Planning Application for the Installation and Operation of a Battery Energy Storage System

PREPARED BY PEGASUS GROUP ON BEHALF OF COCKENZIE STORAGE LIMITED | JANUARY 2024 | P23-0093D



Cockenzie, East Lothian Landscape & Visual Appraisal



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1. INTRODUCTION

- 1.1 This Landscape and Visual Appraisal (LVA) has been prepared on behalf of Cockenzie Storage Limited by Pegasus Group. It relates to a parcel of land on the south western settlement edge of Cockenzie, in proximity to the northeastern settlement edge of Prestonpans, directly southeast of Cockenzie substation and north of the remnant coal workings associated with former coal-fired Cockenzie power station, as shown on **Figure 1**. This LVA considers the site and its surrounding context in both landscape and visual terms, to assess the potential effects of the proposed Battery Energy Storage System (BESS / the Proposed Development) upon:
 - Landscape features;
 - Landscape character; and
 - Visual amenity.
- 1.2 This LVA has been guided by the assessment criteria set out in Appendix
 1. It should be noted that all of the landscape and visual effects stated within assessments such as this are considered adverse unless stated otherwise. It should also be noted that all effects are considered direct, long-term and permanent unless otherwise stated.
- 1.3 The appraisal has been prepared through a desk study analysis of the site and its policy context as well as site visits to gain an appreciation of the landscape and visual context of the site.
- 1.4 A detailed landscape proposals plan conveys the landscape strategy and is shown by Figure 6. This LVA is based on this detailed landscape proposals plan, which is also produced as a separate plan in support of the planning application.



Figure 1: Site Location and Surroundings

2. METHODOLOGY

Published Guidance

- 2.1 The LVA has been undertaken in accordance with the principles of best practice, as outlined in published guidance documents listed in the reference section of this report, notably the third edition of the Guidelines for Landscape and Visual Assessment (GLVIA3), (Landscape Institute and the Institute for Environmental Management and Assessment, 2013).
- 2.2 The methodology and assessment criteria for the assessment have been developed in accordance with the principles established in this best practice document. It should be acknowledged that GLVIA3 establishes guidelines, not a specific methodology. The preface to GLVIA3 states:

"This edition concentrates on principles and processes. It does not provide a detailed or formulaic 'recipe' that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand."

2.3 The approach set out below and in detail in Appendix 1 has therefore been developed specifically for this assessment to ensure that the methodology is fit for purpose.

Distinction between Landscape and Visual Effects

- 2.4 In accordance with the published guidance, landscape and visual effects were assessed separately, although the procedure for assessing each of these is closely linked. A clear distinction has been drawn between landscape and visual effects as described below:
 - Landscape effects relate to the effects of the indicative proposals on the physical and perceptual characteristics of the landscape and its resulting character and quality; and
 - Visual effects relate to the effects on specific views experienced by visual receptors and on visual amenity more generally.

Types of Landscape and Visual Impacts Considered and Duration

- The LVA assesses both the permanent effects of the development and 2.5 the temporary effects associated with its construction.
- Consideration has been given to seasonal variations in the visibility of the 2.6 development and these are described where necessary.
- Both beneficial and adverse effects are identified in the assessment and 2.7 reported as appropriate. Where effects are described as 'neutral' this is where beneficial effects are deemed to balance the adverse effects. The

adverse and beneficial effects are communicated in each case so that the judgement is clear.

- As part of the Proposed Development, new planting would be introduced. 2.8 Newly planted vegetation takes a number of years to mature and average growth rates have been taken into consideration in this assessment. The effectiveness of vegetation would improve over time (both in terms of integrating the development into the surrounding landscape and in providing visual screening) and this needs to be considered appropriately.
- 2.9 Therefore, permanent landscape and visual impacts of the project are assessed both in the winter of year 1 (the year in which the development is completed) and also in the summer of year 15 (15 years after completion of the development). In this second scenario it is assumed that vegetation planted as part of the development will have established and exhibit a degree of maturity.

Assumptions and Limitations of the Assessment

Assessed Proposal

2.10 The project proposals have been developed iteratively in conjunction with the production of the LVA with the intention of incorporating mitigation into the project from the outset. The effects identified and described as part of this LVA are based on the landscape proposals as shown in Figure 6.

Study Area

2.11 This LVA has focussed on an initial 3km study area. Based on an understanding of visibility gained during site visits and the results of the screened zone of theoretical visibility plan (Figure 9), it was considered that given the context of the landscape and the scale of the proposed development, this was a proportionate study area. However, most landscape and visual receptors are within less than 0.5km of the site.

Baseline Information

- 2.12 The baseline landscape resource and visual receptors were identified in part through a desk based study of Ordnance Survey mapping, published landscape character studies, relevant planning policies, interrogation of aerial photography, as well as photographs taken and observations made during a site visits conducted during February and May 2023.
- 2.13 Access during site visits was restricted to publicly accessible locations or land within the ownership of the site landowners. No access was possible to private properties and therefore, assumptions have been made regarding the view from private properties. These assumptions have been based on an understanding of the properties and features

present within the wider landscape gained during the site visit from publicly accessible locations. Assumptions are guided by professional experience and judgement.

3. SITE CONTEXT

- 3.1
- 3.3
- 3.4
 - in section 3 of this LVA.

3.5

2.14 Site visits were conducted during overcast conditions in February and sunny conditions with good visibility in May. It is recognised that the May site visit were undertaken when vegetation was in leaf, however a worst-case scenario is considered in this LVA, including winter conditions following leaf fall, with potential for increased visibility. A photographic record of views toward the site and its local context is provided in Appendix 2 with the photographic locations illustrated in Figure 10.

The site is located within the administrative boundaries of East Lothian Council (ELC). A medium scale arable field occupies the majority of the southern part of the site. The northern part of the site comprises a short section of ELC Core Path 284, a mature hedgerow with large evident gaps, some mature trees and an area of grassland.

3.2 A small substation bound by a wire mesh fence is located within the south western part of the arable field, pylon lines cross the field north and west of this substation and connect with the Cockenzie Electricity Distribution Site in proximity to the northwest. Three steel lattice towers associated with the northern pylon line are located within the site.

