



BRANXTON ENERGY STORAGE FACILITY

LANDSCAPE AND VISUAL APPRAISAL

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Table of Contents

1	Introduction.....	1
2	Guidance and Methodology.....	2
3	Assumptions.....	3
4	Consultation.....	4
5	Planning Policy Context.....	4
6	Baseline Description.....	6
7	Proposed Development and Mitigation..	11
8	ZTV and Viewpoint Analysis.....	13
9	Construction Stage Effects.....	19
10	Residual Landscape Effects.....	21
11	Residual Visual Effects.....	26
12	Cumulative Effects.....	36
13	Conclusions.....	41

Appendix A – LVA Methodology

Appendix B – Landscape Character Sensitivity

Appendix C – Special Landscape Areas: Special Qualities

Appendix D – Landscape Figures

1 Introduction

The proposed Branxton Energy Storage Facility (the 'Proposed Development') is located near Thornton, East Lothian. This Landscape and Visual Appraisal (LVA) has been prepared by independent landscape consultants TGP Landscape Architects Ltd. The LVA report has been prepared with the aim of identifying the predicted landscape and visual effects of the Proposed Development, comprising Control Building, Engineering Building, Battery Storage Blocks, MV and HV Switchgear, HV Transformer Compound, and ancillary works including fencing, security columns, access, parking and landscaping.

The LVA is augmented by supporting text and graphics within the appendices. This includes the following figures within **Appendix D**:

- Figure 1 – Zone of Theoretical Visibility and Viewpoints;
- Figure 2 – Landscape Character;
- Figure 3 – Landscape Designations and Recreational Routes;
- Figure 4 – Residential Receptors;
- Figure 5 – Cumulative Location Plan; and
- Figure 6 – Cumulative ZTVs.

1.1 Scope of the LVA

The LVIA 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. This includes the special characteristics of landscape planning designations, and 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;
- ZTV 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 of 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 elements of infrastructure; and
- Conclusions – a summary of the LVA results.

1.2 Study Area

A 5km 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 Zone of Theoretical Visibility (ZTV) maps and an early appraisal of potential effects for a Proposed Development of this scale. 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 is 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 landscape or visual sensitivity with the predicted magnitude of change, as set out in Table 1.

Table 1: Landscape & Visual Effects Matrix

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

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 (as shown in Figures 1-6). All distances listed within this LVA are in measured in relation to this area.
- The Proposed Development – comprises the Control Building, Engineering Building, Battery Containers, MV Switchgear, HV Transformers, and ancillary works. The main components to contribute to landscape and visual impacts are described in greater detail in Section 6.
- For the purposes of the LVA, the Proposed Development is regarded as being permanent. The construction stage would be temporary, approximately 12 months in duration.
- The landscape proposals outside and around the Site fenceline (comprising new planting) 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 the Scottish Government’s Energy Consents Unit in the form of a Screening Request. The Screening Response confirmed that the Proposed Development did not constitute EIA development. Further consultation was undertaken with East Lothian Council to confirm the scope of the LVA and viewpoint locations. In addition, two public exhibitions and virtual exhibition were held (4 – 5th April 2023) to inform local residents of the Proposed Development and obtain feedback. The project website (www.branxtonenergystorage.com) also has the viewpoint visualisations on display and invites feedback via a consultation form.

5 Planning Policy Context

The following section identifies the planning policy and other planning guidance material specifically relevant to the LVA. This includes consideration of the following:

- *Scottish Planning Policy*, Scottish Government, 2014;
- *SESplan Strategic Development Plan*, Strategic Development Planning Authority for Edinburgh and South East Scotland, 2013;
- *East Lothian Local Development Plan*, East Lothian Council, 2018;
- *Special Landscape Areas Supplementary Planning Guidance*, East Lothian Council, 2018;
- *Green Network Strategy Supplementary Planning Guidance*, East Lothian Council, 2018; and
- *Countryside and Coast Supplementary Planning Guidance*, East Lothian Council, 2018.

5.1 Scottish Planning Policy (SPP)

SPP aims to facilitate beneficial change to Scottish landscapes whilst maintaining and enhancing distinctive character. It acknowledges that landscape character is the result of the action and interaction of natural and / or human factors and stipulates that the siting and design of development should be informed by local landscape character. The relevant paragraphs within the SPP applicable to landscape are paragraphs 193 – 218.

5.2 SESplan 2013

The SESplan presents the spatial strategy for South East Scotland. This vision underpins the parameters of the Local Development Plans for each of the member authorities. Key aims include:

- Enabling growth by supporting local and rural development;

- Integrate landuse, steering new developments to appropriate locations;
- Conserve and enhance the natural environment; and
- Promote green networks and increase woodland planting.

5.3 East Lothian Local Development Plan 2018

The East Lothian Local Development Plan (LDP) sets out the Council’s planning strategy and policies to help stimulate, guide and manage future development within East Lothian. Relevant landscape-related policies from the East Lothian LDP are summarised as follows:

- Policy DC1: Rural Diversification – supports changes in use within countryside areas where this is an operational requirement and this complies with other relevant policy.
- Policy DC6: Development in Coastal Areas – recognises three different types of coastal areas (‘developed’, ‘constrained’ and ‘unspoilt’). The siting and design of new development must respect the qualities of the particular coastal location. With reference to LDP Map 4, the Site is not located within a Coastal Area, and there are no ‘unspoilt’ Coastal Areas within the Study Area.
- Policy DC8: Countryside Around Towns – seeks to protect open space around settlements from new development. The Site is not located within a Countryside Around Towns area, and there are no such areas within the Study Area.
- Policy DC9: Special Landscape Areas – seeks to protect the special character of Special Landscape Areas.
- Policy DC10: The Green Network – protects the existing green network and promotes enhancement measures within new development.
- Policy NH8: Trees and Development – protects the existing woodland resource, particularly where trees or groups of trees make a significant contribution to the setting and amenity of an area.
- Policy CH6: Gardens & Designed Landscapes – safeguards Gardens and Designed Landscapes from inappropriate development elements that would harm their special qualities.
- Policy DP1: Landscape Character – describes how new development must be integrated into its surroundings; responding to the landform and existing features that contribute to the character of the area. This includes inclusion of appropriate landscaping.
- Policy DP2: Design – describes how design of new development must be appropriate to its location in terms of positioning, size / massing and external colours.

The East Lothian LDP is augmented by a series of Supplementary Planning Guidance (SPG) documents that set out additional information in relation to the interpretation of key policies.

5.4 Special Landscape Areas SPG 2018

The Special Landscape Areas SPG describes the review and update of local landscape designations across East Lothian. As part of this process, landscape character across the region was also reviewed. This process was based on the pre-existing national Landscape Character Types (LCTs), with subsequent identification of specific Landscape Character Areas (LCAs) relating to individual geographic areas.

The Special Landscape Areas (SLAs) identified within the SPG replace the previously identified Areas of Great Landscape Value. The special qualities of each SLA are set out in the SPG, including key

features / characteristics, important views / scenic qualities, and cultural associations. With reference to LDP Policy DC9: Special Landscape Areas, there is an aim to protect these special qualities.

5.5 Green Network Strategy SPG 2018

This SPG supports LDP Policy DC10: Green Networks, and recognises the role of Green Networks in the connecting of people to nature and the landscape, whilst also contributing towards the setting of towns and villages. The SPG acknowledges the role of Core Paths, PRowWs, and trees in encouraging people to engage with outdoor spaces, and the contribution of green networks to strengthening landscape character and biodiversity.

The SPG identifies three recreational destinations within the Study Area; Skateraw Beach, Thortonloch Beach, and Bilsdean and Dunglass Coast, which are considered further within this LVA.

5.6 Countryside and Coast SPG 2018

The Countryside and Coast SPG presents additional information that focuses on housing within countryside, as well as development in coastal areas.

As noted above in relation to LPD Policy DC6: Development in the Coastal Area, the Site is not located within a Coastal Area, and there are no 'unspoilt' Coastal Areas within the Study Area.

Similarly, as noted above with reference to Policy DC8: Countryside Around Towns; the Site is not located within a Countryside Around Towns area, and there are no such areas within the Study Area.

6 Baseline Description

6.1 Local Landscape Context

Figure 1 illustrates the geographic location of the Proposed Development Site, which is located on land to the west of the East Coast Main Line, 670m to the east of Thornton.

The landscape within the Study Area comprises rolling farmland, primarily arable, with localised parcels of woodland. Fields are of moderate size, irregularly shaped, and bound by a mix of low stone walls, hedgerows and post-and-wire fencing. The field pattern is bisected by the A1 and East Coast Main Line transport corridors, which are broadly aligned north – south, parallel to the coast. A network of minor roads extends further inland. The landscape is further demarcated by watercourses and associated riparian woodland that meander through the lower-lying valleys within the undulating landform. These watercourses include Thornton Burn to the west of the Site, Ogle Burn to the southwest, and Bilsdean Burn to the south, which meander towards the coast to the east.

The coastline is characterised by a mix of sandy beaches and rocky outcrops, backed by steeply rising grassy banks. There are also areas of engineered flood / wave defenses focused at Torness Point, where Torness Power Station is located.

Settlement within the Study Area is limited to the small villages, hamlets and isolated dwellings. Cockburnspath represents the largest village in the area, located 3.1km to the southeast. Other small settlements in closer proximity include Thornton 670m to the west, Innerwick 2.1km to the west, and Oldhamstocks 2.8km to the south. These villages are accessed via the minor road network.

The limited residential settlement across the Study Area means that the landscape retains an element of rural agricultural character. However, the local environment is also influenced by existing built form. In addition to the A1 (with associated lighting columns near Torness) and the East Coast Main Line (with associated overhead cables), this includes Torness Power Station, long stretches of overhead electricity power lines and associated pylons, Oxwell Mains Cement Works, and two electrical overhead line Sealing End (SE) compounds at Thornton Bridge SE and Branxton SE with associated electricity pylons.

With reference to the undulating nature of the landform, the terrain within the Site ranges from approximately 40-50m AOD. The local landform rises to the south, towards the summit of Harp Law (62m AOD). Within the wider landscape, the landform gradually falls towards the coast to the east. Further inland, the rolling landform results in a series of ridges, hillocks and valleys. Blackcastle Hill and Cocklaw Hill form the largest ridge in the Study Area, reaching 320m AOD, 3.0km to the southwest of the Site.

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 Coastal Margins – Lothians LCT. The key characteristics and sensitivities are as follows:

Key Characteristics of the Coastal Margins – Lothians LCT

- *'Undulating agricultural hinterland of smooth convex curves.*
- *Shallow unobtrusive stream courses.*
- *Diverse coastal scenery provided by prominent rounded headlands and extensive rocky cliffs at the coast, with quiet sheltered coves containing small sand and pebble beaches backed by grassy dunes.*
- *Agricultural character with medium to large scale arable fields, contained by intermittent hedgerows and post-and-wire fences, although this has been fragmented in places to accommodate road, railway and power station development.*
- *Stone walls edge roadsides and occasional field boundaries on higher slopes.*
- *Stream courses delineated by scrub and broadleaf woodland.*
- *Scattering of traditional farms, houses and steadings served by numerous twisting minor roads.*
- *Parallel transport corridors of the A1 and rail line form significant linear features, with bridges, embankments and structures.*
- *Recreational facilities such as picnic sites, and caravan and camping sites.*

- *Extensive views of the open sea and industrial development due to flat terrain and few woodlands.'*

In addition to the above, landscape character at a local scale is described within East Lothian's Special Landscape Areas SPG (2018). This is based on the earlier Lothians Landscape Character Assessment (1998) commissioned by NatureScot (then 'Scottish Natural Heritage') and accordingly recognises consistent landscape typologies. The main difference is the identification of distinct Landscape Character Areas (LCAs) in relation to distinct geographic areas. This identifies the Site as being located within the Coastal Margins: Innerwick Coast LCA. The key characteristics are summarised below:

- *'Transition between the... fringes of the Lammermuir Hills and the sea.*
- *Rolling lowlands cut by numerous steep-sided stream valleys. The terrain opens out towards the coast into a broad, gently undulating plain.*
- *Medium to large arable fields... generally contained by clipped thorn hedgerows and post and wire fencing with isolated hedgerow trees.*
- *Stone walls edge roadsides and occasional field boundaries throughout the higher ground.*
- *Stream courses delineated by scrub and broadleaved woodland*
- *Small roads twist from the hillsides down to the sea.*
- *The A1 trunk road and the East Coast rail line sweep along the open plain.*
- *John Muir way walking route follows the coastline.*
- *The coastline...has... camping and caravanning sites as well as numerous picnic sites.*
- *Dunglass designed landscape lies on the southern boundary of the area.*
- *The area has a scattering of... farms and minor settlements.*
- *There is much industrial development located along the coast within this area. The most prominent being the cement works and associated quarrying and landfill site at Oxwell Mains and Torness Power Station to its south.*
- *Embankments, bridges and structures associated with the transport corridor are often also highly visible features.*
- *Extensive views from the predominantly unwooded plain towards the coast. The open sea dominates the views providing an atmosphere of tranquillity.*
- *The intrusive industrial development and the major transport corridor detract from the otherwise calm character of this landscape.'*

The sensitivity of local landscape character at the Site, specific to the Proposed Development and its locality, is assessed within **Appendix B** as being Medium.

