedges and trees on the patterns and quality of the landscape character would increase steadily over time as they established.

The existing field pattern in the surrounding vicinity of the Site would be retained. The proposed access route and structures would be sited broadly parallel / perpendicular to existing field boundaries and therefore reflect existing landscape patterns.

In terms of indirect effects, ZTV coverage is continuous within the immediate vicinity of the Site and across a band spanning between Drongan (in the west) and Provost Mount (in the east). Visibility would be limited to a very small area directly north of the Site within 1 km. Beyond these areas there is no visibility at all to the north, and fragmented pockets of visibility to the south aligned with the more elevated ridges within the Study Area. From more open vantage points, the Proposed Development would represent an additional element of built form within the landscape (refer to Viewpoints 1-6). At greater distances the changes would become decreasingly impactful given the dominance of the existing Coylton Substation and associated large-scale HV pylons.

On balance, the Proposed Development would augment the existing built form in the vicinity of the Site and further reinforce the presence of electrical infrastructure as a characteristic within the immediate locality. The undulating nature of the landform in combination with the relatively low

height of the Proposed Development would ensure that the proposed built form would typically be experienced below the horizon, having no discernible effect on the skyline. The loss of vegetation would be minimal and, over time, mitigation planting would increase the presence of tree belts and hedges. As these characteristic landscape elements steadily establish, they would result in the partial or total screening of the Proposed Development across many of the geographic areas within the ZTV. As a result, the majority of the Agricultural Lowlands LCT 66 would be completely unaffected and landcover that is '*predominantly pastoral*' would remain a defining characteristic.

The key effects of the Proposed Development on this LCT would be focused within approximately 300-400m of the Site to the south, and 100m to the east, where the magnitude of change would typically be Moderate and the level of effect would be Moderate (notable in this instance). These effects would diminish at greater distances due to the containing influence of the existing landform and due to the presence of existing large-scale electricity infrastructure to adjacent to the Site. Considered across wider parts of the LCT and within the Study Area as a whole, the magnitude of change would typically be Negligible, and the effect would be Minor/Negligible, and not notable.

### 10.3 Effects on Landscape Designations

No landscape designations would be directly or indirectly affected within the Study Area.

## 11 Operational Visual Effects

This section examines the visual effects based on changes to the existing view as experienced by people within the surrounding landscape (as described in Section 6.4). This process draws on the results of the ZTV and viewpoint analysis.

### 11.1 Visual effects experienced by Local Residents

The Appraisal below considers the effects experienced by local residents in settlements, as well as those in isolated residential dwellings or groups of dwelling within 1 km of the Site. In all cases, sensitivity is deemed to be High. Measurements are an approximate measurement between the red line boundary and the residential building.

**Table 3: Visual Effects on Residential Properties**

Property	Description of Effect
R1 Bungalow north of Site	<p><b>Distance to the Proposed Development:</b> 85m</p> <p><b>Description:</b> A small rendered white bungalow set back to the north of the A70. Roadside vegetation screens most views from the property to the south. There is an open driveway to the property from the A70, with views to the operational Coynton Substation, overhead lines and pylons within the landscape to the south-west of the property.</p> <p><b>Magnitude of Change:</b> There would be partial views of the new Site access including the loss of a short section of hedge from side windows. However, as experienced</p>

	<p>within the context of the road, and at an oblique angle, the change would be limited. The magnitude of change would be Negligible.</p> <p><b>Level of Effect:</b> The effects would be Minor, long-term (reversible), and adverse. Once the perimeter hedgerow planting and woodland planting is established on the northern boundary of the Site, the views would soften, albeit the visual effects would remain Minor (not notable).</p>
<p>R2 East Tarelgin Bungalow (refer to Viewpoint 1: Figure 4a for views on the A70 close to the property)</p>	<p><b>Distance to the Proposed Development:</b> 13m</p> <p>This is a bungalow property, with primary open and slightly elevated views on to the A70 and beyond to the open, agricultural landscape to the south.</p> <p><b>Magnitude of Change:</b> The new road entrance to the Site would be directly opposite the dwelling and clearly visible. Sections of hedges would require to be removed to form the visibility splay and a new, tarmac bell mouth would be formed in close proximity. The northern parts of the track and much of the BESS compound would be clearly visible at a distance of approximately 350m. Green fields would be replaced with built structures although this part of the view is already characterized by a number of wood poles, overhead lines and electricity pylons. The transformer structures would be the tallest elements but they would not break the skyline. The magnitude of change would be Moderate, reducing to Slight by Year 15.</p> <p><b>Level of Effect:</b> The initial level of effect would be Major/Moderate (notable). The nature of these effects would be long-term (reversible), and adverse.</p> <p>The growth of perimeter planting along the northern side of the compound would steadily soften views of the built structures and reduce the level of effect over time. By Year 15, the effects would be Moderate, not notable.</p>
<p>R3 East Tarelgin (refer to Viewpoint 1: Figure 4a for views from the property)</p>	<p><b>Distance to the Proposed Development:</b> 60m</p> <p><b>Description:</b> The property comprises a two storey house and a single storey area to the east. It is located on the northern carriageway of the A70, facing south, with a small garden area and with primary open views on to the A70 and directly to the Site and the open landscape to the south.</p> <p><b>Magnitude of Change:</b> Part of the hedge removal and formation of the new Site access would be visible in the foreground. There would also be views to the main BESS compound at greater distance. The proposed infrastructure would be experienced in the context of existing large-scale HV pylons. The existing Coylton Substation is screened within the view. The hills and forestry to the south of the region form the back-drop to the view and the new elements would not break the horizon. The magnitude of change would be Moderate, reducing to Slight by Year 15.</p> <p><b>Level of Effect:</b> The effects would initially be Major/Moderate (notable), long-term (reversible), and adverse given the proximity of the Proposed Development at this location.</p> <p>Once the perimeter hedgerow planting and woodland and hedgerow planting is established on the eastern and northern boundaries of the Site, the new built elements would be partially screened, particularly during the summer months. By Year 15 the visual effects would reduce to Moderate, not notable.</p>
<p>R4 Alwyn Cottage</p>	<p><b>Distance to the Proposed Development:</b> 330m</p> <p>The single storey dwelling is located west of the Coylton Sub Station which, in addition to intervening vegetation, would fully screen the Proposed Development from view.</p> <p><b>No Change.</b></p>
<p>R5 West Tarelgin</p>	<p><b>Distance to the Proposed Development:</b> 450m</p> <p><b>Description:</b> This is a residential two-storey farm property adjacent to a farm shop, situated north of the A70.</p>