The site is delineated to the northwest by ELC Core Path 284 with associated gappy hedgerow, the playing fields west of Whin Park and the mature trees along the southern boundary of the play park south of Whin Park. The Inglis Farm southern property boundaries and the Chimneys southern and western property boundaries define the northeastern perimeter of the site. The eastern boundary is formed by a permissive path and mature trees. The southern boundary is defined by a wire mesh fence and access associated with the remnant Cockenzie power station coal workings backed by a large bund. A block of mature deciduous woodland is found on the southeastern boundary adjacent to the bund.

Key recreational routes include ELC Core Path 284 partly located within the north western part of the site and ELC Core Path 147 approximately 30m east of the site. Existing permissive routes within the site pass north of the pylon line and east under the pylon line provide connectivity from east to west. Core Path 276 / John Muir Way and National Cycle Network Route (NCNR) 76, are located approximately 280m north of the site.

There are no nationally or locally designated landscapes within the site. However, there are a number of locally designated EA Special Landscape Areas within relative close proximity which are considered in more detail

4. DESIGNATION AND POLICY CONTEXT

4.1 This section provides an overview of the policies and designations of particular relevance to landscape and visual issues. Figures 2 to 5 illustrate relevant designations within the locality of the site.

Landscape Designations

- 4.2 The site is not covered by any national or locally designated landscapes. There are some locally designated ELC Special Landscape Areas (SLAs) as defined by the ELC Local Development Plan (adopted September 2018) in proximity to the site. SLAs are shown on Figure 2. Those closest to the site include SLA 26 North Berwick to Seton Sands Coast approximately 1km to the northeast, SLA 32 Prestonpans Coast approximately 2km to the west, and SLA 17 Garden County Farmland approximately 2km to the southeast.
- 4.3 It should be noted that given the limited predicted theoretical visibility of the Proposed Development, see Figure 9 notable indirect effects on ELC SLAs are considered unlikely and are therefore not considered within this LVA.
- 4.4 Recreational routes are shown on Figure 3. A short eastern section of ELC Core Path 284 is located within the north western extent of the site and provides a connection (linking with Core Path 146) between Cockenzie (east) and Prestonpans (West). Other Core Paths in proximity to the site include Core Path 147 approximately 30m to the east and Core Path 146 and 145 which curve around the bund that defines the north eastern settlement edge of Prestonpans approximately 130m to the southwest. Core Path 276 / John Muir Way is located is located approximately 280m north of the site. It should also be noted that an existing permissive routes provide connectivity between Core Paths 147 and 284, running along the existing field boundary north of the pylon line and east under the pylon line.
- 4.5 Potential effects on visual receptors using recreational routes within Screened Zone of Theoretical Visibility Coverage (SZTV) are considered within Section 5 of this LVA.
- 4.6 There are no Tree Preservation Orders covering the site. There are some listed buildings, and scheduled monuments near the site, including Cockenzie Conservation Area, approximately 252m to the north, those closest are illustrated by Figure 4. Cultural assets are a Cultural Heritage concern and are not considered further in this LVA.



Figure 2: Extract from East Lothian Council SLA Supplementary Guidance 2018 (approximate site location shown as red dot). Orange wash indicating SLA 26, yellow wash 32 and pink wash SLA 31

Figure 3: Extract from East Lothian Council Core Path Map E (approximate site location shown as red dot), purple line indicating Core Paths, blue line indicating other paths



Figure 4: Extract from Historic Environment Scotland Interactive Mapping (site boundary shown as red line)



Relevant Landscape Planning Policy

National Planning Guidance

- 4.7 The National Planning Framework for Scotland 4 (NPF4) (2023) was adopted 13th February 2023 and replaces NPF3 (2014) and Scottish Planning Policy (SPP) (2014). NPF4 sets out spatial principles, regional priorities, national developments and national planning policy for Scotland.
- 4.8 NPF4 sets out six overarching spatial principles:
 - "Just transition. We will empower people to shape their places and ensure the transition to net zero is fair and inclusive.
 - · Conserving and recycling assets. We will make productive use of existing buildings, places, infrastructure and services, locking in carbon, minimising waste, and building a circular economy.
 - Local living. We will support local liveability and improve community health and wellbeing by ensuring people can easily access services. greenspace, learning, work and leisure locally.
 - · Compact urban growth. We will limit urban expansion so we can optimise the use of land to provide services and resources.

EGT1



Figure 5: Extract from East Lothian Council LDP 2018 Designations Map site boundary shown as red line)

including carbon storage, flood risk management, blue and green infrastructure and biodiversity.

- · Rebalanced development. We will target development to create opportunities for communities and investment in areas of past decline, and manage development sustainably in areas of high demand. •
- Rural revitalisation. We will encourage sustainable development in rural areas, recognising the need to grow and support urban and rural communities together."
- By applying these principles NPF4 will support the planning and delivery 4.9 of:
 - "sustainable places, where we reduce emissions, restore and better connect biodiversity;
 - *liveable places, where we can all live better, healthier lives; and*
 - productive places, where we have a greener, fairer and more inclusive wellbeing economy."
- 4.10 A full and detailed consideration of the NPF4 policy applicable to the proposed development are provided in the Planning Statement accompanying the planning application.

Local Planning Policy

4.11 The East Lothian Council Local Development Plan (LDP) was adopted September 2023. LDP policies of relevance to the site and the Proposed Development are considered below and an extract from the LDP Designations Map is illustrated in Figure 5.

Policy DP1: Landscape Character

- 4.12 This policy states that all new development must: "Be well integrated into its surroundings.." and: "Include appropriate landscaping and multifunctional green infrastructure and open spaces."
- 4.13 The Proposed Development would be located on a site which has not been identified for its local distinctiveness. The site is partly contained by Cockenzie Electricity Distribution Site, and a combination of vegetation and the settlement edge of Cockenzie & Port Seton to the north, woodland to the east and the large existing bund to the south. Existing elements of electricity infrastructure influence the site including the pylon lines, steel lattice towers, and substation within the site and Cockenzie Electricity Distribution Site and bund associated with the remnant gas

works outside the site to the northwest and south respectively.

- - Policy DP1: Design
- 5. 6 and 7 of this LVA.