Relationship to Adjacent Character Types

The Upland Fringes – Lothians LCT is located 620m to the southwest of the Site. Within the wider Study Area, the Coastal Farmland LCT and the Pastoral Upland Fringe Valley LCT are located 2.2km and 4.3km to the south east respectively. The key characteristics are listed below.

Key Characteristics of the Upland Fringes – Lothians LCT

- *'Broadly undulating, landforms forming a series of smooth rounded hills and slopes, some steep-sided and some gently sloping, shelving gradually from the Uplands northward to merge with rolling farmlands.*

- *Occasional hills where underlying geology incorporates harder strata.*
- *Varied scale, openness and land use reflecting transitional nature between upland and lowland.*
- *Incised watercourses have etched v-shaped valleys into the slopes, often forming deep cleughs.*
- *Occasional larger rivers flow through similar, but larger-scale, v-shaped channels;*
- *Remnant heather moorland and rough grassland on high ground gives way to improved grassland and then to arable land on the lowest elevations, with a parallel transition from post and wire fence and walls to beech and hawthorn hedges.*
- *Some areas of extensive coniferous forest, but tree cover is more frequent in the form of shelterbelts.*
- *Deciduous woodland is restricted to steeper land in river channels, though this includes some important ancient woodlands.*
- *Dispersed settlement pattern of farmsteads and clusters of cottages, with occasional small villages.*
- *Distinctive character of rural road network, dense in places, including local features such as fords and bridges.*
- *Quarries, overhead lines and busy A roads which have localised influence in some parts of the landscape;*
- *Clearly transitional landscape between lowland and upland characters.*
- *Views across the lowland, and to the coast in the east, backed by the ridge lines of the hills to the south.'*

Key Characteristics of the Coastal Farmland LCT

- *'Strongly rolling terrain interrupted by narrow, deeply-incised stream valleys.*
- *Coastline formed by high, near vertical cliffs carved into strongly-folded resistant sedimentary rocks.*
- *Land cover dominated by arable and pastoral fields of varying size.*
- *Gorse and other scrub common on steep slopes and exposed locations.*
- *Field boundaries of mature thorn hedges with occasional hedgerow trees on lower ground.*
- *Towns sited at the coast in sheltered folds and valleys.*
- *Diversity of small-scale topographic and land cover elements.*
- *Expansive views.'*

Key Characteristics of the Pastoral Upland Fringe Valley LCT

- *'Medium scale pastoral valley with flat floor enclosed by upland fringe pastures, often with rough grassland and moorland covered hills above.*
- *Smooth large scale landform modified in places by bluffs and moraine on valley floor, scree slopes or rock outcrops on valley sides.*
- *Narrow, often wooded tributary side valleys.*
- *Broadleaf woodlands and scrub on bluff slopes and scattered trees along river banks, occasional coniferous plantations and shelterbelts on valley sides.*
- *Valley floor pastures enclosed by drystone dykes with occasional hedgerows, interspersed with occasional patches of scrub, coarse grass and rushes.*
- *Scattered villages, farmsteads and mansion houses with policy woodlands.'*

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. With reference to **Figure 3**, the Site is not located within a landscape designation.

The wider Study Area encompasses the following SLAs:

- Thorntonloch to Dunglass Coast SLA, 220m to the east of the Site;
- Monynut to Blackcastle SLA, 780m to the west;
- Dunbar to Barns Ness Coast SLA, 1.6km to the north;
- Berwickshire Coast SLA, 2.2km to the southeast; and
- Doon Hill to Chesters SLA, 3.4km to the northwest.

The special qualities of these SLAs (as extracted from East Lothian Council's Special Landscape Areas SPG) are listed within **Appendix C**.

In addition, Dunglass Garden and Designed Landscape (GDL) is located 1.3km to the south of the Site at the closest point.

6.4 Visual Baseline and Receptors

The following section describes the visual receptors within the Study Area.

Local Residents

With reference to **Figure 1**, settlement within the Study Area from which there may be views of the Proposed Development comprises:

- Thornton 670m to the west;
- Innerwick 2.1km to the west;
- Oldhamstocks 2.8km to the south;
- Pathhead / Cove, 2.8km to the southeast; and
- Cockburnspath, 3.1km to the southeast.

Other residents within the Study Area are limited to dispersed dwellings and farmsteads outside these settlements. With reference to **Figure 4**, those located within 1km of the Site comprise:

- Linkshead, 180m to the northeast;
- No.s 9 and 11 Thorntonloch Holdings, 250m to the north;
- No. 8 Thorntonloch Holdings, 380m to the north;
- Lawfield, 400m to the southeast;
- Thornly, 440m to the north;
- No.s 12 and 13 Thorntonloch Holdings, 480m to the west;
- Thorntonloch, 560m to the north;
- Thornfield, 570m to the northwest;
- No. 16 Thorntonloch Holdings, 670m to the northwest;
- No.s 6 and 14 Thorntonloch Holdings, 720m to the west;

- Thornton Mill, 790m to the northwest;
- Branxton, 830m to the southwest;
- Station House, 950m to the northwest; and
- Birnieknowes, 960m to the southeast.

Recreational Receptors

With reference to **Figure 3**, recreational routes and outdoor destinations / attractions within the Study Area are listed below:

- Core Path network, extending 230m to the northeast of the Site at the closest point;
- National Cycle Route (NCR) 76, 230m to the northeast of the Site at the closest point;
- John Muir Link, 300m to the northeast at the closest point;
- Thorntonloch Beach, 360m to the northeast;
- Thorntonloch Caravan Park, 700m to the north;
- Dunglass GDL, including remains of Collegiate Church, 1.3km to the south;
- Bilsdean and Dunglass Coast (including Castle Dykes), 1.6km to the southeast;
- Skateraw Beach, 2.0km to the northwest;
- Southern Upland Way / Berwickshire Coastal Path / Sir Walter Scott Way, 3.2km to the southeast; and
- Thurston Manor Leisure Park, 3.7km to the west. (outside)

Road and Rail Receptors

Potential road and rail receptors within the Study Area comprise drivers / passengers on the following key routes:

- East Coast Main Line, which extends along the northeastern Site boundary;
- A1, located 230m to the northeast at the closest point;
- A1107, 4.9km to the southeast.

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 on **Figure 1**. The Proposed Development would involve localised areas of ground clearance to facilitate construction within the Site, and the introduction of the following key elements:

- 1no. Control Building, 25 x 12m footprint, 4m height;
- 1no. Engineering Building, 25 x 12m footprint 4m height;
- 278no. Battery Storage Blocks, 6 x 19.2m, 2.9m height;
- 8no. MV Switchgear containers, 6 x 19.2m footprint, 3m height;
- 1no. HV Transformer compound (including grid connection), 4.4m height;

- 1no. Scottish Power 400kV Control Building, 25 x 12m footprint, 4m height;
- Site fencing, 3.0m height;
- 12no. CCTV security columns 6.0m height,
- access, parking, spare parts area, landscaping;
- Underground Cables (UGC) connecting the Site to Branxton 400kV GIS substation; and
- Landscape planting and mitigation features.

The LVA takes cognisance of each of these elements and makes reference to them within the appraisal where relevant.

7.2 Landscape Design and Mitigation

The location of the Proposed Development has been chosen to avoid any notable ridgelines or visually prominent sections of skyline. Furthermore, the Site is located in close proximity to the proposed Scottish Power Energy Networks Branxton 400kV GIS Substation (ref: 21/01569/PM), which represents a key node in the power transmission network. This close proximity negates the need for a lengthy cable connection, thus minimising potential effects and allows the connection to the substation to be made via underground cable.

The Site avoids any direct effect on any landscape designation, and is also located outside the 'Coastal Area' as recognised within the LDP for its greater sensitivities. Similarly, its location at the side of the East Coast Main Line ensures it is spatially separated from the main residential settlements scattered across the wider landscape. The undulating landform in the surrounding landscape also means that potential views of the Proposed Development would be restricted across wider parts of the Study Area.

In terms of design, the submitted proposals incorporate a comprehensive mitigation strategy that seeks to integrate the Proposed Development into the surrounding landscape. This involves consideration of the scale and spread of the Proposed Development, and the most appropriate methods of lessening their potential influence on landscape and visual amenity. 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 tallest element of proposed built form comprises the HV Transformers. These would be located in the southwestern part of the Site on a platform area that would be countersunk below the existing ground level in order to limit potential visibility from surrounding areas, in particular from coastal areas to the east. The maximum height of this infrastructure would be approximately 4.4m above existing ground level.
- In terms of colour and materials, the security fencing would be painted with a recessive colour (RAL 6003: Olive Green, or similar approved) to soften the appearance of the Proposed Development, and screen potential views of infrastructure within central parts of the Site.
- The Battery Containers would also be painted with a recessive colour (RAL 6003: Olive Green, or similar approved) to further soften the appearance of the Proposed Development;

- Proposed landscape works would incorporate the creation of native hedgerow planting around peripheral parts of the Site (as per Planning Drawing 002a: BESS Layout Plan, drawing no. 4852_DR_P_0001). This would extend along the full length of the Site perimeter. The planting approach would be based on mixed native species to provide visual containment and partial screening of the proposed built form (including boundary fencing) and create a soft, green frontage to the development. The hedgerow would be grown to a height of 3 – 3.5m and thereafter maintained at that height;
- The selected species for the native hedgerow would comprise Rowan, Elder, Dog Rose, Holly, Hawthorn and Hazel, or similar;
- In addition, a copse of woodland edge planting would be located in the northwestern part of the Site, comprising mixed native broadleaved species. The selected species for the woodland edge would comprise Elder, Willow, Blackthorn, Hawthorn and Field Maple, or similar;
- Species-rich wildflower meadow (comprising Hedgerow Meadow Mix (SCM4) by Scotia Seeds or similar) would be introduced around peripheral parts of the Site to further soften the appearance of the Proposed Development and provide enhancement to local biodiversity. This would be sown at the first available season and would establish rapidly thereafter.

7.3 Issues Scoped Out of Assessment

As described in Section 7.1, the Proposed Development includes 6.0m high CCTV security columns. These security columns would incorporate motion-detection lighting. On the basis that these security columns are located within the secure fenced area, within a Site that would be unmanned during night-time hours, there would be no night-time illumination of the Site, or light spillage into adjoining areas under normal operating conditions. Accordingly, the potential effects of lighting during hours of darkness are excluded from further assessment.

8 ZTV and Viewpoint Analysis

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

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

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 buildings. The ZTV has been prepared based on Digital Surface Modelling (vertically accurate to within +/-1m in areas of minimal vegetation and where the slope is less than 20 degrees).

With reference to the ZTV, the geographical extent of potential visibility would be focused within approximately 1km of the Site, extending outwards across higher ground primarily to the west / northwest. ZTV coverage across these areas is extremely fragmented, reflecting the undulating nature of the landform. Potential visibility across more distant higher ground to the southeast would

be even more fragmented and localised.

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. Following consultation with East Lothian Council, and 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 publically accessible locations within the Study Area (see **Figure 1**).

Viewpoints 2 – 4 and 6 are illustrated as photomontages, illustrating the form and appearance of the Proposed Development at completion ('Year 1'). These viewpoints are also illustrated to show the appearance of the Proposed Development once the proposed planting measures have had time to establish, after ten years ('Year 10').

Viewpoints 1 and 5 are illustrated as annotated photo-sheets, showing the geographic extents of the Proposed Development within the surrounding landscape context. In each case, the Proposed Development would be subject to intervening screening by landform and vegetation, hence would be barely discernible.

Viewpoint 1: View southeast from Westerton Road, Keith

This viewpoint is located at the side of the A1, on the route of NCR 76 / Core Path 309, 554m to the southeast of the Proposed Development. The viewpoint is located within the Coastal Margins – Lothians LCT. It is representative of transient views experienced by road users and recreational cyclists / walkers. The existing view is characterised by the carriageway in the foreground, with the rolling farmland beyond, which forms a ridge in the middle distance. The embankment for the East Coast Main Line, and the overhead cables that extend along its length, are visible behind the nearby stone wall. Other elements within the view include scattered tree cover, pylons and the tip of the stack at the Oxwell Mains Cement Works, as well as Torness Power Station to the north.