	<p><b>Magnitude of Change:</b> With the exception of the outermost edge of the new Site assess, the Proposed Development would be screened by the intervening trees and structures of Coylton Substation. The magnitude of change would be Negligible.</p> <p><b>Level of Effect:</b> The effects would be Negligible, long-term (reversible), and adverse. Growth of hedgerow planting at the new site entrance would further soften views of the Proposed Development, albeit the visual effects would remain Negligible (not notable).</p>
R6 Macquittiston	<p><b>Distance to the Proposed Development:</b> 450m</p> <p><b>Description:</b> The property is one and a half storey with main views to the north-east and all other views screened by adjacent buildings. There are some oblique angle views towards the Site although ground level is screened by landform. Some of the upper parts of structures including the transformer and possible some of the buildings would be visible beyond the intervening hedgerow, partially filtered by the trees and scrub located on the western boundary of the Site.</p> <p><b>Magnitude of Change:</b> The Proposed Development would contribute additional built development to the view, albeit would be experienced in the context of the existing electricity pylons within the local area including Coylton Substation. As such, effects would be limited. The magnitude of change would be Slight, reducing to Negligible by Year 15.</p> <p><b>Level of Effect:</b> The effects would initially be Moderate, long-term (reversible) and adverse given the proximity of the Proposed Development at this location. Over time the growth of the boundary trees (existing and proposed) would soften the appearance of the Proposed Development. By Year 15 the effects would be Moderate/Minor, not notable.</p>
R7 Bungalow east of Clydenoch	<p><b>Distance to the Proposed Development:</b> 630m</p> <p><b>Description:</b> Access to this property is via a farm track and the core path route. The property has an open aspect to the north with views across the lowland agricultural landscape towards the A70. There would be oblique views from the northern elevation of the property, to the north-west towards the Site. The Proposed Development would be visible within the context of the infrastructure of the Coylton Substation, contributing to the spread of built development within the view. The track would also be clearly visible.</p> <p><b>Magnitude of Change:</b> Although visible, the structures of the Proposed Development would be seen within the immediate context of large-scale HV pylons, as well as moving traffic on the A70, and experienced at an oblique angle. The magnitude of change would be Moderate, reducing to Slight by Year 15.</p> <p><b>Level of Effect:</b> The effects would initially be Major/Moderate (notable), long term reversible and adverse. The establishment of perimeter planting would steadily soften views to the built structures although it would not fully screen them given the slope of the Site. By Year 15, the level of effect would reduce to Moderate, not notable.</p>
R8 Clydenoch	<p><b>Distance to the Proposed Development:</b> 575m</p> <p><b>Description:</b> Access to this property is via a farm track and the core path route. Main views are to the north, although mature trees within the garden tend to limit or heavily filter most long views. There are partial / restricted views to the lowland agricultural landscape and the A70 to the north, and some of the existing large-scale HV structures associated with the Coylton Substation. There would be limited views to parts of the proposed access track, although most of the BESS compound would be screened.</p> <p><b>Magnitude of Change:</b> The Proposed Development would be only partially visible, at</p>

	<p>an oblique angle. The clearest views would be experienced during periods of foliage loss. It would be seen within an immediate context of a series of large-scale vertical structures and the moving traffic of the A70. The magnitude of change would be Slight/Negligible, reducing to Negligible by Year 15.</p> <p><b>Level of Effect:</b> The initial effects would be Moderate/Minor (not notable), long term reversible and adverse. The growth of perimeter planting would further soften views to the built structures over time. By Year 15, the level of effect would remain Moderate/Minor, not notable.</p>
R9 Bardarroch Pet Supplies (two properties)	<p><b>Distance to the Proposed Development:</b> 900m</p> <p><b>Description:</b> This bungalow has primary views orientated to the north-west. The property boundary is open and there are long views across the agricultural landscape to the north and north-west. Commercial premises and barns are situated to the south west of the residential property.</p> <p><b>Magnitude of Change:</b> The northern and taller elements of Proposed Development would be visible in the in the middle distance, experienced alongside the infrastructure of the Coylton Substation. The Proposed Development would account for a limited angle of view and would not notably widen the horizontal spread of existing built structures. The southern-most elements within the BESS compound would be partly screened by the intervening landform and hedgerow trees. The northern part of the compound, including transformer elements, would be seen directly in front of similar elements at the Coylton Substation. The magnitude of change would be Negligible.</p> <p><b>Level of Effect:</b> The effects would be Negligible, long term reversible and adverse. The growth of eastern perimeter planting would soften and potentially fully screen views to the built structures over time. By Year 15 the effects would be Negligible at most.</p>
R10 Bardarroch Farm (two properties)	<p><b>Distance to the Proposed Development:</b> 900m</p> <p><b>Description:</b> This group comprises a bungalow with open views to the north-west, and a two storey farmhouse with views that are limited by surrounding farm buildings.</p> <p><b>Magnitude of Change:</b> From the bungalow, the northern and taller elements of Proposed Development would be visible in the in the middle distance, seen close to the infrastructure of the Coylton Substation. The Proposed Development would account for a limited angle of view and would not notably widen the horizontal spread of existing built structures. The southern-most elements within the BESS compound would be mostly screened by the intervening landform and hedge trees. Northern part of the compound, including transformer elements, would be seen directly in front of similar elements of the Coylton Substation. The magnitude of change to views from the bungalow would be Negligible.</p> <p><b>Level of Effect:</b> The effects on views from the bungalow would be Negligible, long term reversible and adverse. The growth of eastern perimeter planting would further soften and potentially fully screen views to the built structures over time. By Year 15 the effects would be Negligible at most. There would be no views from the two storey farmhouse.</p>
R11 Treesmax	<p><b>Distance to the Proposed Development:</b> 860m</p> <p><b>Description:</b> This is a farmhouse with primary views orientated away from the Proposed Development, to the west and the east. Any views to the Proposed Development would be fully screened by intervening farm buildings.</p> <p><b>No change.</b></p>



## 11.2 Visual effects experienced by Recreational Receptors

Recreational receptors are considered to be of High sensitivity in all cases. The Appraisal is described below, listed in order of increasing distance from the Proposed Development.