Policy SEH1 Sustainable Energy and Heat

PROP EGT1: Land at Former Cockenzie Power Station

4.19 This policy states that

"Land at the above site will be safeguarded for future thermal power generation and carbon capture and storage consistent with National Development 3. Land at Cockenzie may also present significant opportunities for renewable energy-related investment. The council will work together with developers, the landowner, the relevant agencies, local organisations and interested parties, including local residents to ensure that the best use is made of the existing land and infrastructure in this area."

4.14 Mitigation proposals are provided within section 5, and consider further within sections 6 and 7 of this LVA.

4.15 This policy states all development must be: "appropriate for its location" :and "retain the physical or nature features that are important to the amenity of the area or provide adequate replacements where appropriate."

4.16 The site is heavily influenced by existing elements of electricity infrastructure. Consideration of the site, mitigation proposals and the identification of landscape and visual effects are provided within sections

4.17 This policy states that: *"The Council supports the principles of the 'energy* hierarchy' and promotes energy-efficient design in new development."

4.18 The Proposed Development would be located in proximity to an area already influenced by Cockenzie Electricity Distribution Site and associated infrastructure. Potential effects on landscape and visual receptors are considered at section 5, 6 and 7 within this LVA.

4.20 Further consideration of national and local planning policy is provided within the supporting Planning Statement.

5. PROPOSED DEVELOPMENT

- 5.1 The Proposed Development comprises an energy storage facility with associated equipment and infrastructure. The Proposed Development would comprise three areas; the western BESS site, the eastern BESS sit and the proposed Scottish Power Transmission (SPT) substation. For ease of reference these are referred to within the LVA as the main site. The proposals would comprise:
 - Substations and Substation Equipment, with some elements being in the region of 14m in height
 - Battery storage units battery units arranged in rows around 7m in length, 2.8m wide, and 3.1m in height;
 - Switchgear containers around 20m in length, 3.5m wide and 4.1m in height;
 - Inverters and transformers local to the batteries will be around 3m in height;
 - Site fencing, access gate and CCTV;
 - Wires to existing pylons;
 - Infiltration feature north of the main site and
 - Temporary construction compound
- 5.2 An area for a temporary construction compound is proposed towards the south of the site on the former coal yard, should this be required during the implementation of the development. The proposed construction compound is temporary, and as such should be considered on this basis. A construction compound is required to support the construction work and day-to-day operations on site and is required either within the main body of the site, or in close proximity of the proposed BESS (possibly in combination as the development is built out). It is considered that the area proposed is the nearest suitable location in the event that the main body of the site cannot be used.

Mitigation Proposals

- 5.3 In order to mitigate potential landscape and visual effect, the landscape planting as illustrated at **Figure 6**, takes account of the identified areas of sensitivity by providing additional planting where required and maintenance notes for existing planting. During construction the existing hedgerow vegetation on the north western boundary and the mature trees directly southwest would be retained and protected in accordance with BS 5837:2012.
- 5.4 The landscape mitigation proposals include the following:
 - The battery storage containers are relatively low in terms of height;







Species rich grass. Seeded with MG5 Meadow Mix as supplied by Scotia Seeds o similar approved.



Interpretation board
 Palisade security fence - refer to Site Layout Plan

----- Chestnut paling fencing (or similar approved)

INDICATIVE PLANT SCHEDULE

REES (Heavy Standards)			
lanted on a staggered grid, min. 3m centres in species groups of 3-5.			
pecies	Size (girth & height) %		
lnus glutinosa	12-14cm; 300-425cm ht; 3x; Heavy	10	
etula pendula	12-14cm; 300-425cm ht; 3x; Heavy		
	Standard; clear stem 1/5-200cm; 5 12-14cm; 300-425cm ht; 3x; Heavy		
etula pubescens	Standard; clear stem 175-200cm; 5 12-14cm; 300-425cm ht; 3x; Heavy	<u> ''</u>	
runus avium	Standard; clear stem 175-200cm; 5		
uercus robur	12-14cm; 300-425cm ht; 3x; Heavy Standard; clear stem 175-200cm; 5	10	
12-14cm; 300-425cm ht; 3x; Heavy Standard; clear stem 175-200cm; 5		20	
orbus aucuparia	12-14cm; 300-425cm ht; 3x; Heavy Standard: clear stem 175-200cm: 5	15	

Planted on a staggere	d grid, at 2.5m centres in species groups of	f 3-5.
Species	Size	%
Betula pendula	B; 80-100cm ht; 1+1; Transplant - seed raised	15
Corylus avellana	B; 80-100cm ht; 1+2; Transplant - seed raised; branched; 4 breaks	25
Crataegus monogyna	B; 80-100cm ht; 1+2; Transplant - seed raised	15
Malus sylvestris	B; 80-100cm ht; 1+2; Transplant - seed raised	20
Prunus padus	B; 80-100cm ht; 1+1; Transplant - seed raised	10
Sorbus aucuparia	B; 80-100cm ht; 1+1; Transplant - seed raised	15

NATIVE MIXED HEDGEROWS (new sections and 'gapping up')			
Planted in double staggred row, 5 plants per liner metre, rows 500mm apart.			
Species	Size	%	
Corylus avellana	B; 80-100cm ht; 1+2; Transplant - seed raised; branched; 4 breaks	20	
Crataegus monogyna	B; 80-100cm ht; 1+2; Transplant - seed raised	50	
llex aquifolium	RB; 80-100cm ht; leader with laterals	5	
Prunus spinosa	B; 80-100cm ht; 1+2; Transplant - seed raised; branched; 3 breaks	20	
Rosa canina	B; 60-80cm ht; 1+1; Transplant - seed raised; branched; 3 breaks	5	

Figure 6: Detailed Landscape Proposals



Figure 7: Aerial Photograph of site and immediate surroundings, site indicated by red line, Core Path dashed blue line, NCNR 76 purple line

- The proposed access would use the existing access directly south;;
- Extending the existing green fingers east and southeast of the site by creation of new native tree and shrub planting on earth bunds to the north of the proposed compound to provide visual enclosure to the development;
- Provision of new native and infill planting along the northern boundary of the proposed acoustic fence;
- Enhancement of other areas surrounding the compound through proposed seed mixes; and
- Ongoing landscape management of planting during the lifetime of the proposed development.