Predicted View

The Proposed Development would be located behind the ridgeline in the foreground and the embankment of the East Coast Main Line. Accordingly, potential views of the Proposed Development would be extremely restricted and the proposed infrastructure would be barely discernible.

Effects on Visual Amenity

The sensitivity of road users on the A1 at this location is assessed as being Medium. The sensitivity of cyclists on NCR 76 and walkers on the Core Path network is assessed as High. The Proposed Development would be predominantly screened from view and would be barely discernible. The magnitude of change would be Negligible and the level of effect in each case would be Negligible.

Landscape Effects

The Proposed Development would result in no discernible change to the existing landscape

characteristics at this location. The magnitude of change on this part of the Coastal Margins – Lothians LCT would be Negligible and the level of effect would be Negligible.

Viewpoint 2: View looking east from Thornton

This viewpoint is located on the eastern edge of Thornton, 619m to the west of the Site, within the Coastal Margins – Lothians LCT. It is representative of views experienced by local residents on the edge of the settlement closest to the Site. The existing views to the east are characterised by rolling arable farmland in the foreground, demarcated with post and wire fencing. Beyond the foreground fields, there are clear panoramic views out to sea, and towards the distant coastal headlands to the southeast. Built form within the view comprises overhead telecoms lines in the foreground, as well as more distant masts near the coast to the east, and wind turbines on the horizon to the southeast (Penmanshiel Wind Farm).

Predicted View

The Proposed Development would be located beyond an intervening rise on the landform. As such, views would be restricted to a relatively short section of perimeter fencing and the tops of the HV transformers. These elements would be experienced in a visually discreet position, well below the distant horizon. The muted colours of these elements would further reduce their influence on the view. As the proposed boundary planting along the outer edge of the Site establishes over time, views of the proposed boundary fencing and the transformers would become increasingly screened from view.

Effects on Visual Amenity

The sensitivity of residents at this location is assessed as being High. The Proposed Development would represent a relatively discreet addition to the existing view. The magnitude of change would be Slight/Negligible at most, resulting in a Minor level of effect.

By Year 10, the established native planting along the Site boundary would almost fully screen the Proposed Development from view. The resultant magnitude of change would reduce to Negligible and the level of effect would reduce to Negligible.

Landscape Effects

The Proposed Development would represent the introduction of new built form to the local landscape, which is assessed as being of Medium sensitivity. However, the extent of intervening screening, discreet location below the horizon, and the muted colours in accordance with the surrounding context means that potential effects on local landscape character would be limited. The magnitude of change would be Slight/Negligible at most, resulting in a Minor level of effect.

By Year 10, the established native planting along the Site boundary would further reduce effects on local landscape character. The magnitude of change would reduce to Negligible and the level of effect would reduce to Negligible.

Viewpoint 3: View looking south from Thorntonloch

This viewpoint is located at Thorntonloch, 661m to the north of the Site, within the Coastal Margins

– Lothians LCT. It is representative of views experienced by local residents. The existing views to the south are characterised by rolling, steadily rising farmland. The field pattern forms a mosaic of differing textures, augmented by localised tree cover. Built form incorporates turbine blades of Kinegar Wind Farm and a row of pylons extending along the skyline. In addition, there are views of scattered dwellings and telecoms lines in the lower-lying slopes, as well as the route of the A1 and the East Coast Main Line (the latter emphasised by the associated overhead cables).

Predicted View

The Proposed Development would be located on the rising landform to the south, beyond localised tree cover and undulations in the intervening landform. The proposed infrastructure (battery storage and perimeter fencing) would be located below the distant horizon, and back-clothed by farmland beyond. These elements would account for a relatively wide horizontal angle of view (26°), albeit a very narrow vertical field of view. They would be experienced in the middle distance, between the existing infrastructure that marks the East Coast Main Line and the more distant row of pylons. The muted colours of these elements would blend with the background landscape, reducing their influence on the view. As the proposed planting along the perimeter of the Site establishes over time, views of the Proposed Development would steadily soften. By Year 10, there would be filtered views of the battery storage containers, whilst the boundary fence would be fully screened.

Effects on Visual Amenity

The sensitivity of residents at this location is assessed as being High. The Proposed Development would represent the addition of new infrastructure within the view, albeit its influence would be restricted by intervening screening, muted colour and back-clothing by the distant landscape. On balance the magnitude of change would be Moderate/Slight, resulting in a Moderate level of effect, which is considered notable in this instance based on the horizontal field of view occupied by the proposed infrastructure.

By Year 10, the established native planting along the Site boundary would almost fully screen the Proposed Development from view. The resultant magnitude of change would reduce to Negligible and the level of effect would reduce to Minor.

Landscape Effects

From this location the Proposed Development would represent the introduction of new built form in the rising landscape to the south. The new infrastructure would be located beyond intervening elements of built form, and the muted colours would be in accordance with the surrounding context. On balance, the magnitude of change on local landscape character (of Medium sensitivity) would be Slight, resulting in a Moderate/Minor level of effect.

By Year 10, the established native planting along the Site boundary would soften the appearance of the Proposed Development and thereby reduce effects on local landscape character. Accordingly, the magnitude of change would reduce to Negligible and the level of effect would be Minor/Negligible.

Viewpoint 4: View looking north from Birnieknowes

This viewpoint is located at an elevated vantage point on the minor road network near Birnieknowes, 898m to the south of the Site, within the Coastal Margins – Lothians LCT. It is representative of transient views experienced by local road users. The existing views to the north are characterised by mixed farmland demarcated by hedgerows or post and wire fencing in the foreground, as well as open views of the sea beyond. The local landform is undulating, yet steadily dropping downwards towards the coast to the north / northeast. Built form within the view incorporates Torness Power Station, the A1 transport corridor (and associated lighting columns), the East Coast Main Line with associated electrical overhead lines, as well as telecoms lines and masts. Barns Ness Lighthouse is visible on the lower-lying coastal edge in the distance.

Predicted View

The Proposed Development would be located in the lower-lying landscape in the middle distance. Due to the elevated nature of the viewpoint, there would be relatively open views of parts of the proposed infrastructure, including battery storage, transformers and perimeter fencing. These elements would be experienced in the context of Torness Power Station and the A1 transport corridor. The intervening landform would result in partial screening. This includes the hillock of Harp Law which would fully screen the infrastructure in the southern corner of the Site. The muted colours of the proposed infrastructure would blend with the background landscape, reducing their influence on the view. As the proposed planting along the perimeter of the Site establishes over time, views of the Proposed Development would slightly soften.

Effects on Visual Amenity

The sensitivity of road users at this location is assessed as being Medium. The Proposed Development would represent the addition of new infrastructure within the view, in close proximity to existing elements of built form. This includes Torness Power Station, which would continue to form a focal point within the views based on its scale, and the A1 transport corridor, which would continue to influence northerly views based on the frequent movement of traffic. The Proposed Development would represent a relatively discreet addition, in a low-lying position, well below the horizon. The magnitude of change would be Slight, resulting in a Moderate/Minor level of effect.

By Year 10, the established native planting along the Site boundary would soften the edges of the Proposed Development. However, the elevated nature of views from this vantage point mean that there would continue to be views of infrastructure within central parts of the Site. On balance, the magnitude of change would reduce to Slight/Negligible and the level of effect would be Minor.

Landscape Effects

The Proposed Development would represent the introduction of new built form in the low-lying landscape to the north. The new infrastructure would be located in the context of surrounding large-scale built form and the linear A1 transport corridor. The muted colours would be in accordance with the surrounding landscape context. On balance, the Proposed Development would exert limited influence on existing landscape character. The magnitude of change would be Slight/Negligible,

resulting in a Minor level of effect.

By Year 10, the established native planting along the Site boundary would soften the edges of the Proposed Development. However, the level of effect would remain unchanged.

Viewpoint 5: View looking southeast from the A1

This viewpoint is located at the side of the A1, on the route of NCR 76 / Core Path 310, 1301m to the northwest of the Proposed Development. The viewpoint is located within the Coastal Margins – Lothians LCT. It is representative of transient views experienced by road users and recreational cyclists / walkers. The existing view is characterised by the carriageway and associated lighting columns in the foreground. The landscape beyond comprises rolling farmland with localised tree cover and scattered dwellings and farmsteads. Other built form within the view comprises telecoms lines, overhead cables along the East Coast Main Line, and the electricity substation at Station House. There are also views of pylons extending along the skyline, as well as the tops / blades of the two turbines at Kinegar Wind Farm, and more distant wind turbines at Penmanshiel Wind Farm.

Predicted View

The Proposed Development would be located beyond undulations in the intervening landscape and scattered tree cover. As a result, potential views of the Proposed Development would be extremely restricted and the proposed infrastructure would be barely discernible.

Effects on Visual Amenity

The sensitivity of road users on the A1 at this location is assessed as being Medium. The sensitivity of cyclists on NCR 76 and walkers on the Core Path network is assessed as High. The Proposed Development would be predominantly screened from view and would be barely discernible. The magnitude of change would be Negligible and the level of effect in each case would be Negligible.

Landscape Effects

The Proposed Development would result in no discernible change to the existing landscape characteristics at this location. The magnitude of change on this part of the Coastal Margins – Lothians LCT would be Negligible and the level of effect would be Negligible.

Viewpoint 6: View looking northeast from minor road near Branxton

This viewpoint is located on the minor road network near Branxton, 988m to the southwest of the Proposed Development (within the Upland Fringes - Lothians LCT). It is representative of views experienced by local road users on an open and elevated section of the route. The existing view comprises rolling farmland with scattered tree cover and thickets of gorse. Existing infrastructure within the view comprises electrical overhead lines in the foreground with associated pylons, telecoms lines and masts in the middle distance and Torness Power Station beyond. There are also views of lighting columns along the route of the A1 and overhead cables along the East Coast Main Line. Other built form includes scattered dwellings and large-scale agricultural barns.

Predicted View

Potential views of the Proposed Development would be partly screened by the intervening

landform, including the rounded hillock of Harp Law. There would be partial views of the Proposed Development to either side of this hillock. The proposed infrastructure would be experienced below the horizon, in the same field of view as the existing masts located near the coast. The recessive colour of the proposed infrastructure and back-clothing by the landscape beyond would reduce their influence on the view. As the proposed planting along the perimeter of the Site establishes over time, views of the Proposed Development would slightly soften.

Effects on Visual Amenity

The sensitivity of road users at this location is assessed as being Medium. The Proposed Development would represent a new element of infrastructure within the view, albeit in a relatively discreet location, in the context of existing built form. Torness Power Station would continue to form a focal point within the view based on its scale. The magnitude of change would be Slight, resulting in a Moderate/Minor level of effect. By Year 10, the established native planting along the Site boundary would soften the edges of the Proposed Development. However, the elevated nature of views from this vantage point mean that there would continue to be views of infrastructure within central parts of the Site. Accordingly, the overall level of effect would remain unchanged.

Landscape Effects

The Proposed Development would represent the introduction of new built form in the low-lying landscape to the northeast. The new infrastructure would be located in the context of surrounding built form and infrastructure. The muted colours would be in accordance with the surrounding landscape context. On balance, the Proposed Development would exert limited influence on existing landscape character. The magnitude of change would be Slight/Negligible, resulting in a Minor level of effect. By Year 10, the established native planting along the Site boundary would soften the edges of the Proposed Development. However, the level of effect would remain unchanged.

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 office 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 programme is not known at this stage, albeit is anticipated to be of 12 months duration. The associated effects would be temporary and would mainly arise through the gradual

introduction of 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, 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. However, given the arable nature of the farmland within the Site, there is no permanent ground cover, or notable features of landscape value such as trees. As a result, ground clearance operations would be very limited. The existing field boundary (stone wall) that extends northwest – southeast through the centre of the Site would be retained, with the exception of a very short section at the southeastern end to facilitate the introduction of the internal access track.

In terms of landscape fabric, the existing arable farmland within the Site is considered to be of Low sensitivity to the Proposed Development. This is due to its commonality in the surrounding area, the absence of features of landscape value, and the inherent seasonal change in colour and texture that is common to arable landuse. The construction operations would introduce temporary new elements within the Site, such as laydown areas and the temporary compound / site office. However, there would be no discernible loss of landscape features. On balance, the magnitude of change 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 Coastal Margins - Lothians LCT (Innerwick Coast LCA). The construction operations would result in the disturbance of the existing ground cover, introduction of temporary fencing / laydown areas, and an increase in the intensity of human activity and vehicular movements within the Site. However, the locality is already influenced by human activity, including large-scale built form at Torness Power Station, as well as vehicular and rail traffic along the A1 and East Coast Main Line (and the associated infrastructure that extends along these transport corridors, comprising overhead cables and telecoms lines). The Coastal Margins - Lothians LCT (Innerwick Coast LCA) is assessed as being of Medium sensitivity to the Proposed Development. On balance, the magnitude of change during the construction stage would be Moderate, resulting in a Moderate effect. This is not considered notable in this instance based on the limited geographic area affected and the temporary nature of the works.