### Core Path network

Core Paths C7, C9 and D19 form a continual route between Drongan and Lessnessock, 255m to the south of the Site at the closest point. Views from this combined route are illustrated in Viewpoints 2, 3 and 6 (**Figures 4b, 4c and 4f**, within Appendix 3).

**Table 4: Visual Effects on Recreational Users**

Recreational Receptor	Description of Effect
<p>Core Paths C7, C9 and D19 (refer to Viewpoints 2, 3 and 6: Figures 4b, 4c and 4f, which illustrate the view from the Core Path to the south and south-west of the Site).</p>	<p><b>Distance to the Proposed Development:</b> 255m at their closest point.</p> <p><b>Description:</b> These Core Paths form a link between Drongan in the west and Lessnessock in the east, extending via Treesmax, and the A70 at Laih Tarbeg, as illustrated on <b>Figure 3</b>. The routes largely follow a farm track over a distance of 5.1km on a loose ridgeline which trends in a north-east/south-west alignment. Users include recreational walkers, and riders of cycles and horses. The route is through primarily grazed agriculture and is largely open with some long views. As the path extends through central parts of the Study Area, views are increasingly influenced by existing infrastructure at Coynton Substation to the north, associated large-scale HV pylons (extending over the path in places) and a series of large agricultural barns, including those at Treesmax and Macquittiston to the north, which are prominent in views.</p> <p><b>Magnitude of Change:</b> Primary visibility to the Proposed Development would be from two sections of the route; comprising a short 715m section at Carston, and a 2km section between Treesmax and Clydenoch.</p> <p>From Carston, the Proposed Development would be partially visible beyond intervening trees. With reference to Viewpoint 6, the Proposed Development would increase the spread of built form in the view, albeit the proposed perimeter fence (which would be muted in colour) and proposed hedge and tree planting within the Site would soften the appearance of the Proposed Development and steadily screen the BESS area over time. Accordingly, from this section the magnitude of change would be Slight.</p> <p>The Proposed Development would become increasingly visible further to the east, as the user travels between Treesmax and Clydenoch. With reference to Viewpoint 2, from open vantage points near Clydenoch, the BESS compound and the access track would be visible beyond existing field boundary vegetation. The Proposed Development would increase the level of built form within the view, albeit would be lower-lying and smaller in scale than many of the existing elements, including large-scale HV pylons. From this section the magnitude of change would be Moderate at most (based on the closest vantage points in the vicinity of Clydenoch). The proposed hedge and trees planting within the Site would soften these views and steadily screen the BESS area over time.</p> <p><b>Level of Effect:</b> The Proposed Development would become increasingly visible further to the east on the route. There would be Moderate (not notable) effects from sections of the route at Carston, and Major/Moderate (notable) effects from sections closer to Clydenoch. From other sections there would be no discernible views of the Proposed Development. On the whole, the Proposed Development would be visible in the</p>

	<p>landscape to the north from a total of approximately 55% of the route (particularly for east-bound users). It is considered that effects on users of the routes as a whole would be Moderate and notable. The nature of these effects would be long-term (reversible), and adverse.</p> <p>The establishment of planting along the western, southern and eastern boundaries of the BESS compound would steadily soften views of the Proposed Development from this route, and reduce effects over time. By Year 15, the level of effect across the route as a whole would reduce to Moderate/Minor, not notable.</p>
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### 11.3 Visual effects experienced by Road and Rail Receptors

The sensitivity of road users and rail passengers is considered to be Medium in all cases unless otherwise stated.

**Table 5: Visual Effects on Road Users**

Property	Description of Effect
A70 (refer to Viewpoint 1 Figure 4a)	<p><b>Distance to the Proposed Development:</b> 0m</p> <p><b>Description:</b> The A70 extends east-west across the Study Area, covering approximately 5.3km. The A70 represents a fast-moving, well-used road on the northern side of the Site. Accordingly, users of the A70 are assessed as being of Low sensitivity to the Proposed Development.</p> <p><b>Magnitude of Change:</b> The ZTV indicates that potential views of the Proposed Development would be limited to a short distance measuring 800m, between Coylton Substation and East Tarelgin. These views would be subject to screening by intervening road-side vegetation. Actual visibility would be more restricted and focused within a 230m section to the east of the Coylton Substation. From here the BESS compound and the new road entrance would be visible to varying degrees, where they would be seen within the context of similar structures associated with the Coylton Substation (including road entrances) and large-scale HV pylons. Given the visual context and the speed of travel / short duration of view, the magnitude of change to road users over the length of the route would be Negligible. After 15 years the change would be imperceptible.</p> <p><b>Level of Effect:</b> The effects would be Negligible. The nature of these effects would be long-term (reversible), and adverse. By Year 15, the effects would remain Negligible.</p>
B7046 (refer to Viewpoint 6 Figure 4af)	<p><b>Distance to the Proposed Development:</b> 1.27km to the south-west at the closest point.</p> <p><b>Description:</b> The B7046 is a minor road located in the south-west part of the Study Area. The road passes through an undulating, mainly rural landscape over a section measuring 5.9km. The ZTV indicates potential views of the Proposed Development from fragmented sections of the route where it extends across areas of higher ground.</p> <p><b>Magnitude of Change:</b> Hedges line much of the route, screening some views towards the Site. However, there would be some clearer views to the Proposed Development from a number of localised sections, including those close to Carston and Whitehall, as well as more distant views east of Sinclairston (at distances of over 2km). Viewpoint 6 represents views from the closest section of the B7046. From this section of the road, the BESS compound would be visible, and would extend the spread of built development in the view, in association with the existing Macquittiston buildings and the Coylton Substation. However, the Proposed Development would represent a low-lying element, beyond large-scale HV pylons in the foreground, and would account for a narrow angle of view. The hedge and trees that are proposed on the western boundary would soften and largely screen the BESS area over time. The magnitude of change along this section would be</p>