LANDSCAPE BASELINE AND EFFECTS 6.

- 6.1

Landscape Features

Landform and Topography

- 6.3 coal yard.
- 6.4
- 6.5
- 6.6

The assessment of landscape effects deals with the changes to the landscape as a resource. Different combinations of the physical, natural and cultural components (including aesthetic, perceptual and experiential aspects) of the landscape and their spatial distribution create the distinctive character of landscapes in different places.

6.2 Effects are considered in relation to both landscape features and landscape character during construction, at Year 1 and at Year 15 and beyond. A summary of landscape effects are included in Table 1.

The landform of the wider field of which the mains BESS site and proposed SPT substation would occupy the southwestern portion is relatively flat, with an elevation range of approximately 10m above ordnance datum (AOD) in the northeast to approximately 12m in the south. The site for the temporary construction site is located to the south within a former

The elevation range of the immediate surroundings to the north, east and west are similar to the site including much of Cockenzie to the north and northeast. Large man made bunds are found in proximity to the east (immediately east of the site and west of the B6371), south and southwest of the site. An existing permissive route passes over the bund adjacent to the site, the bund approximately 150m to the southwest largely encloses the northeastern settlement edge of Prestonpans.

The characteristics of the site topography are judged to be of low susceptibility to the type and scale of development proposed. Considering the present site condition and immediate surroundings landscape value is judged to be medium to low. Taking account of the judgements of susceptibility and value, the overall sensitivity of the landform and topography of the site is judged to be medium to low.

There would be some changes to the landform of the site to accommodate foundations of the proposed compounds and their fencing, and other structures, as well as the creation of earth bunds and the infiltration basin. During construction, the magnitude of change is judged to be high to medium, which combined with the medium to low sensitivity would result in a short-term **Moderate** adverse level of landscape effect, which would be temporary in nature.

6.7 Upon completion (Years 1 and 15), all earthworks works would be completed, with new features either planted or seeded, the magnitude of change is considered to be low at this stage, which would result in a Minor adverse level of landscape effect in the longer term.

Watercourse and Drainage

- 6.8 There are no watercourses within the site, the Firth of Forth is located approximately 0.5km to the north outside the site boundaries. Beyond some field drains within the wider field in which the site would occupy a south eastern portion there are no notable water or drainage features within the site.
- 6.9 Given the lack of water of water and drainage features within and close to the site, the sensitivity of these features is judged to be low to the type of development proposed.
- 6.10 There would be no direct or indirect effects upon the water features in proximity to the site. However, the Proposed Development would create a new infiltration basin, which would be appropriately seeded. A very low beneficial magnitude of change is predicted upon completion of the Proposed Development, which would result in a Minor beneficial long term level of landscape effect.

Land Use, Buildings and Infrastructure

- 6.11 Built features and infrastructure within the site include some old stone walls along the wider northern site boundary, a pylon line which connects with Cockenzie Electricity Distribution Site in proximity to the northwest. Three steel lattice towers are located within the northern part of the existing arable field and a small existing substation is located within the southwestern part of the field.
- 6.12 The site is heavily influenced by the existing energy infrastructure within the site and Cockenzie Electricity Distribution Site northwest, the pylon line west and the large bund containing the remnant gas workings south. These infrastructure elements are visible across much of the site partly screened and locally filtered by the woodland and tree line on the north eastern edge just outside the wider site boundary.
- 6.13 From much of the site including from Core Path 284 and the permissive routes within the site parts of the southern settlement edge of Cockenzie and Port Seton are visible. This includes properties that back onto the site along Inglis Farm and The Chimneys directly north and north east of the site boundary.
- 6.14 Accounting for the existing land uses and the influence of existing electricity and infrastructure susceptibility and landscape value are judged to be medium to low. Overall sensitivity is judged to be medium to low.
- 6.15 The introduction of the Proposed Development would result in a change of land use within the south western part of the larger field. This would

result in the loss of an area of arable land use and the introduction of a the SPT substation and the BESS compounds and associated infrastructure either side of the substation. The magnitude of change is judged to be high during construction and at Year 1 of operation, which combined with the medium to low sensitivity would result in a Moderate adverse level of landscape effect.

6.16 As landscape mitigation planting matures the Proposed Development would be further integrated within the local landscape by Year 15. However, accounting for the change in land use the degree of effect would remain Moderate and adverse.

Vegetation

- 3.1 A medium scale arable field occupies the majority of the southern part of the site. The northern part of the site comprises a short section of, mature hedgerow with large evident gaps, some mature trees and an area of grassland. Mature woodland is found adjacent to the site to the east and on the south eastern boundary.
- 6.1 The arable field within which the main proposals would be introduced are considered to be of medium to low susceptibility to change and the fringes of gappy hedgerows mature trees and grassland perimeter are considered to be of higher susceptibility. The landscape value of the vegetation within the site is considered to be medium to low. On balance the overall sensitivity of vegetation within the site is considered to be medium. There is no notable vegetation within the former coal yard where the temporary construction compound is proposed.
- 6.2 During construction, the introduction of the Proposed Development would result in the loss of some vegetation within the footprint and immediately adjacent to the proposals. The existing hedgerows, trees and adjacent woodland on the eastern and south eastern boundaries would be retained and protected during construction. The magnitude of change during construction to vegetation is judged to be low, which combined with the medium t sensitivity would result in a short-term Minor adverse and temporary level of landscape effect.
- The proposed mitigation measures as illustrated in Figure 6, would help 6.3 integrate the proposals within the surrounding area. Proposed native planting would be provided along the western and northern perimeter of the proposed acoustic fence. Native tree and shrub planting would be introduced along the northern boundary of the wider site and north of the wayleave. Other areas including the proposed infiltration basin would be appropriately seeded.
- 6.4 A low beneficial magnitude of change is predicted at Year 1 as planting would not have matured, which would result in a Minor beneficial

landscape effect in the short term. In the longer term, the proposed vegetation would help integrate the Proposed Development with its surroundings and bring about a number of localised benefits, resulting in a long-term Moderate beneficial level of landscape effect.