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 containing effect of surrounding landform in combination with the low-lying nature of activities associated with site clearance /

excavation. The most open views of the Proposed Development would be experienced by passengers on the East Coast Rail Line where it extends along the northeastern edge of the Site, and from localised vantage points on higher ground to the south / southwest of the Site that look downwards over the Site. These vantage points primarily coincide with localised parts of the road network and isolated dwellings.

The views experienced by rail passengers would be at close proximity, albeit transient and of very short duration due to an intervening embankment along the edge of the Site. Views from elevated vantage points to the south / southwest would typically be experienced at greater distance, where the construction activities would be viewed in the wider context of Torness Power Station and other elements of infrastructure / transport corridors (see Viewpoints 3 and 6). In each case, the construction activities would be experienced below the skyline, and would be back-clothed by the distant landscape.

Along with 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 proposed infrastructure (which are considered below under 'Operational Effects'). The influence of construction activities on existing views would be reduced through good site management.

On balance, the visual magnitude of change during the construction phase would be Slight, resulting in a Moderate/minor effect for rail passengers and road users (of Medium sensitivity) and Moderate at most for local residents (of High sensitivity). These effects are assessed as not notable based on the temporary nature of the construction activities.

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 arable farmland, which is void of any notable features of landscape value, and accordingly is assessed as being of Low sensitivity to the Proposed Development. The only feature within the Site comprises a low stone wall that demarcates the existing field boundary, which would be retained with the exception of a very short section at the southeastern end to facilitate the introduction of the internal access track.

The Proposed Development would result in the permanent loss of an area of open farmland situated adjacent to the East Coast Main Line (approximately 11.6Ha) and its replacement with the proposed infrastructure as listed in Section 7.1. The Proposed Development would also incorporate new areas of native hedgerow and woodland edge planting, and associated species-rich meadow (as described in Section 7.2). These elements would represent the addition of beneficial landscape features to the locality that would exert increasing influence over time as they become more established.

On balance, the magnitude of change upon the fabric within the Site would be Moderate, giving rise

to a Moderate/minor level of effect.

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 development may be considered to be consistent with or at odds with it; and how the proposal would be perceived within its setting.

Coastal Margins – Lothians LCT (Innerwick Coast LCA)

The Proposed Development would be located within the Coastal Margins – Lothians LCT (Innerwick Coast LCA). With reference to sensitivity analysis within **Appendix B**, the local landscape character at the Site is assessed as being of Medium sensitivity to the Proposed Development. The effects on landscape character would be direct (predominantly affecting the Site itself) and indirect (affecting the visual and perceptual characteristics of the surrounding area).

In terms of direct effects, existing ground cover in the locality of the Site comprises arable farmland, typical of this LCT. There would be no notable loss of valued natural features to facilitate introduction of the proposed buildings or associated infrastructure. The proposed Site access would make use of the existing farm access tracks, negating the need for lengthy new links to the existing road network. The Proposed Development would incorporate native woodland edge planting and native hedgerow along the Site boundary, which would represent beneficial elements within the local landscape, whose influence on landscape character would steadily increase over time in accordance with their establishment.

In terms of indirect effects, ZTV coverage is relatively widespread across local areas within approximately 1km of the Site. However, due to the undulating nature of the landform that is characteristic of this LCT (with its *'smooth convex curves'*), the Proposed Development would typically be partly screened within this area (see Viewpoints 1 and 2). The proposed infrastructure would be fully screened from lower-lying locations within this area, including the valley of the Thornton Burn to the north, and parts of the coast to the northeast.

At greater distances, the intervening landform would continue to restrict potential views of the Proposed Development. As such, the influence of the Proposed Development would be limited to more elevated parts of the LCT to the northwest and southeast of the Site. In views from these areas the proposed infrastructure would be experienced in the context of the existing *'industrial development and the major transport corridor'* within the LCT (see Viewpoints 3 and 4). This includes Torness Power Station, overhead lines, telecoms lines and the transport corridors of the A1 and East Coast Main Line (encompassing associated lighting columns and overhead cables respectively). The muted colours of the proposed infrastructure and back-clothing by the distant landscape would further reduce the influence of the Proposed Development. Accordingly, at greater distances, the Proposed Development would typically assimilate with the surrounding context.

On the whole, indirect effects resulting from the introduction of the Proposed Development would

be limited to localised geographic areas surrounding the Site. There would be no effect on the existing field pattern of *'medium to large scale arable fields, contained by intermittent hedgerows and post-and-wire fences'* and no loss of *'scrub and broadleaf woodland'*. The landscape would continue to be characterised as an *'agricultural hinterland'* with *'diverse coastal scenery'*.

The undulating nature of the landform in combination with the relatively low height of the Proposed Development would ensure that the proposed infrastructure would be experienced below the horizon, and exert limited influence upon the *'extensive views of the open sea'*. There would be very limited views or effects on the *'quiet sheltered coves containing small sand and pebble beaches'* along the coast. On this basis, the Proposed Development would exert limited influence on local landscape character.

In summary, the main effects would be focused within approximately 400m of the Site. Within this localised area the magnitude of change would be Substantial/Moderate and the level of effect would be Major/moderate, notable. These effects would diminish abruptly at greater distances due to the containing influence of the rolling landform. Accordingly, across wider parts of the LCT, the magnitude of change would be Slight at most, and the resultant effect would be Moderate/minor at most, not notable. Extensive parts of the Coastal Margins – Lothians LCT (Innerwick Coast LCA) would be unaffected.

Upland Fringes – Lothians LCT

The Upland Fringes – Lothians LCT is located 620m to the southwest of the Site and is considered to be of Medium sensitivity to the Proposed Development. ZTV coverage is primarily focused across localised areas of higher ground within the LCT, comprising the upper slopes and summits of Thornton Hill and Blackcastle Hill, as well as localised areas near Branxton and Innerwick. From these elevated vantage points, there would be open views of the Proposed Development in the spatially separate, lower-lying landscape to the east. The Proposed Development would be experienced in the same field of view as existing elements of infrastructure, including Torness Power Station, overhead lines and the East Coast Main Line and A1 transport corridors (see Viewpoint 6).

On balance, the Proposed Development would represent a relatively discreet addition to the neighbouring lowland landscape. There would be no effect on the characteristic *'broadly undulating, landform'* within the LCT or the existing ground cover of *'heather moorland and rough grassland'*. The Proposed Development would exert limited influence on the *'views across the lowland, and to the coast'*. The magnitude of change would be Slight/Negligible, and the effect on landscape character would be Minor, not notable.

Other LCTs

The Coastal Farmland LCT and Pastoral Upland Fringe Valley LCT are located 2.2km and 4.3km to the south east of the Site respectively. Potential views of the Proposed Development in the distant landscape to the northwest would be extremely limited due to the screening influence of the intervening landform (as reflected in the fragmented ZTV coverage) in combination with intervening vegetation, including woodland at Dunglass GDL. Accordingly, there would be no discernible effect

on landscape character.

10.3 Effects on Landscape Designations

The effects of the Proposed Development on landscape designations is described below. In each case, sensitivity to the Proposed Development is assessed as being High.

Thorntonloch to Dunglass Coast SLA

The Thorntonloch to Dunglass Coast SLA is located 220m to the east of the Proposed Development, and encompasses the linear coastal strip, that is bounded by the A1 transport corridor along its western flank. Effects on the SLA would be indirect, based on views of the proposed infrastructure. Although the SLA is located in close proximity to the Site, ZTV coverage is extremely fragmented and absent completely across lengthy sections of the lower-lying coastal edge. This reflects the screening influence of the intervening landform that rises steeply between the beach and the adjoining farmland to the west.

Potential views of the Proposed Development would be focused within northern parts of the SLA, between Thornton Ford and Torness Point. This part of the SLA is already influenced by the large-scale Torness Power Station, which would continue to represent a key focal point. Conversely, the Proposed Development would be located further inland, where it would be part-screened by undulations in the intervening landscape, beyond the A1 transport corridor and East Coast Main Line. The muted colours of the proposed infrastructure would further reduce the influence upon inland views.

There would also be partial views of the Proposed Development from localised areas along the western-most edge of the SLA. These peripheral areas are already influenced by the A1 transport corridor and East Coast Main Line based on their close proximity. The Proposed Development would represent a very discreet additional element in the background landscape beyond these features, and accordingly would exert limited influence.

In summary, potential views from the '*spectacular*' beach at Thorntonloch would be extremely limited due to the intervening landform. There would be no effect on the key physical and geological features within the SLA, or on the key easterly views to the sea. From more open parts of the SLA with clearer inland views the magnitude of change would be Slight and the level of effect would be Moderate. This is not considered to be notable in this instance based on the inland views being secondary to the key views out to sea and along the coastline. Across the vast majority of the SLA inland views of the Proposed Development would be fully screened and there would be no effect.

Monynut to Blackcastle SLA

The Monynut to Blackcastle SLA is located 780m to the west of the Proposed Development. ZTV coverage is primarily focused across localised areas of higher ground at Thornton Hill and the easterly-facing slopes of Blackcastle Hill. From the most open vantage points there would be open views of the Proposed Development in the spatially separate, lower-lying landscape to the east / northeast. The Proposed Development would be experienced in the context of existing elements of

infrastructure, including Torness Power Station, overhead lines and the East Coast Main Line and A1 transport corridors. The Proposed Development would be back-clothed by the landscape beyond, and the muted colours of the proposed infrastructure would further reduce their influence upon these views.

On balance, the Proposed Development would represent a relatively discreet addition to the neighbouring lowland landscape to the east. There would be very limited change to the *'extensive views towards the coast from the smooth domed hill tops'* or the sense of wildness. There would be no effect on the *'expanses of heather covered open plateau'* within the SLA. Across localised vantage points on the eastern side of the SLA the magnitude of change would be Slight/Negligible at most, and the effect would be Moderate/minor, not notable. Across the majority of the SLA views of the Proposed Development would be fully screened and there would be no effect.

Dunbar to Barns Ness Coast SLA

This SLA is located 1.6km to the north of the Proposed Development. The SLA encompasses the linear strip of low-lying coast extending northwards from Torness Power Station. ZTV coverage across the SLA is extremely restricted, and limited to very localised areas north of Skateraw and near Barns Ness lighthouse. From both of these areas the Proposed Development would remain partly screened by intervening undulations in the landform in combination with intervening tree cover. The Proposed Development would represent an extremely minor element in the distant landscape, experienced beyond Torness Power Station in the foreground. Accordingly, the Proposed Development would exert no discernible influence on the key qualities of the SLA. The magnitude of change would be Negligible and the level of effect would be Negligible.

Berwickshire Coast SLA

This SLA is located 2.2km to the southeast of the Proposed Development. ZTV coverage across the SLA is extremely restricted, and potential views of the proposed infrastructure would be further restricted by intervening vegetation (including woodland at Dunglass GDL). From more open vantage points the Proposed Development would represent a distant element in the background landscape, beyond the A1 and East Coast Main Line transport corridors. As such, there would be no discernible effect on the special qualities of this SLA.

Doon Hill to Chesters SLA

The Doon Hill to Chesters SLA is located 3.4km to the northwest. ZTV coverage is focused across more elevated slopes of Brunt Hill, where there are expansive views to the coast and sea beyond. The Proposed Development would be visible from these elevated vantage points, albeit would represent a distant element in the spatially separate lower-lying landscape to the southeast, in the context of the existing Torness Power Station. Accordingly, the Proposed Development would exert extremely limited influence on the key qualities of the SLA. The magnitude of change would be Negligible and the level of effect would be Negligible.

Dunglass GDL

Dunglass GDL is located 1.3km to the south of the Proposed Development. The GDL encompasses

widespread areas of established woodland (including ancient woodland) that restricts outward views and creates a sense of enclosure. This woodland, in combination with the intervening rolling landform, would fully screen potential views of the Proposed Development across the vast majority of the GDL (as reflected in the very limited ZTV coverage). There would be no views from the Collegiate Church or walled garden, and no discernible views from Dunglass House. Potential views from wider parts of the wider parkland would also be extremely limited due to the intervening landform. From the most open views on the outer edge of the GDL, the Proposed Development would represent a very minor addition to the landscape to the north, in the same field of view as Torness Power Station. Overall, the magnitude of change would be Negligible and the level of effect would be Minor/negligible.

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 / steadings in closest proximity to the Site. In all cases, sensitivity is deemed to be High.

Thornton

The hamlet of Thornton is located 670m to the west of the Proposed Development. ZTV coverage is restricted to the eastern-most edge of the hamlet, hence the majority of residents would experience no views of the Proposed Development. Potential views would be limited to residents at Nos 3, 4 and 7 Thorntonloch.