	<p>Slight. Whilst the Proposed Development would be visible over further sections (measuring more than half of the route), it would be seen as an additional, relatively small built element in a largely rural landscape that is affected by existing structures with similar character. The magnitude on the route as a whole would be Slight at most, reducing to Negligible as the proposed tree planting becomes established.</p> <p><b>Level of Effect:</b> The effects would be Moderate/Minor. The nature of these effects would be long-term (reversible), and adverse. By Year 15 the level of effect would reduce to Minor/Negligible.</p>
<p>Minor road located to the south-east (refer to Viewpoints 4 and 5, Figures 4d and 4e)</p>	<p><b>Distance to the Proposed Development:</b> 300m south-east at its closest point.</p> <p><b>Description:</b> The minor road crosses the A70 in the eastern part of the Site and meets the B7046 in the south-east part of the Study Area, crossing a section measuring 4km.</p> <p><b>Magnitude of Change:</b> ZTV coverage across this route is fragmented and any actual visibility to the Proposed Development would be further restricted by intervening tree cover and road-side vegetation. Views of the Proposed Development would be extremely limited, occurring over short sections, typically oblique to the direction of travel, and experienced in the wider context of existing large-scale HV pylons. Across the route as a whole the magnitude of change would be Negligible. As the proposed tree planting within the Site becomes established views would further soften.</p> <p><b>Level of Effect:</b> The effects would be Negligible. The nature of these effects would be long-term (reversible), and adverse. At Year 15 the level of effect would remain Negligible.</p>
<p>Railway</p>	<p><b>Distance to the Proposed Development:</b> 300m to the east.</p> <p><b>Description:</b> The railway links with the Killoch Disposal point and the quarry to the north of the Site. Users are considered to have a Low sensitivity.</p> <p><b>Magnitude of Change:</b> ZTV coverage of this route is almost entirely absent, and limited to a short section north of Carston. Potential views of the Proposed Development would be fully screened from this section by intervening vegetation and the structures of Coylton Substation. There would be no change to existing views.</p> <p><b>Level of Effect:</b> None.</p>

## 12 Cumulative Effects

This section examines the potential cumulative effects of the Proposed Development in combination with other large-scale elements of infrastructure and power developments within the Study Area. In this instance, the assessment includes consideration of the following sites:

- Existing Coylton Substation (within the Site area);
- Existing overhead power lines extending broadly north-south from the Coylton Substation;
- The Killoch Colliery and Disposal Point (550m to the north); and
- The large shed at Macquittiston (480m to the west).

The following assessment describes the combined cumulative effects of the Proposed Development with other existing infrastructure development.

Landscape and visual receptors described in Sections 10 and 11 above as undergoing / experiencing a Negligible or Slight magnitude of change (or less), are excluded from consideration in the cumulative assessment on the basis that the Proposed Development would exert such a limited effect in its own

right that it would not meaningfully contribute to potential cumulative effects, and as such would not tip the balance from a minor cumulative effect to a notable cumulative effect.

## **12.1 Cumulative Landscape Effects**

### Cumulative Effects on the Agricultural Lowlands LCT 66

A number of large-scale developments are located within 1.5km of the Site. In addition to the Proposed Development, the existing Coylton Substation, overhead power lines extending broadly south from the Coylton Substation, the Killoch Colliery and Disposal Point and the large shed at Macquittiston are all located within the Agricultural Lowlands LCT 66, and therefore exert direct effects upon local landscape character in their own right. With reference to the preceding assessment of effects on landscape character (described in Section 10.2), the primary effects of the Proposed Development on the Agricultural Lowlands LCT 66 would be focused within approximately 300-400m of the Site to the south and 100m to the east, where the magnitude of change would typically be Moderate and the level of effect would be Moderate (notable in this instance). These effects would diminish at greater distances due to the containing influence of the existing landform and due to the presence of existing large-scale electricity infrastructure to adjacent to the Site.

There would be some coalescence of these effects with the characterising influence currently exerted by the existing developments in the surrounding area. The Proposed Development would augment the presence of the existing large-scale infrastructure / activity in the landscape, and extend its influence slightly further to the south of the existing Coylton Substation. However, the combined cumulative effects would remain relatively localised due to surrounding landform and the relatively small size of the Proposed Development and the low-lying elevation of the Site.

In summary, the Proposed Development would contribute to cumulative effects in combination with the existing Coylton Substation, overhead power lines extending broadly south from the Coylton Substation, the Killoch Colliery and Disposal Point and the large shed at Macquittiston. However, the net result would be to slightly extend the characterising influence of existing power-related infrastructure in a southerly direction. The close geographical proximity of the Proposed Development to the existing infrastructure is such that the characteristics of the wider Agricultural Lowlands LCT 66 would remain unchanged. The cumulative magnitude of change across the LCT as a whole at Year 1 would be Moderate based primarily on the presence of Coylton Substation, and the associated spread of overhead power lines, Killoch Colliery and Disposal Point and the large shed at Macquittiston. The Proposed Development would exert very limited incremental cumulative influence. The cumulative level of effect across the Agricultural Lowlands LCT 66 at Year 1 would be Moderate, not notable and adverse.

The growth of the mitigation planting in the Site would reduce the perceptual effects of the Proposed Development over time. By Year 15 the established planting would contribute to beneficial effects in views from the east and the west where it would be seen as a tree belt, extending the spread of

existing trees at Coylton Substation. However, given the ongoing characterizing influence of other existing large-scale infrastructure within the LCT, there would be no notable reduction in cumulative effects. As such, at Year 15 the cumulative magnitude of change would remain Moderate, and the cumulative effects would be Moderate, and not notable. However, the Proposed Development would exert very limited cumulative influence.

## 12.2 Cumulate Visual Effects

Coylton Substation and the associated spread of overhead power lines / large-scale HV pylons are visible in all views where there is cumulative visibility to the Proposed Development within the Study Area. In addition, the large barn at Macquittiston is also visible in a number of views from the south and west. These existing developments represent prominent visual elements within the landscape, which cause notable effects on views across the Study Area in their own right (particularly in views from the south-west, south and east). In most views, the Proposed Development would be experienced behind, or in line with these existing cumulative developments, thereby limiting its potential incremental cumulative influence within the view. The exceptions are as follows:

- On the Core Path C9 to the south and south-east of the Site (Viewpoint 2 West of Clydenoch), where the Proposed Development would be visible close to the viewer, extending the visible spread of infrastructure southwards relative to the Coylton Substation.
- In elevated locations to the east including the minor road near Provost Mount (Viewpoint 5), where the BESS structures would extend the horizontal spread of infrastructure from the Coylton Substation, in addition to built development at Drongan beyond.
- From the south-west, including the south-eastern edge of Drongan and the nearby section of the B7046 / Core Path D19 at Carston (Viewpoint 6), where the BESS compound would extend the horizontal spread of infrastructure associated with the Coylton Substation and the Macquittiston shed.