Landscape Character

6.5

- 6.6
- 6.7
- 6.8
- 6.9 this LVA.
- **Coastal Farmland**
- landscape include:

This section provides an overview of the landscape character of the site and its locality. It provides judgment on the sensitivity of the landscape character to the proposed development and the resulting effects which would arise from the development proposals.

National Level Landscape Character

Scotland has a digital map-based national Landscape Character Assessment published in 2019 by NatureScot, showing Landscape Character Types (LCTs) i.e. areas of consistent and recognisable landscape character. This mapping now supersedes those landscape character studies from the 1990s.

The site is located within the northern eastern part of LCT 279 - Settled Coastal Farmland, illustrated on Figure 8 and considered below.

Neighbouring LCTs 278 - Coastal Terrace Lothians and 275 - Lowland Farmed Plain - Lothian lie approximately 1.5km east of the site and LCT 272 Lowland Hills and Ridges - Lothians lies approximately 1.6km south.

Accounting for no notable SZTV coverage on neighbouring LCTs and screening by existing mature woodland directly east of the site and the large bund in proximity to the south notable indirect effects on LCTs 272, 275 and 278 are considered unlikely and are therefore not considered in

6.10 The appraisal of landscape effects is therefore limited to the potential effects the Proposed Development would have on LCT 270 - Settled

6.11 LCT 270 - Settled Coastal Farmland extends from the eastern margins of Edinburgh in the west to the eastern side of Port Seton in the east. Selected key characteristics of LCT 66 relevant to the site and immediate

> • "Almost continuously settled coastal strip giving the area an overall dominant urban/industrial character.

> • Extensive fields of prime agricultural land which is being reduced in area due to settlement expansion.

> • Prominent main road and rail transport corridors, as well as a dense

network of minor roads. Estate and designed landscapes and boundary features.

Visual clutter of vertical structures."

Effects upon LCT 279 - Settled Coastal Farmland

- 6.12 The site is located within the northern eastern part of the LCT. This part of the LCT is heavily influenced by existing energy infrastructure including the pylon lines and small substation within the site, Cockenzie Electricity Distribution Site in proximity to the northwest and remnant gas workings to the south. Other man made influences include settlement and transport routes.
- 6.13 Accounting for the influence of existing elements of electricity infrastructure the susceptibility of the LCT is judged to be medium to low. There are no landscape designations within the site, although a small part of SLA 17 Garden County Farmland and the majority of SLAs 31 Fisherrow Sands and 32 Prestonpans Coast are found within the wider LCT to the southeast and west respectively. Recreational routes include a network of Core Paths, with a short section of Core Path 284 located within the site, on balance landscape value is judged to be medium to high.
- 6.14 Accounting for landscape susceptibility and value the overall sensitivity of LCT 279 - Settled Coastal Farmland is judged to be medium.
- 6.15 Effects on landscape character would be largely contained within the site and its local context. The Proposed Development would introduce the SPT substation, BESS and associated infrastructure and result in the loss of an area of arable farmland. This would directly affect key characteristic: "Extensive fields of prime agricultural land which is being reduced in area due to settlement expansion". The proposed temporary compound is located within the former coal yard.
- 6.16 Accounting for the size and scale of the overall Proposed Development and screening provided by the existing woodland and bund to the east, woodland to the southeast, bund to the south, Cockenzie Electricity Distribution Site to the northwest and proposed mitigation measures directly north of the main development site and north of the pylon line, notable landscape effects would be largely limited to the site level. At Year 1 of operation before mitigation measures have established such effects would extend to around 50m to north up to the proposed bund and planting, 100m east up to the woodland edge adjacent to the B637, 25m south up to the large existing bund and around 100m to the west.
- 6.17 The Proposed Development would extend the presence and influence of electricity infrastructure between the Cockenzie Electricity Distribution

Site outside the site to the northwest and the existing pylon line within the site to the northeast. The Proposed Development would give rise to a no greater than low magnitude of change upon the wider LCT, which combined with the medium sensitivity would result in a Minor adverse level of landscape effect during construction and at Year 1. In the longerterm as proposed mitigation planting becomes more established by Year 15 landscape effects would reduce as the Proposed Development become more integrated within the local landscape.

Townscape Character

6.18 The site is located within close proximity to Cockenzie & Port Seton to the north and east and Prestonpans to the southwest. Existing views of the site are experienced from parts of the southwestern settlement edge of Cockenzie & Port Seton. Views of the site from Prestonpans are largely screened by the large existing bund on the north eastern perimeter of the settlement and by intervening vegetation.

6.19 The SZTV (Figure 9) shows limited theoretical visibility from the south western settlement edge of Cockenzie & Port Seton and the north eastern settlement edge of Prestonpans. Actual views of the Proposed Development would be largely limited to those experienced from the southwestern streets of Cockenzie including Whins Park, Inglis Farm and The Chimneys. No notable views of the Proposed Development are likely to be experienced from Prestonpans

6.20 The Proposed Development would not be evident from the Cockenzie Conservation Area, approximately 252m to the north.

6.21 Accounting for the influence of existing electricity infrastructure, existing screening elements and proposed mitigation measures notable effects on the townscape character of Cockenzie & Port Seton and Prestonpans are considered unlikely and are not considered in this LVA.

Effects on Local Landscape Character

Sensitivity of the site

- 6.22 The current land use of the site is mainly for agriculture with the site of the proposed temporary compound a former coal yard. The site is influenced by the pylon line within the site, the small substation within the south western part of the larger agricultural field, Cockenzie Electricity Distribution Site immediately northwest, pylon line immediately west and large bund in proximity to the south. Accounting for the existing land use and influences of existing electricity infrastructure landscape susceptibility is considered to be low to medium.
- 6.23 The site is not located within any nationally or locally designated landscapes. In terms of recreation, a short section of Core Path 284 is located within the north western part of the wider site and existing permissive routes provide connectivity within the northern and eastern parts of the site. On balance landscape value is considered to be medium
- 6.24 Considering both landscape susceptibility and value the overall sensitivity of the site to the type and scale of development proposed is considered to be medium to low.