Views of the Proposed Development from the single storey No. 3 Thorntonloch and two storey No. 7 Thorntonloch would be tempered by the intervening landform in both cases, and further restricted by garden vegetation (at No. 3) and the oblique angle of view (at No. 7). Views would be limited to a short section of perimeter fencing and the tops of the HV transformers at most (see Viewpoint 2). These elements would be experienced in a visually discreet position, well below the distant horizon. The muted colours of these elements would further reduce their influence on the view.

Potential views from No. 4 Thorntonloch would be fully screened by garden vegetation in combination with the intervening landform.

In summary, the magnitude of change experienced by residents at Nos 3 and 7 Thorntonloch would be Slight/Negligible and the level of effect would be Minor. All other residents (comprising the majority of the settlement) would experience no view and no effect.

Innerwick

Innerwick is located 2.1km to the west of the Proposed Development. ZTV coverage is limited to the southern-most edge of the settlement, where potential views of the proposed infrastructure would be restricted by intervening tree cover and buildings within eastern parts of the settlement. This includes a large-scale agricultural barn on the eastern edge of the settlement. As a result, there would be no views of the Proposed Development and no effect.

Oldhamstocks

Oldhamstocks is located 2.8km to the south of the Proposed Development. It is completely outside the ZTV, hence residents would experience no views and no effect.

Pathhead / Cove

Pathhead / Cove is located 2.8km to the southeast. Potential views of the Proposed Development would be subject to screened by the intervening landform and tree cover. As a result, there would be no views of the Proposed Development.

Cockburnspath

Cockburnspath 3.1km to the southeast of the Proposed Development. ZTV coverage is limited to the northern-most edge of the settlement, where potential views of the proposed infrastructure would be restricted by the intervening landform and vegetation, in combination with the distance of view. The magnitude of change would be Negligible at most, and the level of effect would be Negligible. The vast majority of residents would experience no views and no effect.

Isolated Residential Dwellings / Steadings

Linkshead is located 180m to the northeast of the Proposed Development, at the side of the A1. Potential views of the Proposed Development would be restricted by the steadily rising landform to the west in combination with the East Coast Main Line embankment and a series of outbuildings and agricultural barns located on to the southwest of the property. As a result, views would be extremely limited, comprising parts of the proposed infrastructure between gaps in intervening built form. The magnitude of change would be Negligible and the level of effect would be Minor.

Nos. 9 and 11 Thorntonloch Holdings are located 250m to the north of the Proposed Development, at the side of the A1. Potential views of the Proposed Development from these single storey properties would be fully screened by coniferous garden vegetation. There would be no views and no effect.

No. 8 Thorntonloch Holdings is located 380m to the north of the Proposed Development. It is located outside the ZTV, hence residents would experience no views and no effect.

Lawfield is located 400m to the southeast of the Proposed Development. This includes the east-west facing Lawfield Cottage and the north-south facing Lawfield Farm. Both properties are located on the edge of the ZTV suggesting limited views based on the intervening landform. Views from the single-storey Lawfield Cottage would be further restricted by the oblique nature of the view and intervening garden vegetation. Potential views from the two storey Lawfield Farm would also be

oblique to the primary direction of view and would be tempered by intervening tree cover extending along the access track. The magnitude of change would be Negligible and the level of effect would be Negligible.

Thornly is located 440m to the north of the Proposed Development. It is located outside the ZTV, hence residents would experience no views and no effect.

No.s 12 and 13 Thorntonloch Holdings are located 480m to the west of the Proposed Development, at the side of a minor road. No. 12 is east-west facing, whilst No. 13 is north-south facing. Residents at No. 12 would experience direct views towards the Proposed Development from the rear-facing windows, where the proposed infrastructure would be partly visible beyond undulations in the intervening landform. The muted colours of the infrastructure and location below the distant horizon would temper the visual influence of the Proposed Development. Potential views from No. 13 would be oblique to the primary direction of view and subject to screening by garden vegetation and an intervening agricultural barn. In summary, the magnitude of change experienced by residents at No. 12 Thorntonloch Holdings would be Moderate at most. The resultant level of effect would be Major/moderate, notable. The magnitude of change experienced by residents at No. 13 Thorntonloch Holdings would be Negligible and the level of effect would be Negligible.

Thorntonloch is located 560m to the north of the Proposed Development, and consist of a small cluster of houses comprising No.s 17, 20, 21 and 25 Thorntonloch Holdings, Thorntonloch House and Gardeners Cottage. There would be no views of the Proposed Development from No. 25 Thorntonloch Holdings and Gardeners Cottage due to the screening influence of surrounding buildings and the intervening landform. Views from No.s 17, 20 and 21 Thorntonloch Holdings (single storey) and Thorntonloch House (two storey) are more open. There would be partial views of the Proposed Development in the landscape to the south, beyond localised tree cover and undulations in the intervening landform. The proposed infrastructure would be experienced in the middle distance, in the context of the East Coast Main Line in the foreground and distant overhead lines. The visual influence of the Proposed Development would be tempered by the muted colours, which would blend with the surrounding landscape (see Viewpoint 3). The magnitude of change experienced by residents at No.s 17, 20 and 21 Thorntonloch Holdings and Thorntonloch House would be Moderate/Slight, resulting in a Moderate level of effect. This is considered notable in this instance based on the horizontal field of view occupied by the proposed infrastructure.

Thornfield is located 570m to the northwest of the Proposed Development. It is located outside the ZTV, hence residents would experience no views and no effect.

No. 16 Thorntonloch Holdings is located 670m to the northwest of the Proposed Development. This single storey dwelling is north-south facing. Potential views of the Proposed Development would be part-screened by undulations in the intervening landform in combination with intervening tree cover. As such, visibility would be limited to localised parts of the Site, where the proposed infrastructure would be experienced beyond the intervening embankment and infrastructure along the East Coast Main Line, and back-clothed by the rising landform in the distance. The magnitude of

change would be Slight/Negligible and the level of effect would be Moderate/minor.

No.s 6 and 14 Thorntonloch Holdings are located 720m to the west of the Proposed Development; No. 14 is east-west facing, and No. 6 is north-south facing. Residents at No. 14 would experience direct views towards the Proposed Development from the rear easterly-facing windows. Within these views the proposed infrastructure would be subject to screening by intervening buildings (No.s 12 and 13 Thorntonloch Holdings), roadside hedgerows, and undulations in the landform. The muted colours of the infrastructure would further reduce the visual influence of the Proposed Development. Potential views from No. 6 would be fully screened by garden vegetation and fencing. In summary, the magnitude of change experienced by residents at No. 14 Thorntonloch Holdings would be Slight/Negligible and the level of effect would be Moderate/minor. Residents at No. 6 Thorntonloch Holdings would experience no views and no effect.

Thornton Mill is located 790m to the northwest of the Proposed Development. It is located outside the ZTV, hence residents would experience no views and no effect.

Branxton is located 830m to the southwest of the Proposed Development, and comprises the single storey Branxton Farm Cottage (north-south facing) and Branxton Farmhouse (southeast facing). Potential views of the Proposed Development from Branxton Farm Cottage would be oblique to the primary direction of view and subject to screening by garden vegetation (particularly during summer months) and the intervening landform. Views during winter months would be clearer, albeit would remain filtered. Potential views from Branxton Farmhouse would be screened by intervening outbuildings on the northern side of the property. Secondary views from wider parts of the curtilage and garden would be restricted by intervening tree cover and landform. In summary, the magnitude of change would be Slight/Negligible and the level of effect would be Moderate/minor.

Station House is located 950m to the northwest of the Proposed Development. This two storey 'L' shaped dwelling has windows facing in various directions, including southeast towards the Site. Potential views of the Proposed Development from ground floor windows would be fully screened by an intervening roadside embankment. Potential views from the upper storey would also be predominantly screened by undulations in the intervening landform, and limited to the uppermost parts of the proposed infrastructure, accounting for a narrow angle of view in the distance beyond intervening telecoms lines and sections of the East Coast Main Line. The magnitude of change would be Negligible and the level of effect would be Minor.

Birnieknowes is located 960m to the southeast of the Proposed Development, and consist of a small cluster of houses comprising Birnieknowes Farm, Grieves Cottage, Palmerton and Birnieknowes Cottages (No.s 1 – 11). Palmerton and Birnieknowes Cottages are completely outside the ZTV. The properties of Birnieknowes Farm and Grieves Cottage are on the edge of the ZTV, and potential views of the Proposed Development would be subject to screening by intervening agricultural barns and tree cover. The magnitude of change would be Negligible and the level of effect would be Negligible.

11.2 Visual effects experienced by Recreational Receptors

The appraisal of effects experienced by recreational receptors is described below, listed in order of increasing distance from the Proposed Development. Recreational receptors are considered to be of High sensitivity unless stated otherwise.

Core Path network

Core Paths CP309 and CP310

With reference to Figure 3, CP309 and CP310 form a continuous route (2.6km in length) that extends along the side of the A1, 230m to the northeast of the Proposed Development at the closest point. ZTV coverage is relatively continuous across the route, with the exception of a short section at Thorntonloch Ford in the centre (150m in length), and the southern-most 450m of the route.

For walkers travelling northwest; potential views of the Proposed Development would initially be screened by the intervening landform, including a roadside embankment along the A1 (see Viewpoint 1). The first glimpsed views would be experienced upon approach to Linkshead, where the proposed infrastructure would be predominantly screened by the intervening buildings and barns in combination with the intervening landform. As the walker travels further north, past Linkshead, potential views would continue to be predominantly screened by an intervening rise in the local landform and a short roadside embankment. As the walker approaches No.s 9 and 11 Thorntonloch Holdings, there would be partial views of the proposed infrastructure in the northern part of the Site, at an oblique angle of view. Further north, the Proposed Development would be located behind the direction of travel.

For walkers travelling southeast; views would initially be restricted by the intervening landform (see Viewpoint 5). As the walker travels southwards past Torness Power Station, there would be glimpsed views of parts of the Site, filtered by intervening tree cover. The proposed infrastructure would represent a minor element in the background landscape, experienced beyond the roadside signage and lighting columns along the A1, and the embankment and overhead cables along the route of the East Coast Main Line. The clearest views would be experienced from the 200m section to the southeast of the junction to Thorntonloch Caravan Park. From this localised section of the route, there would be views of the Proposed Development on the rising landform to the south. The proposed infrastructure would be experienced beyond the East Coast Main Line (including associated embankment and overhead cables) and undulations in the intervening landform. The proposed infrastructure would be back-clothed by the distant landscape, and the muted colours of these elements would blend with the background landscape. As the walker travels further south, these views would be fully screened by roadside vegetation, embankments, and a rise in the intervening landscape. Thereafter, the Proposed Development would be located behind the direction of travel.

In summary, views of the Proposed Development from CP309 and CP310 would be restricted by the intervening terrain. The clearest views would be limited to a short section (200m in length), experienced by walkers travelling in a southerly direction. The magnitude of change along this

section of the route would be Moderate/Slight, and the level of effect would be Moderate. This is considered to be notable in this instance based on the horizontal field of view occupied by the proposed infrastructure. This accounts for a short section of the overall route. The effects upon the route as a whole would be far more limited based on the extent of intervening screening. The magnitude of change across the route as a whole would be Slight/Negligible, and the level of effect would be Minor, not notable.

Core Paths CP215, CP211, CP213, CP187 and CP208

CP215, CP211, CP213, CP187 and CP208 form a continuous route along the coast between Torness Power Station in the north and The Linn in the south. At the closest point, the route extends 300m to the northeast of the Proposed Development. ZTV coverage across the route is fragmented and limited to localised sections, reflecting the generally low-lying nature of this coastal path.

For walkers travelling northwest; potential views of the Proposed Development would initially be restricted by the intervening landform and tree cover. As the walker travels northwards along the section extending east of Linkshead, there would be partial views of the proposed infrastructure in the landscape to the west. The muted colours of these elements would blend with the surrounding context, reducing their influence upon the view. There would be no effect on key views along the coast or out to sea. Further north, the Proposed Development would be located behind the direction of travel.

For walkers travelling southeast; views would initially be screened by an embankment extending along the southwestern side of the path between Torness Power Station and Thorntonloch Caravan Park. Potential views from the short section extending through the caravan park would be screened by surrounding built form. To the south of the caravan park, views would be fully screened once again by the intervening landform. There would be no views of the Proposed Development until the walker travels further south, along the section extending east of Linkshead. From this localised section of the route there would be partial views of the proposed infrastructure in the landscape to the west, where the muted colours of these elements would blend with the surrounding context. There would be no effect on key views along the coast or out to sea. Thereafter, the Proposed Development would be located behind the direction of travel.