However, in each of these cases, the Proposed Development would represent a compact, low-lying element within views across an agricultural landscape that is already influenced by large-scale infrastructure. The Proposed Development would be experienced below the skyline, and the existing large-scale pylons that break the horizon would continue to represent the prominent features within the view. Accordingly, the Proposed Development would exert limited incremental cumulative influence on these views. There would not be any cumulative visual impacts with the Killoch Colliery and Disposal Point.

## 13 Conclusions

In summary, the Proposed Development would be located in an area of lowland farmland, approximately 1.8km north-east of Drongan. The Proposed Development would result in the permanent loss of a localised area of pastoral farmland within the Site, and the introduction of new elements of built form within a fenced compound. The local agricultural landscape incorporates various elements of infrastructure and human activity.

Electricity infrastructure in the local landscape comprises large-scale high voltage overhead power lines, which coalesce at the Coylton Substation within the western part of the Site. In addition, Killoch Colliery and Disposal plant are located 580m to the north-east of the Site, and a large (180m long) barn at Macquittiston is located in the landscape to the southwest. The A70 extends along the northern boundary of the Site and represents a busy, thoroughfare with fast-moving traffic.

Landscape effects have been appraised on landscape fabric, landscape character and designations. The current pastoral land use and minimal loss of trees or hedges within the Site would limit effects on the landscape fabric, giving rise to a Moderate/Minor effect. Whilst the loss of pastoral grassland and its replacement with hard-standing and built form is regarded as adverse, the introduction of new areas of meadow habitat, and native trees and hedgerow represent beneficial change. Overall, the effects on landscape fabric would be adverse.

The Proposed Development lies within Agricultural Lowland LCT 66. The proposed infrastructure shares some characteristics with the neighbouring Coylton Substation, and the proposed tree and hedge planting would strengthen and enhance the pattern and quality of the landscape. Over time the perimeter planting would largely screen the BESS and associated elements from wider parts of LCT 66. As a result, the majority of the Agricultural Lowlands LCT 66 would be unaffected. The key effects of the Proposed Development on this LCT would be focused within approximately 300-400m of the Site to the south, and 100m to the east, where the magnitude of change would typically be Moderate and the level of effect would be Moderate (notable in this instance). These effects would diminish at greater distances due to the containing influence of the existing landform and due to the presence of existing large-scale electricity infrastructure to adjacent to the Site. Considered across wider parts of the LCT and within the Study Area as a whole, effects would not be notable.

The Proposed Development would not affect any landscape designations.

Visual effects have been appraised in relation to residential and recreational receptors (including users of Core Paths), and road users. Views of the Proposed Development are primarily limited to sections of the A70 on the northern boundary, and from wider areas of the landscape to the east, south and south-west of the Site. In all instances the Proposed Development would be seen in close conjunction with the large-scale infrastructure of Coylton Substation and the associated pylons, and in some cases the large agricultural shed at Macquittiston. This spread of existing built development would limit the magnitude of change that the Proposed Development would exert upon existing vistas. In addition, the establishment of proposed mitigation planting within the Site would steadily screen or soften views to the BESS compound from all angles by Year 15, rendering visual effects neutral or beneficial in some instances. Notable, adverse visual effects would affect the following receptors at Year 1:

- Residents at R2: East Tarelgin Bungalow (Year 1), and R3: East Tarelgin, 80m north-east of the Site (Year 1);
- Residents at R7: Bungalow east of Clydenoch (Year 1) 630m east;

- Recreational users of Core Paths C7, C9 and D19 (which form a continuous route within the Study Area). In particular, key views would be experienced from localised sections of Core Path C9 near Clydenoch, 300m to the south-east (Year 1), and at Treesmax, 590m to the south-west (Year 1).

In all cases listed above, the establishment of planting along the boundaries of the BESS compound would steadily soften views of the Proposed Development over time. By Year 15, the level of effect experienced by these receptors would reduce to Moderate or Moderate/Minor, not notable.

In terms of cumulative effects, the Proposed Development would augment the presence of existing, power-related infrastructure in the locality, including Coylton Substation and large-scale pylons, as well as the large shed at Macquittiston. In terms of cumulative effects on Landscape Character, the Proposed Development would contribute a limited incremental cumulative influence. The net result would be to slightly extend the characterising influence of existing power-related infrastructure in a southerly direction. In terms of cumulative visual effects, the Proposed Development would typically be experienced behind, or in line with existing cumulative developments, thereby limiting its potential incremental cumulative influence within the view. From localised vantage points, comprising sections of Core Paths C9 and D19 and parts of the minor road network, the Proposed Development would slightly extend the horizontal spread of infrastructure from the Coylton Substation. However, the proposed infrastructure would represent a compact, low-lying element. The existing large-scale pylons would continue to represent the prominent features within the view based on their larger height and wider spread across the landscape. Accordingly, the Proposed Development would exert limited incremental cumulative influence on these views.

In conclusion, it is assessed that the Proposed Development could be accommodated at the Site with limited and relatively localised effects on landscape character and visual amenity.

## References

### Publications

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*Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3)*; Institute of Environmental Management and Appraisal and the Landscape Institute, 2013.

*Landscape Character Assessment: Guidance for England and Scotland*; Prepared on behalf of the Countryside Agency and NatureScot, Land Use Consultants, 2002.

*Landscape Sensitivity Assessment - Guidance for Scotland (Consultation Draft)*; NatureScot, 2020.

*Visual Representation of Development Proposals*; Landscape Institute Technical Guidance Note 06/2019 (2019).

*National Landscape Character Assessment* (web-based interactive map), NatureScot, 2019.

*Scottish Planning Policy*, Scottish Government, 2014.



## Appendix A: LVA methodology

### Landscape Effects

The starting point for the assessment of landscape effects was a desk-based review of published landscape assessments.