Effects on the site

- 6.25 The Proposed Development would introduce a new feature into the landscape, which although of limited height and scale and in proximity to similar infrastructure, would incorporate much of the south western part of the wider site and therefore adversely alter the physical and perceptual attributes of the site.
- 6.26 The magnitude of change to the site itself during construction and at Year 1 of operation is judged to be medium to high. Combined with the medium to low sensitivity this would result in a **Moderate** adverse level of landscape effect on the site.
- 6.27 The landscape mitigation proposals would provide some enhancements across the site, largely enclosing the Proposed Development and would have the potential to enhance local landscape character and connectivity. In the longer-term, the magnitude of change to the site itself is judged to reduce to medium, which on balance would result in a **Moderate** adverse level of landscape effect at Year 15 of operation.

Landscap

Recep

Landform a topography

Water feat and draina

Land use, buildings a infrastruct

Vegetation

Landscap

LCT 270 -Settled Co Farmland

The site its

or	Sensitivity	Development Phase	Magnitude of change	Level of Effect
e Feat	tures			
and Medium t y Low	Madium to	Construction	High	Moderate adverse
	Low	Year 1	Low	Minor adverse
	2011	Year 15	Low	Minor adverse
uroc		Construction	Negligible	n/a
Low Low	Low	Year 1	Very Low	Minor beneficial
		Year 15	Very Low	Minor beneficial
	Construction	Medium	Moderate adverse	
and	Medium	Year 1	Medium	Moderate adverse
ure		Year 15	Medium	Moderate adverse
n Medium	Construction	Medium	Minor adverse	
	Medium	Year 1	Medium	Minor beneficial
		Year 15	Medium	Moderate beneficial
e Character				
astal Me		Construction	Low	Minor adverse
	Medium	Year 1	Low	Minor adverse
		Year 15	Low	Minor adverse
self	Medium	Construction	Medium to	Moderate adverse
			High	
		Year 1	Medium	Moderate adverse
		Year 15	Medium	Moderate adverse
				-

Table 1: Summary of Landscape Effects

7. VISUAL EFFECTS

Introduction

- The appraisal of visual effects considers the potential for changes in 7.1 views and visual amenity. The aim is to establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected, and the nature of the views and visual amenity (meaning the overall quality and pleasantness to a view).
- 7.2 Effects are considered during construction, at Year 1 and at Year 15 and beyond. New planting takes a number of years to mature and average growth rates have been taken into consideration. The effectiveness of the vegetation both in terms of integrating the development into the surrounding landscape and in providing visual screening would improve over time and needs to be considered appropriately. A summary of visual effects are included in Table 2.
- Photography is set out within the photographic record set out in Appendix 7.3 2. Viewpoint locations are shown on Figure 10.

Zone of Theoretical Visibility

- The Screened Zone of Theoretical Visibility (SZTV, Figure 9) identifies 7.4 the potential locations from which the development may be visible. The Screened Zone of Theoretical Visibility (SZTV) has been produced using Digital Terrain Modelling (DTM) data. Existing built development (8m tall) and larger blocks of woodland have also been modelled (15m tall) to take account of the screening effect that these would provide. However, the screening effect provided by smaller blocks of woodland, individual trees and hedgerows have not be taken into account, and consequently the actual extent of the area from which the proposed development is visible is likely to be much smaller. Figure 9 also conveys the bare earth scenario, assuming that only the DTM data is used and there are no elements providing screening.
- The SZTV has been run at an average height of 3.5m for the elements 7.5 which form the majority of the Proposed Development.

Sensitivity

- Residential receptors, users of Core Paths and visitors are considered to 7.6 be of high visual sensitivity. Users of the local minor road network where the view is not the focus of activity are of medium sensitivity. People using larger A-roads are of low sensitivity.
- 7.7 The approach to sensitivity of visual receptors is set out in **Appendix 1**.

Figure 9: Screened Zone of Theoretical Visibility P23-0093D | COCKENZIE BESS | LANDSCAPE & VISUAL APPRAISAL 13

Residential Receptors

- 7.8 The appraisal of residential receptors focuses on residential groups along the south western settlement edge of Cockenzie & Port Seton. This LVA does not include a separate residential amenity assessment. It is considered that effects resulting from the Proposed Development would fall below the Residential Visual Amenity Threshold referred to in Landscape Institute TGN 02/2019 as visual effects: "of such nature and / or magnitude that it potentially affects 'living conditions' or Residential Amenity".
- 7.9 For the purpose of this appraisal, it is assumed as a worst-case, that all nearby properties are permanent residences.

Whin Park

- 7.10 This residential receptor group comprises the residences along Whin Park approximately 110m at the closest point northwest of the main SPT substation and BESS site. Representative views from the south western corner of Whin Park are shown as Viewpoint 1
- 7.11 The majority of properties along the western part of Whin Park are orientated with principal views west. The majority of properties along the eastern part of Whin Park, north of Inglis Farm are orientated south. It should be noted that the two semi detached properties closest to the site are orientated southwest towards the western part of the site. From the properties along the western part of Whin Park principal views would largely feature the existing Cockenzie Electricity Distribution Site and associated infrastructure including the pylon lines, seen in the middle distance. It is possible that from some properties along the western part of Whin Park areas of the western BESS site and the SPT substation site would be seen in the middle distance behind the existing pylon line, partly screened by existing vegetation associated with the nearby play park south of the road and along Core Path 284, as represented by Viewpoint 1. The eastern BESS site would be largely screened form views from the western Whin Park properties by intervening vegetation and Inglis Farm properties.
- 7.12 Passing the bend in the road views of the western BESS site and SPT substation site from the eastern part of Whin Park would be largely screened by the mature play park trees and Inglis Farm properties. Views of the eastern BESS site from along the eastern part of Whin Park would be largely limited to glimpsed views between the intervening properties and associated garden vegetation directly south on Inglis Farm where parts of the overall eastern side of the site would be seen in the middle distance behind the existing pylon line.