In summary, views of the Proposed Development from CP215, CP211, CP213, CP187 and CP208 would be extremely limited based on the screening influence of the intervening landform. Views would be limited to a short section east of Linkshead, and would be tempered by the intervening landform and tree cover. There would be no effect on key views along the coast or out to sea. The magnitude of change would be Negligible, and the level of effect would be Minor, not notable. From the vast majority of the route there would be no views and no effect.

Core Path CP197

CP197 extends around Torness Power Station and northwards along the coast past Skateraw Harbour, 1.0km to the north of the Proposed Development at the closest point. ZTV coverage is limited to short, fragmented sections on the northeastern side of Torness Power Station. For walkers

travelling north, the Proposed Development would be located behind the direction of travel. For walkers travelling south along these sections, the Proposed Development would be subject to screening by the flood defense wall that extends around Torness Power Station in combination with the intervening landform to the south. Accordingly, there would be no views and no effect.

Core Paths CP205 and CP198

CP205 and CP198 extend from The Linn to Dunglass GDL, 1.5km to the southeast of the Proposed Development. ZTV coverage across the route is almost completely absent, and views of the proposed infrastructure would be fully screened by intervening tree cover at The Linn. Walkers would experience no views and no effect.

Core Path CP12

CP12 extends from Oldhamstocks to Dunglass Viaduct (through Dunglass GDL). The route is located 1.7km to the southeast of the Proposed Development at the closest point. ZTV coverage across this route is extremely limited and potential views of the Proposed Development would be further restricted by intervening woodland within Dunglass GDL. In summary, walkers would experience no views of the Proposed Development.

Other Core Paths

Other Core Paths within the Study area are located at greater distance from the Proposed Development. Potential views of the Proposed Development from these Core Paths would be restricted by increased levels of screening based on intervening landform, buildings and / or tree cover in combination with the distance of view. In the most open views, the Proposed Development would represent an extremely minor element in the background landscape, where the muted colours of the proposed infrastructure would assimilate with the surrounding context. The magnitude of change experienced by walkers would be Negligible at most, resulting in a Minor level of effect. The majority of the more distant Core Paths are located entirely outside the ZTV, hence there would be no views and no effect.

NCR 76

NCR 76 extends northwest to southeast through the Study Area, 230m to the northeast of the Proposed Development at the closest point. ZTV coverage is fragmented along the route. Potential views of the Proposed Development would primarily be focused across local sections in closest proximity to the Site, where NCR 76 shares the same route as Core Paths CP310 and CP309 (which are assessed above). Accordingly, views of the Proposed Development would be limited to the same short sections as described above in relation to the views experienced by walkers.

In summary, views of the Proposed Development from NCR 76 would be restricted by the intervening terrain, comprising roadside embankments and undulations in the intervening landform (see Viewpoints 1 and 5). The clearest views would be limited to a 200m section of the route southeast of the junction to Thorntonloch Caravan Park. From this localised section of the route, there would be views of the Proposed Development on the rising landform to the south. The proposed infrastructure would be experienced beyond the East Coast Main Line, where the muted

colours of the proposed infrastructure would blend with the background landscape. These views would be experienced by cyclists travelling in a southeast direction only. The magnitude of change along this section of the route would be Moderate/Slight, and the level of effect would be Moderate. This is considered to be notable in this instance based on the horizontal field of view occupied by the proposed infrastructure.

This accounts for a short section of the overall route. Views from all other parts of the route would be subject to increased amounts of intervening screening. Accordingly, the magnitude of change across the route as a whole would be Slight/Negligible, and the level of effect would be Minor, not notable. There would be no views and no effect from the more distant northern and southern sections of the route.

John Muir Link

The John Muir Link long distance footway is located 300m to the northeast of the Proposed Development at the closest point. The footpath extends along the low-lying landscape along the edge of the coast. ZTV coverage is fragmented along the route, and potential views of the Proposed Development would primarily be focused across local sections in closest proximity to the Site. The John Muir Link shares the same route as Core Paths CP215, CP211, CP213, CP187 and CP208 in this area (which are assessed above).

In summary, views of the Proposed Development would be extremely limited based on the screening influence of the intervening landform. Views of the proposed infrastructure would be limited to a short section of the route to the east of Linkshead, and would remain partly screened by the intervening landform and tree cover. The muted colours of these elements would blend with the surrounding context in the landscape to the west, reducing their influence upon the view. There would be no effect on key views along the coast or out to sea. The magnitude of change would be Negligible, and the level of effect would be Minor, not notable. From the vast majority of the route there would be no views and no effect.

Thorntonloch Beach

Thorntonloch Beach is located 360m to the northeast of the Proposed Development. Despite its close proximity to the Site, potential views of the proposed infrastructure would be subject to screening by the intervening landform that rises steeply between the beach and the adjoining farmland to the west. As such, views would be restricted to northern sections of the beach, at greater distance from the Site. Within southerly views from these low-lying areas, the Proposed Development would be predominantly-screened by the intervening landform and tree cover. The muted colours of the proposed infrastructure would further reduce their influence upon inland views. There would be no effect on key views along the beach or out to sea. The magnitude of change would be Negligible and the level of effect would be Minor.

Thorntonloch Caravan Park

Thorntonloch Caravan Park is located 700m to the north of the Proposed Development, where it occupies a low-lying position adjacent to Thorntonloch Beach. ZTV coverage is fragmented across

the caravan park, and there would be no views from southern areas or the northern edge. Potential views from other parts of the caravan park would be partly screened by the intervening landform in combination with tree cover along Thornton Burn and along the sides of the A1 further south. There would be no effect on key views along the coast or out to sea. On balance, the magnitude of change would be Slight/Negligible at most and the level of effect would be Moderate/minor. Views would be fully screened across the northern and southern edges of the Caravan Park.

Dunglass GDL

As described above in Section 10.3; potential views of the Proposed Development from this heritage attraction would be substantially screened by the intervening landform in combination with established woodland within the GDL. Views would be restricted to the outer edges of the parkland, where the Proposed Development would represent a very minor addition to the landscape to the north, in the same field of view as Torness Power Station. There would be no views from the Collegiate Church or walled garden, and no discernible views from Dunglass House. Overall, the magnitude of change would be Negligible and the level of effect would be Minor/negligible.

Bilsdean and Dunglass Coast (including Castle Dykes

Bilsdean and Dunglass Coast is located 1.6km to the southeast of the Proposed Development. ZTV coverage across this section of the coast is extremely limited, reflecting the screening influence of the steeply rising landform along this section of the coast. Accordingly, there would be no discernible views of the Proposed Development.

Skateraw Beach

Skateraw Beach is located 2.0km to the northwest of the Proposed Development. Potential views of the Proposed Development from this low-lying coastal area would be substantially screened by the intervening landform that rises steadily towards the south. ZTV coverage is restricted to more northerly sections of the beach (at greater distance from the Site), where the Proposed Development would represent a very minor element in the distant landscape beyond Torness Power Station. There would be no effect on key views along the coast or out to sea. The magnitude of change would be Negligible and the level of effect would be Negligible.

Southern Upland Way / Berwickshire Coastal Path / Sir Walter Scott Way

These long distance promoted footpaths share the same route in the Study Area, where they extend within 3.2km to the southeast of the Proposed Development at the closest point. ZTV coverage is limited to a 1.3km section that extends along the coast above Cove Harbour. Potential views of the Proposed Development from this section of the route would be experienced by walkers travelling in a northerly direction only, and would be limited by the distance of view in combination with intervening built form at Cove, vegetation and undulations in the landform. As a result, there would be no discernible views of the Proposed Development.

Thurston Manor Leisure Park

Thurston Manor Leisure Park is located 3.7km to the west of the Proposed Development. It is

located outside the ZTV, hence there would be no views and no effect.

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. Views would be experienced transiently and at speed.

East Coast Main Line

The East Coast Main Line extends northwest to southeast through the Study Area. At the closest point the route extends along the northeastern Site boundary. ZTV coverage is fragmented along the route and limited to a 1km section near Dryburn Bridge in the north, and a 3.3km section between Skateraw Gate and Bilsdean further south.

For rail passengers travelling northwest; potential views of the Proposed Development would initially be screened by the intervening landform, including trackside embankments. The first glimpsed views would be experienced from a 150m section where the track diverges away from the A1. Views from this section would be limited to the proposed infrastructure in the eastern part of the Site, which would account for a narrow angle of view. As the rail passenger travels further north, they would experience gradually more open views of the Proposed Development as the route approaches the Site. From a 500-600m section of the route passing the Site, there would be views of the proposed infrastructure at close proximity. The infrastructure would represent new elements within the landscape to the west, albeit the muted colours of these elements would be in accordance with the background landscape. A trackside embankment along the edge of the Site would partly screen views along this section. Further north, the Proposed Development would be located behind the direction of travel.

For rail passengers travelling southeast; views would initially be restricted by the intervening landform in combination with field trees, trackside vegetation and road bridges extending over the rail line. Further south, views would be contained by trackside embankments. The clearest views would be experienced from a short section, approximately 400m in length, where the track extends past the Site. The proposed infrastructure would be visible at close proximity, albeit a trackside embankment along the edge of the Site would partly screen views along this section. Further south, the Proposed Development would be located behind the direction of travel.

In summary, views of the Proposed Development from the East Coast Main Line would be subject to screening by the intervening landform, in combination with trackside embankments, road bridges and vegetation. The clearest views would be limited to a short section (500-600m in length) as the track passes the Site. The Proposed Development would be experienced at close proximity, albeit a trackside embankment along the edge of the Site would interrupt views along this section. As such, the Proposed Development would be experienced for a very brief duration. The magnitude of change along this section of the route would be Substantial/Moderate, and the level of effect would be Major/moderate, notable. This accounts for a very short section of the overall route. The effects upon the route as a whole would be far more limited based on the extent of intervening screening.

The magnitude of change across the route as a whole would be Negligible, and the level of effect would be Minor/Negligible, not notable.

A1

The A1 is located 230m to the northeast of the Proposed Development at the closest point. ZTV coverage is fragmented along the route. Potential views of the Proposed Development would be focused across local sections in closest proximity to the Site, where the A1 shares the same route as Core Paths CP310 and CP309. Accordingly, views of the Proposed Development would be limited to the same short sections as described above in relation to the views experienced by walkers.

In summary, views of the Proposed Development from the A1 would be restricted by the intervening terrain, comprising roadside embankments and undulations in the intervening landform (see Viewpoints 1 and 5). The clearest views would be limited to a 200m section of the route southeast of the junction to Thorntonloch Caravan Park. From this localised section of the route, there would be transient views of the Proposed Development on the rising landform to the south. The proposed infrastructure would be experienced beyond the East Coast Main Line, where the muted colours of the proposed infrastructure would blend with the background landscape. These views would be experienced by road users travelling in a southeast direction only. This accounts for a short section of the overall route, and given the speed of road users along this section, would be of very short duration. The magnitude of change along this section of the route would be Moderate/Slight at most, and the level of effect would be Moderate/minor, not notable.

Views from all other parts of the route would be subject to increased amounts of intervening screening. Accordingly, the magnitude of change across the route as a whole would be Slight/Negligible, and the level of effect would be Minor/Negligible, not notable. There would be no views and no effect from the more distant northern and southern sections of the route.

A1107

The A1107 is located 4.9km to the southeast of the Proposed Development at the closest point. Road users on this route would experience no views of the Proposed Development and no effect.

12 Cumulative Effects

This section examines the potential cumulative effects of the Proposed Development in combination with other large-scale development and / or elements of electrical infrastructure within the Study Area. With reference to **Figure 5**, the cumulative assessment includes consideration of the following developments:

- Thornton Bridge SE compound, 900m to the southwest;
- Branxton SE compound, 800m to the southwest;
- Torness Power Station, 1.1km to the north;
- Kinegar Wind Farm, 3.6km to the southeast;
- Oxwell Mains Cement Works, 4.7km to the northwest;

- Hoprigshiels Wind Farm, 4.9km to the south;
- Proposed Branxton 400kV GIS substation (application currently withdrawn, but resubmission anticipated), 1.0km to the southwest;
- Proposed Berwick Bank Onshore Substation (including associated underground cable routes and HDD compound), 1.7km to the northwest; and
- Proposed Eastern Link Converter Station (including underground cable corridor and Landfall HDD compound), 3.8km to the northwest.

The cumulative assessment draws from the main assessment of landscape and visual effects as described in Sections 10 and 11 above. Receptors assessed as experiencing a Negligible or Slight/Negligible magnitude of change within the main assessment have been excluded from further consideration within the cumulative assessment on the basis that the Proposed Development would exert a very minor cumulative influence on such receptors, hence would not meaningfully contribute to potential cumulative effects. As such, the Proposed Development would not tip the balance from a minor cumulative effect to a notable cumulative effect. Any notable cumulative effects on such receptors would therefore occur as a result of other cumulative developments, rather than the Proposed Development.