The sensitivity of the landscape to change resulting from a Proposed Development is not absolute and varies according to the existing landscape, the nature of the Proposed Development and the type of change being proposed. Good practice guidance differentiates between baseline sensitivity of the landscape and the sensitivity of a landscape to a specific development proposal. Accordingly, the concept of ‘sensitivity to change’ to new development, as described within the baseline published landscape character assessments, is distinct from the consideration of landscape sensitivity to the specific development proposal.

The baseline for consideration of landscape effects is the established landscape character. The landscape effects of a Proposed Development are considered against the key characteristics of the receiving landscape. The degree to which the Proposed Development may change ‘the distinct and recognisable pattern that makes one landscape different from another, rather than better or worse’ (Countryside Agency and NatureScot, 2002), enables a judgement to be made as to the significance of the effect in landscape character terms. This involves consideration of where the Proposed Development may give rise to a different landscape character type or sub-type.

In general terms, a distinctive landscape of acknowledged value (e.g. covered by a designation) and in good condition is likely to be more sensitive to change than a landscape in poor condition and with no designations or acknowledged value. General guidance on the evaluation of sensitivity is provided below; however, the actual sensitivity would depend on the attributes of the landscape receiving the proposals and the nature of those proposals.

In order to reach an understanding of the effects of development upon the landscape it is necessary to consider different aspects of the landscape as follows:

- **Landscape Fabric / Elements:** The individual features of the landscape, such as hills, valleys, woods, hedges, tree cover, vegetation, buildings and roads for example which can usually be described and quantified;
- **Landscape Quality:** The state of repair or condition of elements of a particular landscape, its integrity and intactness and the extent to which its distinctive character is apparent;
- **Landscape Value:** The importance attached to a landscape, often used as a basis for designation or recognition which expresses national or regional consensus, because of its special qualities/attributes including aesthetic or perceptual aspects such as scenic beauty, tranquillity or wildness, cultural associations or nature conservation interest; and
- **Landscape Key Characteristics:** The particularly notable elements or combinations of elements which makes a particular contribution to defining or describing the character of an area, which may include experiential characteristics such as wildness and tranquillity.

The sensitivity of the landscape to a particular development considers the susceptibility of the landscape and its value. The overall sensitivity is described as high, medium or low. This is assessed by taking into account the existing landscape quality, landscape value, and landscape capacity or susceptibility to change, which often vary depending on the type of development proposed and the particular site location, such that sensitivity needs to be considered on a case by case basis. This should not be confused with ‘inherent sensitivity’ where areas of the landscape may be referred to as inherently of ‘high’ or ‘low sensitivity’.

For example, a National Park may be described as inherently of high sensitivity on account of its designation, but it may prove to be less sensitive to particular development and/or the design of that development.

Alternatively, an undesignated landscape may be of high sensitivity to a particular development and/or the design of that development regardless of the lack of local or national designation. The main factors to consider are discussed as follows:

Landscape susceptibility according to GLVIA3 means “the ability of the landscape to accommodate the Proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies”. Judgements on landscape susceptibility include references to both the physical and aesthetic characteristics and the potential scope for mitigation that would be in character with the landscape.

The judgements regarding susceptibility and value of the landscape character are identified within the sensitivity table included within **Appendix B**. These relationships can be complex and value alone does not automatically or by definition have high susceptibility to all types of change. Examples and on the evaluation of landscape sensitivity are provided below:

**Table A.1: Landscape sensitivity criteria**

High Sensitivity	Landscape character, characteristics and elements which would generally be of lower landscape capacity or scope for landscape change, and of notable landscape value and quality. These are landscapes that may be considered to be of particular importance to conserve and which may be particularly sensitive to change if inappropriately dealt with.
Medium Sensitivity	Landscape character, characteristics and elements where there would be a moderate landscape capacity or some scope for landscape change. Often include landscapes of moderate landscape value and quality which may be locally designated.

Low Sensitivity	Landscape Character, characteristics and elements where there would be higher landscape capacity or scope for landscape change to accommodate the proposed type of development. Usually applies to landscapes with of lesser landscape susceptibility or higher landscape capacity for the Proposed Development.
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The level of landscape effects is not absolute and can only be defined in relation to each development and its location. It is for each assessment to determine the assessment criteria and thresholds using well informed and reasoned judgements.

The magnitude of landscape effect arising from the Proposed Development at any particular location is described as substantial, moderate, slight or negligible based on the interpretation of a combination of largely quantifiable parameters, as follows:

- degree of loss or alteration to key landscape features/elements or characteristics;
- distance from the Proposed Development;
- duration of effect;
- landscape backdrop to the Proposed Development;
- landscape context of other built development, particularly vertical elements.

In order to differentiate between different levels of magnitude the following definitions are provided:

**Table A.2: Landscape magnitude of change definitions**

Substantial	Total loss or extensive alteration to key landscape elements/features/characteristics of the baseline, or introduction of uncharacteristic elements which would give rise to a fresh characterising effect.
Moderate	Partial loss or alteration to one or more key landscape elements/features/characteristics of the baseline and/or introduction of elements that may be prominent, but not necessarily substantially uncharacteristic with the attributes of the receiving landscape (which could co-characterise parts of the landscape).
Slight	Minor loss or alteration to one or more key landscape elements/features/characteristics of the baseline and/or introduction of elements that may not be uncharacteristic with the surrounding landscape or may not lead to a characterising or co-characterising effect.
Negligible	Very minor loss or alteration to one or more key landscape elements/features/characteristics of the baseline and/or the introduction of elements that are not uncharacteristic of the surrounding landscape. Change would be barely

	distinguishable approximating to no change.
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Having established where the observation of varying levels of change to the landscape baseline may occur, the geographical extent of the change can be identified and a judgement made as to the level of effect in landscape character terms at varying scales.

The importance of the effect on the landscape resource may be determined by correlating the magnitude of the landscape effect (substantial, moderate, low or negligible) with the sensitivity of the landscape resource (high, medium or low). The following table sets out the main correlations between magnitude and sensitivity.