- 7.13 During construction the greatest visual effects would be experienced from the properties closest to the Proposed Development, as represented by Viewpoint 1, where construction activities would be seen in the middle distance between gaps in the existing vegetation. From the eastern part of Whin Park much of the construction activities would be limited to glimpses through the intervening buildings and vegetation. At worst, a medium magnitude of change is predicted during construction, resulting in a short-term Moderate temporary adverse level of visual effect.
- 7.14 At Year 1, the majority of the Proposed Development would be screened by the existing vegetation and a combination of the proposed mitigation measures including the acoustic fence, bunds and tree and shrub planting. A worst case low magnitude of change is predicted at Year 1, which would give rise to a Minor adverse level of visual effect.
- 7.15 At Year 15, once proposed planting has established around the proposed development, views would be largely screened. However, some glimpses maybe possible, particularly in the winter months following leaf fall. A low to very low magnitude of change is predicted at Year 15, with a Minor adverse visual effect to No Effect.

Inglis Farm

- 7.16 This residential receptor group comprises the residences along Inglis Farm approximately 75m at the closest point northwest of the main BESS and SPT substation sites. Representative views looking southeast towards the main site, close to the southern property boundaries on the existing permissive route within the site are shown as Viewpoint 2.
- 7.17 Properties on the northern side of Inglis Farm are orientated with principal views southeast. Properties on the southern side of Inglis Farm back onto the site with secondary (rear) views southeast. Properties on the western side of Inglis Farm are orientated with principal views southwest.
- 7.18 Direct principal views of the eastern BESS site seen in the middle distance behind the pylon line and east of the small existing substation would be possible from the properties on the northern side of Inglis Farm. With views partly interrupted and screened by the properties on the southern side of the road. Views of the western BESS site and the SPT substation site would be largely oblique and partly screened by the intervening vegetation around the play park south of Whin Park.
- 7.19 Direct secondary views of the eastern BESS site seen in the middle distance behind the pylon line and east of the small existing substation would be possible from the properties on the southern side of Inglis Farm. Views of the western BESS site would also be anticipated and would be largely oblique. While the fencing along the southern boundary would

provide some ground level screening from these properties, some views of the overall site would be largely unrestricted.

- 7.20 Similar views would be experienced from the properties on the western side of Inglis Farm.
- 7.21 Construction activities associated with the introduction of the Proposed Development would affect principal and secondary views from Inglis Farm. The introduction of the main BESS and SPT substation components would be evident in the middle distance behind the existing pylon line. Activities involving the introduction of the bunds, infiltration basin and new planting and seeding would be seen at closer proximity. While some views would likely be more restricted at worst the construction period would result in a high magnitude of change and a short-term Major temporary adverse level of visual effect.
- 7.22 At Year 1, lower lying components of the Proposed Development would be largely screened by the proposed mitigation measures including the acoustic fence, bunds and tree and shrub planting. However, it is considered likely that from some upper storeys of some Inglis Farm properties that the tops of some of the battery storage units and the transformers would be seen above the mitigation measures behind the existing pylon line and back clothed by the existing bund directly south.
- 7.23 The Proposed Development would occupy a similar portion of the available view to the existing pylon line and would where visible be seen behind this existing feature. Although, the introduction of the Proposed Development would extend the visual presence of electricity infrastructure to the southeast of the Cockenzie Electricity Distribution Site up to the pylon line. A worst case medium magnitude of change is predicted at Year 1, which would give rise to a Moderate adverse level of visual effect.
- 7.24 At Year 15, once proposed planting has established around the Proposed Development, views would be largely screened. However, some glimpses maybe possible, particularly in the winter months following leaf fall. A medium to low magnitude of change is predicted at Year 15, with a Moderate to Minor adverse level of visual effect.

The Chimneys

7.25 This residential receptor group comprises The Chimneys residences approximately 90m at the closest point northwest of the main BESS and SPT substation sites. Representative views looking east towards the main site, close to the western property boundaries on the existing permissive route within the site are shown as Viewpoint 3.

Other properties

within the study area.

7.26 Properties within the western side of The Chimneys have their western facades facing the site with some opportunity for largely indirect principal and secondary views of the main site seen in the middle distance behind the pylon line, either side of the small existing substation. Direct views of the eastern part of the wider site would also be experienced from these properties in views looking south. Properties along the B6371 are orientated east facing the road with secondary views west across the majority of the wider site partly screened by the properties within the western side of The Chimneys. The existing wooden boundary fence on the western and southern side of The Chimneys offers largely limited ground level screening in views looking south and west towards the site.

7.27 Construction activities associated with the introduction of the main BESS and SPT substation components would be evident in the middle distance behind the existing pylon line north. Activities involving the introduction of the bund, infiltration basin and new planting and seeding would be seen at closer proximity. Construction activities would affect principal and secondary views and would result in a high magnitude of change and a short-term Major temporary adverse level of visual effect.

7.28 At Year 1, lower lying components of the Proposed Development would be largely screened by the proposed mitigation measures including the acoustic fence, bunds and tree and shrub planting. However it is considered likely that from some of the upper storeys of The Chimneys properties that the tops of some of the battery storage units and the transformers would be seen above the mitigation measures behind the existing pylon line back and clothed by the existing bund to the south.

7.29 The Proposed Development would occupy a similar portion of the available view to the existing pylon line and would where visible be seen behind this existing feature. Although, the introduction of the Proposed Development would extend the visual presence of electricity infrastructure to the southeast of the Cockenzie Electricity Distribution Site up to the pylon line. A worst case medium magnitude of change is predicted at Year 1, which would give rise to a Moderate adverse level of visual effect. At Year 15, once proposed planting has established around the Proposed Development, views would be largely screened. However, some glimpses maybe possible, particularly in the winter months following leaf fall. A medium to low magnitude of change is predicted at Year 15, with a Moderate to Minor adverse level of visual effect.

7.30 No notable visual effects are anticipated on other residential receptors

Recreational Receptors and Road Users

7.31 Views from roads closest to the site would be similar to the adjacent recreational routes and are therefore not considered separately.