12.1 Cumulative Landscape Effects

Cumulative Effects on the Coastal Margins – Lothians LCT (Innerwick Coast LCA)

In addition to the Proposed Development; the existing Torness Power Station and Oxwell Mains Cement Works are located within the Coastal Margins – Lothians LCT (Innerwick Coast LCA) and exert direct effects upon local landscape character in their own right. In addition, the proposed Berwick Bank Onshore Substation and Eastern Link Converter Station would also be located within the LCT and thereby would exert their own additional effects upon existing landscape character.

With reference to the preceding assessment of effects on landscape character, the primary effects of the Proposed Development on the Coastal Margins – Lothians LCT (Innerwick Coast LCA) would be focused within approximately 400m of the Site. Within this localised geographic area the magnitude of change would be Substantial/Moderate and the level of effect would be Major/moderate. There would be some coalescence of these effects with the characterising influence exerted by the existing Torness Power Station, which is substantially larger and thereby exerts an influence over a wider area. The Proposed Development would augment the presence of this existing feature, extending the presence of infrastructure in a southerly direction (away from the coastline). This encompasses a localised part of the LCT that is already bisected by the A1 transport corridor and East Coast Main Line.

The effects of the Proposed Development would be reduced at greater distances (the magnitude of change across the LCT as a whole would be Slight at most as described in the main assessment). Accordingly, there would be no coalescence with other existing or proposed cumulative developments based on their geographic separation from the Proposed Development, and / or physical separation via intervening landform and tree cover. The other cumulative developments

would therefore exert their influence over geographically separate parts of the LCT. The existing characteristics of the LCT would re-exert themselves across the intervening landscape.

In summary, the Proposed Development would contribute to cumulative effects in combination with the existing Torness Power Station and Oxwell Mains Cement Works, as well as the proposed Berwick Bank Onshore Substation and Eastern Link Converter Station. The cumulative influence of the Proposed Development would be very localised and slightly extend the spread of infrastructure southwards from the existing Torness Power Station. Across wider parts of the surrounding landscape, the existing characteristics of the LCT would re-exert themselves. The cumulative magnitude of change across the LCT as a whole would be Moderate at most, based primarily on the presence of the existing large scale Torness Power Station and Oxwell Mains Cement Works, and proposed Berwick Bank Onshore Substation and Eastern Link Converter Station. The Proposed Development would represent a minor incremental addition to the landscape. The cumulative level of effect would be Moderate, which is not assessed as notable in this instance based on the retention of key views to the open sea, which would continue to exert a unifying influence on landscape character. The Proposed Development would exert very limited influence on the overall cumulative effect.

Cumulative Effects on the Thorntonloch to Dunglass Coast SLA

The Proposed Development would result in indirect effects on the Thorntonloch to Dunglass Coast SLA. With reference to the main assessment, potential views of the Proposed Development would be focused within northern parts of the SLA, between Thornton Ford and Torness Point, and along the western edge of the SLA (where the magnitude of change would be Slight and the level of effect would be Moderate). In addition to the Proposed Development, there are clear, close proximity views of the existing Torness Power Station from the SLA. Based on its scale, this existing element forms a recognisable feature within the surrounding coastal landscape. There would also be partial views of the proposed Branxton 400kV GIS substation, albeit located inland at distances in excess of 1.6km (thereby exerting limited influence on the special qualities of the SLA). Other cumulative developments within the Study Area are / would be located at distance from the SLA and typically are / would be subject to increased amounts of intervening screening.

In summary, the cumulative magnitude of change across the SLA would be Moderate, resulting in a Major/moderate (notable) effect. This is based primarily on the presence of the existing large scale Torness Power Station, which forms a distinct feature on the coastline. The Proposed Development would represent a very minor incremental addition, located in the adjoining 'inland' agricultural landscape. It would exert no influence on the key views out to sea.

12.2 Cumulate Visual Effects

Cumulative Effects Experienced by Local Residents

No. 12 Thorntonloch Holdings

In addition to the Proposed Development, residents at No. 12 Thorntonloch Holdings experience

existing views of Torness Power Station to the north, as well as very distant views of the Oxwell Mains Cement Works to the northwest (limited to the upper parts of the building / stack in the background landscape). There would also be partial views of the proposed Berwick Bank Onshore Substation and Eastern Link Converter Station to the northwest (in the same field of view as Oxwell Mains Cement Works). Views of other cumulative developments are / would be subject to greater amounts of intervening screening. The cumulative magnitude of change would be Substantial/Moderate, based primarily on views of Torness Power Station and Berwick Bank Onshore Substation based on their scale (the Proposed Development would represent a substantially smaller feature, exerting more limited cumulative influence). The level of cumulative effect would be Major/moderate (notable).

No.s 17, 20 and 21 Thorntonloch Holdings and Thorntonloch House

In addition to the Proposed Development, residents at No.s 17, 20 and 21 Thorntonloch Holdings and Thorntonloch House experience existing views of Torness Power Station at a distance of approximately 460m to the north. The intervening landform provides partial screening, limiting views to the upper part of the building. Other cumulative developments are / would be located at greater distance and subject to greater amounts of intervening screening. The cumulative magnitude of change would be Substantial/Moderate, based primarily on views of Torness Power Station based on its scale and proximity to these dwellings. The level of cumulative effect would be Major/Moderate (notable). The Proposed Development would represent a smaller, more distant element in the landscape to the south that would exert more limited cumulative influence on the views from these properties.

Cumulative Effects Experienced by Recreational Receptors

Core Paths CP309 and CP310

With reference to the main assessment, key views of the Proposed Development would be limited to a 200m section southeast of the junction to Thorntonloch Caravan Park (where the magnitude of change would be Moderate/Slight, and the level of effect would be Moderate). Walkers on this route also experience clear, close proximity views of the existing Torness Power Station. Based on its vertical scale this feature is visible for the vast majority of the route and represents a focal point on the skyline. Walkers would also experience views of the proposed Berwick Bank Onshore Substation from northern sections of the route (located in the landscape to the west). Other cumulative developments are / would be located at greater distance and subject to increased amounts of intervening screening.

On balance, the cumulative magnitude of change experienced by walkers on CP309 and CP310 would be Substantial/Moderate, based primarily on views of Torness Power Station, leading to a Major/moderate (notable) effect. The Proposed Development would represent a minor incremental addition to the landscape and its cumulative influence upon the experience of walkers on this route would be far more limited and localised.

NCR 76

With reference to the main assessment, key views of the Proposed Development would be focused along localised sections of NCR 76, where it shares the same route as Core Paths CP309 and CP310 (assessed above). There are cumulative views of Torness Power Station along this section. In addition, from the northern section of this route there are close proximity views of the existing Oxwell Mains Cement Works and there would also be views of the proposed Berwick Bank Onshore Substation and Eastern Link Converter Station. Other cumulative developments are / would be located at greater distance and subject to increased amounts of intervening screening.

On balance, the cumulative magnitude of change experienced by cyclists on NCR 76 would be Substantial/Moderate, based primarily on views of Torness Power Station, Oxwell Main Cement Works and the proposed Eastern Link Converter Station. The cumulative level of effect would be Major/moderate (notable). The Proposed Development would represent a minor incremental addition to the landscape and its cumulative influence upon the experience of cyclists on this route would be far more limited and localised.

Cumulative effects experienced by Road and Rail Receptors

East Coast Main Line

With reference to the main assessment, key views of the Proposed Development would be limited to a 500-600m section of the route where the track passes the Site. Rail passengers on this route also experience clear views of the existing Torness Power Station along lengthy sections, where it represents a focal point on the skyline (subject to localised screening by embankments and trackside vegetation). From northern sections of the route passengers experience views of the existing Oxwell Mains Cement Works, and would also have views of the proposed Berwick Bank Onshore Substation and Eastern Link Converter Station (subject to localised screening). Other cumulative developments are / would be located at greater distance and subject to increased amounts of intervening screening.

On balance, the cumulative magnitude of change experienced by passengers on the East Coast Main Line would be Substantial/Moderate, based primarily on views of Torness Power Station, Oxwell Main Cement Works, the proposed Eastern Link Converter Station and the proposed Berwick Bank Onshore Substation. The cumulative level of effect would be Major/moderate (notable). The cumulative influence of the Proposed Development would be far more limited and localised.

A1

With reference to the main assessment, key views of the Proposed Development would be focused along localised sections of the A1, where it shares the same route as Core Paths CP309 and CP310 (assessed above). There are cumulative views of Torness Power Station along this section. In addition, from the northern section of this route there are close proximity views of the existing Oxwell Mains Cement Works and there would also be views of the proposed Berwick Bank Onshore Substation and Eastern Link Converter Station. Other cumulative developments are / would be located at greater distance and subject to increased amounts of intervening screening.

On balance, the cumulative magnitude of change experienced by road users on the A1 would be Substantial/Moderate, based primarily on views of Torness Power Station, Oxwell Main Cement Works, the proposed Eastern Link Converter Station and the proposed Berwick Bank Onshore Substation. The cumulative level of effect would be Major/moderate (notable). The cumulative influence of the Proposed Development would be far more limited and localised.

13 Conclusions

The Proposed Development would be located in the Coastal Margins – Lothians LCT (Innerwick Coast LCA), at the side of the East Coast Main Line. The Proposed Development would result in the loss of farmland within the Site, and the introduction of new infrastructure and boundary fencing. This accounts for a relatively small parcel of land within a much wider area of agriculture (predominantly arable), which is interspersed with pockets of tree cover and existing elements of built form, electricity infrastructure and transport networks.

Summary of Operational Landscape Effects

The limited height of the Proposed Development, combined with the rolling nature of the local landform, means that landscape effects would be localised. The key effects would be focused within approximately 400m of the Site. This would result in notable effects across localised parts of the Coastal Margins – Lothians LCT (Innerwick Coast LCA) in closest proximity to the Proposed Development. This would account for a relatively small part of the LCT. The effects on the LCT as a whole would be very limited. There would be no notable effects on any other LCTs or any landscape designations.

Summary of Operational Effects on Visual Amenity

The visual effects of the Proposed Development would also be limited based on its vertical scale and location within undulating farmland, which would screen views of the proposed infrastructure across the wider area. In more open views, the muted colours of the proposed infrastructure would typically blend with the surrounding landscape. There would be no notable effects on views from any settlements. Notable effects on views would be experienced by residents within isolated dwellings at No. 12 Thorntonloch Holdings (to the west of the Site) and at No.s 17, 20 and 21 Thorntonloch Holdings and Thorntonloch House (to the north). Potential views from other dwellings would be restricted by a combination of intervening landform and vegetation.

Notable effects would also be experienced by recreational walkers on localised parts of Core Paths CP309 and CP310, and cyclists on NCR 76 (which share the same route). The effects would be reduced along wider parts of these routes, and accordingly would not be notable overall. Similarly, rail passengers on the East Coast Main Line would experience notable effects along localised sections of the route in closest proximity to the Site. Again, the effects would diminish at greater distances and would not be notable across the wider route. Potential views from other recreational routes and roads would be more limited, and would not result in notable effects.

Summary of Cumulative Effects

The Proposed Development would augment the presence of existing, and proposed infrastructure in the Study Area.

In terms of cumulative landscape effects; the Proposed Development would add to the presence of the existing Torness Power Station, overhead power lines and associated pylons, existing Oxwell Mains Cement Works, proposed Berwick Bank Onshore Substation and proposed Eastern Link Converter Station within the Coastal Margins – Lothians LCT (Innerwick Coast LCA). These cumulative developments currently / would exert notable effects in their own right across localised parts of the LCT based on their large scale and/or geographic spread. The cumulative influence of the Proposed Development would be much more localised based on the smaller scale of the proposed infrastructure. As a result, the main effect would be to slightly extend the spread of infrastructure southwards from the existing Torness Power Station. This encompasses a localised part of the LCT that is already bisected by the A1 transport corridor and East Coast Main Line (at greater distance from the coastline). Overall, the cumulative effects on the Coastal Margins – Lothians LCT (Innerwick Coast LCA) and other LCTs within the Study Area would not be notable.

There would be notable cumulative effects on the Thorntonloch to Dunglass Coast SLA. However, these effects are based primarily on the influence of the existing Torness Power Station, which forms a distinct feature on the coastline, at close proximity to the SLA. The Proposed Development would represent a very minor incremental addition, located in the adjoining 'inland' agricultural landscape (away from the coast) and would exert very limited cumulative influence on the SLA. It would exert no influence on the key views out to sea. There would be no notable effects on other designations within the Study Area.