**Table A.3: Landscape effects matrix**

Landscape sensitivity	Magnitude of Change			
		Substantial	Moderate	Slight
High	Major	Major/Moderate	Moderate	Minor
Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible
Low	Moderate	Moderate/Minor	Minor	Negligible

**Visual Effects**

The sensitivity of potential visual receptors will vary depending on the location and context of the viewpoint, the activity of the receptor and importance of the view. Visual receptor sensitivity is defined as high, medium, or low in accordance with the criteria in Table A.4.

**Table A.4: Visual sensitivity criteria**

High Sensitivity	Residents within the curtilage of their homes; users of outdoor recreational facilities including footpaths, cycle ways and recreational road users; people experiencing views from important landscape features of physical, cultural or historic interest, beauty spots and picnic areas.
Medium Sensitivity	Road users and travelers on trains experiencing views from transport routes. People engaged in outdoor sport other than appreciation of the landscape, e.g. nature conservation, golf and water based recreation.
Low Sensitivity	Workers, users of facilities and commercial buildings (indoors) experiencing views from buildings.

The magnitude of landscape effect arising from the Proposed Development at any particular location is described as substantial, moderate, slight or negligible based on the interpretation of a combination of largely quantifiable parameters, as follows:

- distance of the viewpoint/receptor from the Proposed Development;
- duration of effect;
- extent of the Proposed Development in the view;
- angle of view in relation to main receptor activity;
- proportion of the field of view occupied by the Proposed Development;
- background to the Proposed Development;
- extent of other built development visible, particularly vertical elements.

It is assumed that the change would be seen in clear visibility and the assessment is carried out on that basis. Where appropriate, comment may be made on lighting and weather conditions. In order to differentiate between levels of magnitude the following definitions are provided in Table A.5:

**Table A.5: Visual magnitude of change definitions**

Substantial	Where the proposals would have a defining influence on the view. Change very prominent leading to substantial obstruction or complete change in character and composition of the baseline existing view.
Moderate	Where the proposals would be clearly noticeable and an important new element in the view. It may involve partial obstruction of existing view or partial change in character and composition of the baseline existing view
Slight	The proposals would be partially visible or visible at sufficient distance to be perceptible and result in limited or minor changes to the view. The character and composition, although altered will be similar to the baseline existing situation
Negligible	Change would be barely perceptible. The composition and character of the view would be substantially unaltered, approximating to little or no change.

The threshold for different levels of visual effects relies to a great extent on professional judgement. Criteria and local circumstances require close study and careful judgement.

Beneficial effects upon receptors may result from a change to a view by the removal of eyesores or through the addition of well-designed elements which add to the sense of place in a beneficial manner.

The following Table A.6 sets out the main correlations between magnitude and sensitivity.

**Table A.6: Visual effects matrix**

Visual sensitivity	Magnitude of Change				
		Substantial	Moderate	Slight	Negligible
High	Major	Major/Moderate	Moderate	Minor	
Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible	
Low	Moderate	Moderate/Minor	Minor	Negligible	

**Level of Effect**

As per the matrices in Table A.3 and Table A.6; the level of any identified landscape or visual effect has been assessed in terms of major, moderate, minor, negligible or none. These categories are based on the juxtaposition of viewer or landscape sensitivity with the predicted magnitude of change. This matrix should not be used as a prescriptive tool but must allow for the exercise of professional judgement. Effects which are judged to be Major/Moderate or Major are considered to be notable. Where Moderate effects are predicted, professional judgement is applied to ensure that the potential for notable effects arising has been thoroughly considered.

**Type of Effect**

Landscape and visual effects are described with reference to type (direct, indirect, secondary or cumulative), timeframe (short, medium, long term, permanent, and temporary) and whether they are beneficial or adverse (beneficial or adverse). The various types of effect are described as follows:

Temporary / Residual Effects

If a proposal would result in an alteration to an environment whose attributes can be quickly recovered, then judgements concerning the significance of effects should be tempered in that light. Commercial development applications typically include permanent, long term elements as well as minor alternations to landform resulting in residual landscape and visual effects.

Direct/Indirect

Direct and indirect landscape and visual effects are defined in Guidelines for Landscape and Visual Impact Assessment (GLVIA3). Direct effects may be defined “*result directly from the Proposed Development itself*” (para 3.22). An indirect (or secondary) effect is one that results “*from consequential change resulting from the Proposed Development*” (para 3.22) and is often produced away from the site of the Proposed Development or as a result of a complex pathway or secondary association. The direct or physical landscape effects of the Proposed Development would generally be limited to an area around the Proposed Development itself. Any indirect landscape effects are concerned with the view of the changes from outside the local landscape.

## Beneficial/Adverse

Landscape and visual effects can be beneficial or adverse and, in some instances, may be considered neutral. Beneficial effects upon landscape receptors may result from changes to the landscape involving beneficial enhancement measures or through the addition of well-designed elements, which add to the landscape experience or sense of place in a complementary manner.

The landscape impacts of the Proposed Development have been considered against the landscape baseline, taking account of the landscape characteristics. Taking a precautionary approach, changes to rural landscapes involving construction of man-made objects of a large scale are generally considered to be adverse, as they are not usually actively promoted as part of a district wide landscape strategy and therefore in the assessment of landscape effects they are assumed to be adverse, unless specified otherwise in the text.

It is important to recognise that for the same development, some may consider the visual effects for a development of this nature as adverse or beneficial. This depends to some extent on the viewer's predisposition towards landscape change but also the principle of commercial building features in the landscape. Taking a precautionary approach in making an assessment of the 'worst case scenario', the assessment considers that all effects on views which would result from the construction and operation of the Proposed Development to be adverse, unless specified otherwise in the text. It is noted, however, that not all people would consider the effects to be adverse.

## **Visualisation Methodology**

### Zone of Theoretical Visibility Map

Computer generated Zone of Theoretical Visibility (ZTV) Map has been prepared to assist in viewpoint selection and to indicate the potential influence of the Proposed Development in the wider landscape.

The ZTV has been prepared on an Ordnance Survey (OS) 1:25,000 base to indicate the extent of potential visibility on the basis of bare ground, and does not include the screening effects of intervening established tree cover. The ZTV indicates areas from which it might be possible to secure views of part, or parts, of the Proposed Development (building heights of up to 8m and BESS height of 4m). The ZTV illustrates the maximum overall visibility of the proposed structures and is modelled on. The ZTV has been prepared on the basis of 'bare ground' and does not take into account the potential screening effects of surrounding vegetation / woodland. However, use of the ZTV needs to be qualified on the following basis:

- There are a number of areas within the ZTV from which there is potential to view parts of the proposal, but which comprise land where the general public do not appear to exercise regular access;
- The large scale ZTV does not account for the screening effects and filtering of views as a result of intervening features, such as trees and forestry;
- The ZTV does not account for the likely orientation of a viewer – for example when travelling in a vehicle.

In addition, the accuracy of the ZTV has to be considered. In particular, the ZTV will be generated from OS Landform Panorama digital data based on a gridded terrain model with 5m cell sizes. The resolution of this model cannot accurately represent small-scale terrain features, which can therefore give rise to inaccuracy in the predicted visibility. This can lead to underestimation of visibility – e.g. a raised area of ground permitting views over an intervening obstruction, or can lead to overestimation of visibility – such as where a roadside embankment obscures a view.



## **Appendix B: Landscape Character Sensitivity**

The sensitivity of the area of Agricultural Lowlands LCT 66 represented within the 3km Study Area is assessed in detail below. Landscape sensitivity is not absolute and can only be defined in relation to each development and its location taking account of susceptibility as described in the methodology. To understand the sensitivity of a particular landscape and its location it is good practice to consider a range of criteria as set out in the table below.

The table below highlights the inherent sensitivities of this landscape to the Proposed Development proposed, with reference to relevant characteristics as described within NatureScot's 2019 National Landscape Character Assessment. Extracts from this document are included in italics.

**Table B.1: Sensitivity of the Agricultural Lowlands LCT 66 within the Study Area**

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape at the Site	Sensitivity Rating
<b>Physical</b>				
Scale	Large scale featureless landscapes	Small to medium scale landscapes with some scaling features	Field and settlement patterns form a <i>'Small to medium scale landscape'</i> . However the electricity pylons and elements of the Coylton substation are large-scale	Low-Medium
Openness	Enclosed and sheltered landscapes	Open and exposed landscapes	<i>'Fields often regular in shape and enclosed by beech or hawthorn hedges, with mature hedgerow trees giving the landscape a surprisingly wooded character'</i> which provides shelter. The rolling nature of the landform creates more sheltered areas.	Medium
Landform	Smooth regular flowing, flat or uniform landscapes	Dramatic, rugged and complex landscapes	<i>'Complex landform, gently increasing in height from the coastal fringe, dissected by many burns and streams draining to incised main river valleys to create an undulating lowland landscape.'</i> Some small but prominent hills also occur in places.	Medium
Land cover	Extensive areas of simple regular land cover (including farming and forestry)	Complex, intimate or mosaic cover	<i>'Landcover is predominantly pastoral, with some arable on lower and better soils'. '...beech or hawthorn hedges, with mature hedgerow trees...'</i>	Medium
Complexity and patterns	Simple and sweeping lines, linear features and patterns	Complex or irregular patterns	<i>'Complex landform although fields are regular in shape'</i> with regular pattern of small farms. The landscape is crossed by a concentrated network of roads and high voltage transmission lines.	Medium

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape at the Site	Sensitivity Rating
Built Environment	Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements	Established, traditional or historic built character	'Settlement pattern historic in origin based upon larger, more self-contained farmsteads set in a hinterland of fields'. Farms are accessed by a network of rural roads and there are several existing elements of electricity infrastructure, as well as an opencast mineral site.	Low
<b>Overall physical sensitivity</b>				Medium
<b>Perceptual</b>				
Wildness / Sense of Remoteness	Busy evidence of human activity	Remote, peaceful or sense and tranquillity, solitude and emptiness	There are several existing elements of electricity infrastructure, as well as opencast mineral sites, busy roads and dwellings that signify this is a landscape influence by human activity.	Low
Perception of Change	Dynamic or modern landscapes	Ancient landscapes, designed landscapes or with obvious historical continuity	As above, built form in the Site locality incorporates existing contemporary elements in the form of substations, overhead power lines and roads, suggestive of a modern landscape. Surrounding agriculture is more traditional in character.	Low
<b>Overall Perceptual Sensitivity</b>				Low
<b>Visual</b>				

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape at the Site	Sensitivity Rating
Landscapes that form settings, skylines, backdrops, focal points	Generally low lying landscapes without distinctive landform or horizon	Areas with strong features, focal points that define the setting or skyline	<p>There are expansive skyline views to the east and west and south from the Site. However the Site does not tend to be seen within skyline views as it is back-dropped to the north by topography which rises to north of the Site as far as the coal mine located at approximately 180 m AOD 500m north of the Site. The existing Coylton substation back-drops the Site to the west.</p> <p>The distant and elevated hills to the south are characterised by large areas of dark toned coniferous forestry.</p>	Low-Medium
Views intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area with distant horizons.	<p>The Site is located on a south-facing slope with an open aspect to the south, allowing some direct views of the Proposed Development. The adjacent Coylton Substation and local topography and vegetation cover restrict views across the wider landscape to the north, north-east and north-west.</p> <p>Rolling landform and the incidence of hedges limits intervisibility considerably beyond 2 km to the south</p>	Low-Medium
<b>Overall Visual Sensitivity</b>				Low-Medium
<b>Value</b>				
Rarity	Commonplace	Rare	The LCT encompasses a notable wider geographic area beyond the Study Area.	Low
Designated scenic quality	No specific designation	National or regional designation	There are no landscape designations within the Study Area.	Low

<b>Factors affecting the sensitivity</b>	<b>Lower Sensitivity</b>	<b>Higher Sensitivity</b>	<b>Characteristics of local landscape at the Site</b>	<b>Sensitivity Rating</b>
Cultural associations	No specific cultural associations	Strong cultural association	Some cultural / historical associations are evident including remains of cairns, Trabboch Castle and ancient woodland shelterbelts. Otherwise there few cultural associations are evident.	Low
Amenity and recreation	Limited amenity function	Well used for amenity/recreation, especially for National trails or other long distance routes	There are two main sections of core path in the Study Area. However, there are no promoted long distance routes or visitor attractions within the Study Area.	Low
<b>Overall Value</b>				Low
<b>Overall Sensitivity of the Agricultural Lowlands LCT</b>				<b>Low-Medium</b>

# Appendix C: Landscape Figures