In terms of cumulative visual effects; residents within isolated dwellings at No. 12 Thorntonloch Holdings (to the west of the Site) and at No.s 17, 20 and 21 Thorntonloch Holdings and Thorntonloch House (to the north) would experience notable cumulative effects. These effects would be based primarily on views of Torness Power Station and Berwick Bank Onshore Substation based on their scale / proximity. The Proposed Development would represent a smaller element within the view. Notable cumulative effects would be experienced by walkers on Core Paths CP309 and CP310, cyclists on NCR 76, passengers on the East Coast Main Line, and road users on the A1. These effects would be based primarily on views of Torness Power Station, as well as Oxwell Main Cement Works, the proposed Eastern Link Converter Station and the proposed Berwick Bank Onshore Substation. The cumulative influence of the Proposed Development would be far more limited and localised. There would be no notable cumulative effects on any other residential receptor, recreational footpath / destination, road user or rail passenger.

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

References

Publications

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Special Landscape Areas Supplementary Planning Guidance; East Lothian Council, 2018.

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Countryside and Coast Supplementary Planning Guidance; East Lothian Council, 2018.

Local Landscape Designations Supplementary Planning Guidance; Scottish Border Council, 2012.

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.

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 change 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 development;
- duration of effect;
- landscape backdrop to the development; and
- 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.

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 change (substantial, moderate, slight 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	Negligible
	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 visual change 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 development;
- duration of effect;
- extent of the development in the view;
- angle of view in relation to main receptor activity;
- proportion of the field of view occupied by the development;
- background to the development; and
- 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 or negligible. Intermediate correlations are also possible and depend upon professional judgement, e.g. Major/moderate. 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 development itself*” (para 3.22). An indirect (or secondary) effect is one that results “*from consequential change resulting from the 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 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 Maps

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

The Visibility Map has been prepared at 1:30,000 scale based NextMap Britain 5m Digital Terrain Model data, being interpolated from the Digital Surface Model. The Visibility Map indicates areas from which it might be possible to secure views of part, or parts, of the Proposed Development (based on its maximum height / elevation). However, use of the Visibility Maps needs to be qualified on the following basis:

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

In addition, the accuracy of the Visibility Maps has to be considered. The DTM data is vertically accurate to within +/-1m in areas of minimal vegetation and where the slope is less than 20 degrees. The model cannot accurately represent every small-scale terrain feature, which can therefore give rise to slight inaccuracies in the predicted visibility.

Appendix B: Landscape Character Sensitivity

The sensitivity of the Coastal Margins - Lothians LCT (Innerwick Coast LCA) 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 development proposed, with reference to characteristics as described within NatureScot's 2019 National Landscape Character Assessment where relevant, as well as those listed in East Lothian Council's 2018 Special Landscape Area SPG. Extracts from these documents are included in italics.

Table B.1: Sensitivity of the Coastal Margins - Lothians LCT (Innerwick Coast LCA)

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape at the Site	Sensitivity Rating
Physical				
Scale	Large scale featureless landscapes	Small to medium scale landscapes with some scaling features	The LCT is characterised by <i>'medium to large scale arable fields'</i> and has <i>'extensive views of the open sea'</i> that increase the sense of scale.	Medium/Low
Openness	Enclosed and sheltered landscapes	Open and exposed landscapes	Typically open from higher ground, including expansive views to the sea in the east. More enclosed within localised valleys.	High
Landform	Smooth regular flowing, flat or uniform landscapes	Dramatic, rugged and complex landscapes	The rolling landscape is described as an <i>'undulating agricultural hinterland of smooth convex curves'</i> . The terrain is more level towards the coast.	High/Medium
Land cover	Extensive areas of simple regular land cover (including farming and forestry)	Complex, intimate or mosaic cover	The local area is extensively farmed, primarily comprising arable agriculture. The varied field colours and textures create a mosaic appearance in places.	Medium
Complexity and patterns	Simple and sweeping lines, linear features and patterns	Complex or irregular patterns	The undulating landform, varied field cover and scattered built form / infrastructure increase the complexity of the landscape. This is part-balanced by open views to the sea, which provides a more consistent and simple feature that binds the coastal landscape together.	Medium
Built Environment	Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements	Established, traditional or historic built character	The Site is within an area of traditional farmland, albeit in the wider context of more modern infrastructure comprising Torness Power Station, major transport corridors, overhead lines and masts.	Medium/Low
Overall physical sensitivity				Medium

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape at the Site	Sensitivity Rating
Perceptual				
Wildness / Sense of Remoteness	Busy evidence of human activity	Remote, peaceful or sense and tranquillity, solitude and emptiness	Easterly views towards the sea provide <i>'an atmosphere of tranquility.'</i> However, this is balanced by the <i>'intrusive industrial development and the major transport corridor [that] detract from the otherwise calm character of this landscape.'</i>	Medium
Perception of Change	Dynamic or modern landscapes	Ancient landscapes, designed landscapes or with obvious historical continuity	<i>'There is much industrial development located along the coast within this area. The most prominent being the cement works and associated quarrying and landfill site at Oxwell Mains and Torness Power Station to its south.'</i> The agricultural landuse and vernacular settlements within the Study Area are suggestive of a traditional landscape with historic continuity. However, the built form in the Site locality, which also includes major transport corridors, is suggestive of a modern landscape.	Medium
Overall Perceptual Sensitivity				Medium
Visual				
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	The landscape is described as the <i>'transition between the... fringes of the Lammermuir Hills and the sea.'</i> The low-lying nature of the landform means that it does not notably contribute to the skyline or backdrop of other adjoining landscapes.	Low
Views intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area with distant horizons.	There are <i>'extensive views of the open sea'</i> outwards to the east. There are also inward views along parts of the coast from more open vantage points.	High
Overall Visual Sensitivity				Medium

Factors affecting the sensitivity	Lower Sensitivity	Higher Sensitivity	Characteristics of local landscape at the Site	Sensitivity Rating
Value				
Rarity	Commonplace	Rare	The agricultural landscape is relatively common, albeit its close alignment with the coastline and the diversity of geological features makes it more distinctive.	High/Medium
Designated scenic quality	No specific designation	National or regional designation	The eastern-most coastal edge of the LCT is designated at a local level (Thorntonloch to Dunglass Coast SLA and the Dunbar to Barns Ness Coast SLA). The southern extent of the LCT encompasses parts of Dunglass GDL.	High/Medium
Cultural associations	No specific cultural associations	Strong cultural association	Dunglass GDL, Barn Ness Lighthouse and the vernacular architecture within the historic settlements represent elements of cultural association within the LCT.	Medium
Amenity and recreation	Limited amenity function	Well used for amenity/recreation, especially for National trails or other long distance routes	The LCT incorporates a network of Core Paths, as well as sections of NCR 76 and the John Muir Link. The eastern coastal edge of the LCT is also used recreationally, with beaches, picnic areas and campsites.	High/Medium
Overall Value				High/Medium
Overall Sensitivity of the Coastal Margins - Lothians LCT (Innerwick Coast LCA)				Medium

Appendix C: Special Landscape Areas: Special Qualities

The special qualities of SLAs within the Study Area are summarised below with reference to their description within East Lothian Council's 2018 *Special Landscape Area SPG* and Scottish Border Council's 2012 *Local Landscape Designations SPG*. Extracts are listed in italics.

Thorntonloch to Dunglass Coast SLA

- *'Geological differences create variety along the coastline with the harder volcanic rocks producing more resistant coastline of promontories, low cliffs and rocky shoreline... several natural arches.*
- *Beach at Thorntonloch is spectacular.*
- *At Bilsdean Burn, a large waterfall, The Linn, tumbles over stone towards the sea. Overlooking the burn to the south are the remains of the Iron Age Castledykes Fort.*
- *A second dramatic incised valley at Dunglass provides an attractive enclosed and hidden walkway to the sea.*
- *Inland area is a raised beach... It consists mainly of medium to large scale rolling, gently sloping agricultural fields.*
- *Contrast in colour and form is a feature of this area.*
- *To the north of the area, the open fields provide a setting for Torness [Power Station].*
- *Stone boundary walls, in particular that along the coast and the A1, are a feature of the area.*
- *Good access; from the A1 for motorists and via the John Muir Link or N76 cycle route for more active travel... The area is used by walkers, cyclists, anglers, surfers and day trippers.*
- *The first views of the Scottish central lowlands for travellers from the south.*
- *Wide views across the area out to sea and along the coast.*
- *[Views] to St Abbs and across Thorntonloch bay from Torness breakwater and the cliff top path.'*

Monynut to Blackcastle SLA

- *'A strong sense of place.*
- *Complex, contrasting landscape of a mix of landuses and features, visually rich. Open on higher ground... ancient woodland within the rugged cleughs and deans.*
- *The large scale, open landscape affords extensive views towards the coast from the smooth domed hill tops.*
- *Expanses of heather covered open plateau show seasonal change.*
- *Upland, heath, bog and grassland habitats with areas of ancient native upland oak woodland.*
- *SNH's wildness mapping shows this area as scoring highly in wildness qualities. The naturalness of the area is reduced in places by the presence of wind turbines and access tracks and associated infrastructure.*
- *Distinctive cleughs of Ling Hope, Bladdering Cleugh and Burn Hope, several steep-sided eroded gullies.*
- *Calcareous (mineral-rich) grasslands are found at Lammermuir Deans.*
- *Fairy Glen at Burn Hope ...is an important geological site.*
- *Minor single-track roads follow winding courses through the area crossing the numerous water courses with small stone bridges and fording points.*

- *Open access across the moorland... used for grouse shooting and the area is also popular with hill walkers, birdwatchers and ramblers... There are also several rights of way and core paths.*
- *Fantastic views from the area towards the coast, in particular towards the cliffs at St Abbs.*
- *The Lammermuir Hills...form the backdrop to views south from lowland East Lothian.*
- *Picturesque village of Oldhamstocks... very little... has changed since it was a bustling market town during the 18th century.*
- *Well-preserved landscape of post-medieval and possibly earlier agricultural settlement.'*

Dunbar to Barns Ness Coast SLA

- *'Dramatic landscape with complex and rugged elements.*
- *Relatively undeveloped nature of the rocky coastline and separation from the land by low rocky cliffs creates a sense of wildness and isolation.*
- *Uninterrupted, undeveloped views out to sea.*
- *Significant fossil beach... coral reef between 360-290 million years old.*
- *Raised beach platform and the mineral enriched dune grassland, beach-head salt marshes and shingle habitats.*
- *Good diversity of birds, butterflies, moths and invertebrates attracted to the rare habitats adds to the interest of the area.*
- *Good public access including the route of the John Muir Way path .*
- *Attracts fewer recreational visitors than the northern beaches, being further from main population centres, helping to maintain its sense of wildness and isolation.*
- *Barns Ness Lighthouse, built in 1901 ...is a feature of the area.*
- *Quarried area inland from White Sands has been included in the SLA as the pond here has the makings of being an attractive feature, and a superb birding resource.*
- *Skateraw Harbour.*
- *Raised beach with early (Mesolithic) settlement activity.*
- *Coastline also has a coherent industrial landscape of lime quarrying and kilns.'*

Berwickshire Coast SLA

- *'Rocky coastline...represents one of the most dramatic sections of Scotland's east coast.*
- *Around Cockburnspath the coast is dramatic and wild, expansive and exciting. The steeply-sloping landform results in a pleasing, occasionally secluded landscape with attractive colours.*
- *Coldingham Moor is wild and rugged, and of very high scenic quality, with distinctive rocky outcrops and long views to Fife.*
- *Coldingham Bay is very attractive, and the surrounding cliff features make for a distinctive section of coast. The bay itself is a tranquil, calm environment in comparison with the wilder seas around St Abbs. Important coastal landmarks include St Abbs Head, and sites of biodiversity and geodiversity interest such as Siccar Point.*
- *Dramatic cliffs continue south of Eyemouth, though the A1 has a greater influence in this area.*
- *The valued coastal landscape is well used for recreation. A continuous coastal footpath now links*
- *East Lothian and Berwick, passing Fast Castle, Siccar Point.*

- *The area provides the settlement settings of Eyemouth, St Abbs, Coldingham and Cockburnspath.*
- *The fishing village of Eyemouth is an important coastal access point, with a historic harbour.'*

Doon Hill to Chesters SLA

- *'Hills forming the backdrop and setting of Dunbar.*
- *Narrow incised valleys.... have a variety of mixed deciduous woodland and grassland habitats.*
- *Rolling hills comprise fertile well-managed arable farm land of red soil.*
- *Complex, contrasting landscape of a mix of landuses and features, visually rich with limited manmade development.*
- *Open on higher ground.*
- *Village of Spott and other small attractive vernacular settlements of the traditional red sandstone.*
- *Important for recreation with great viewpoints from higher ground. There are notable viewpoints from The Brunt and Doon Hill.*
- *Good access through the area in the form of several core path routes.*
- *Identified as a historic landscape as there is a concentration of significant prehistoric settlement remains along the ridgeline.*
- *From a historic perspective there are significant viewpoints over Battles of Dunbar I and II.'*

Appendix D: Landscape Figures