Core Path 284

- 7.32 The eastern section of this route is located within the red line boundary. Representative views are shown as Viewpoint 4 in Appendix 3. This Core Path links Whin Park with Core Path 146, approximately 250m west of the main site. This Core Path passes directly north of the western main site under two pylon lines between the Cockenzie Electricity Distribution Site and the small substation within the south western part of the site. An existing hedgerow with large evident gaps on the southern side of the route partly contains the Core Path.
- 7.33 The SZTV indicates theoretical visibility from the majority of the Core Path. Views of the main site and wider site are possible through the gaps in the hedgerow along the Core Path. Existing views are heavily influenced by the existing elements of electricity infrastructure.
- 7.34 Construction activities would be seen in proximity views looking south and east through the gaps in the hedgerow. The magnitude of change is judged to be high and taking account of the high sensitivity would result in a short-term temporary Major adverse level of visual effect. It should be noted that during construction it is possible that access to Core Path 284 would be managed to facilitate the introduction of the Proposed Development.
- 7.35 At Years 1 the majority of the Proposed Development would be screened by the proposed acoustic fence. Although it is possible that the tops of the transformers would be seen above back clothed by the existing bund to the south. The introduction of the Proposed Development would bring electricity infrastructure closer to the Core Path north and west of the small existing substation. A worst case high to medium magnitude of change is predicted at Year 1, which would give rise to a Major to Moderate adverse level of visual effect.
- 7.36 At Year 15, the Proposed Development would be largely screened by a combination of the acoustic fence and the proposed infill hedgerow planting on the southern side of the Core Path which would become established by this time. It is possible that during the winter months the acoustic fence and the tops of taller elements such as the transformers become more visible. A medium to low magnitude of change is predicted at Year 15, with a Moderate to Minor adverse level of visual effect.

B6371 / Core Path 144

- 7.37 This visual receptor group comprises the B6371 and adjacent Core Path 144. The B63761 is located approximately 120m east of the main site, Core Path 144 provides a link along the eastern side of the road The SZTV shows very little to no theoretical visibility across the road and Core Path. Actual views of the Proposed Development would be limited to those experienced from a very short northern section of this Core Path through gaps in the tree line and The Chimneys residences west of the road. From the majority of the route the Proposed Development would be fully screened by the existing bund and tree line west of the B1361.
- 7.38 It is possible that during construction some additional vehicle movements would be evident on the B1361. However on balance a low to very low magnitude of change is predicted at construction and Years 1 and 15, which would result in a Minor adverse visual effect to No Effect.

B1348 / NCNR 76, Core Paths / John Muir Way, north of the site

- 7.39 This visual receptor group of includes the B1348 / NCNR 76, Core Path 276 / John Muir Way, and other Core Paths (277, 278, 441 and 442) located approximately 240m northwest of the main BESS site at the closest point.
- 7.40 Representative views experienced from the road and recreational routes northwest of the site are represented by Viewpoints 6, 7 8 and 10. Views looking south and southeast towards the site from these routes feature the existing pylon lines and the Cockenzie Distribution Centre, visible against the local skyline. The SZTV indicates relatively extensive visibility from short sections of B1348 / NCNR 76 and Core Path 786 / John Muir to the northwest of the Proposed Development. Very limited or no theoretical visibility is indicated from the other Core Paths north of the site.
- 7.41 However, actual visibility of the Proposed Development from Core Path 276 / John Muir Way, NCNR 76, would be limited to occasional glimpses between intervening features including landform buildings and vegetation.
- 7.42 It is possible that during construction some additional vehicle movements would be evident on the B1348. However on balance a low to very low magnitude of change is predicted at construction and Years 1 and 15, which would result in a Minor adverse visual effect to No Effect.

Core Paths south and east of the site

7.43 This group of recreational routes includes Core Path 145 and 146 located

approximately 250m west and southwest of the main site.

- visual effect to No Effect.

Permissive routes within the site

- of the Proposed Development.

7.44 Representative views experienced from Core Path 146 south of the site are represented by Viewpoint 9. Both routes are heavily influenced by views of the existing pylon lines and the Cockenzie Electricity Distribution Site seen against local skylines. The SZTV indicates relatively extensive visibility from the majority of these routes. However, actual visibility of the Proposed Development from these routes would be largely limited to glimpses of the western BESS site and proposed temporary compound area through intervening vegetation directly west and south of the site.

7.45 It is possible that during construction some additional vehicle movements would be evident on the existing access directly south of the site. However, on balance a low to very low magnitude of change is predicted at construction and Years 1 and 15, which would result in a Minor adverse

7.46 Existing permissive routes cross the northern and eastern parts of the site linking Core Path 284 in the west and the B6371 / Core Path 144 in the east. These routes are heavily influenced by views of the existing pylon lines and Cockenzie Electricity Distribution Site seen against local skylines and the large bunds associated with the remnant gas workins south of the site. The SZTV indicates extensive visibility across these routes with actual proximity views of the main site relatively unrestricted in views looking south and west from the existing permissive routes.

7.47 Construction activities would be seen in proximity largely open views looking south and west from the permissive routes. The magnitude of change is judged to be high and taking account of the high sensitivity would result in a short-term temporary Major adverse level of visual effect. It should be noted that during construction it is possible that access to the permissive routes would be managed to facilitate the introduction

7.48 At Years 1 the majority of the Proposed Development would be screened by the proposed acoustic fence. Although it is possible that the tops of the transformers would be seen above through gaps in the proposed bunds back clothed by the existing bunds in views looking south and west. The introduction of the Proposed Development would bring electricity infrastructure closer to the permissive routes north, east and west of the small existing substation. The proposed improvements to the permissive routes and tree and planting along the proposed bunds and periphery of the site would provide some overall enhancement. However, planting would not yet be fully established and a worst case medium to low magnitude of change is predicted at Year 1, which would result in a **Moderate** adverse level of effect.

7.49 At Year 15, the Proposed Development would be largely screened by a combination of the acoustic fence and the proposed planting around the acoustic fence and on the proposed bunds. It is possible that during the winter months the acoustic fence and the tops of taller elements such as the transformers become more visible between the gaps in the proposed bunds. A low magnitude of change is predicted at Year 15, which would result a **Minor** adverse level of visual effect.

Other recreational routes within the study area

7.50 No notable visual effects are anticipated on other more distant recreational receptors within the study area.

Sensitivity	Development Phase	Magnitude of change	Level of Effect
ptors			
-	Construction	High	Moderate adverse
	Year 1	Low	Minor adverse
High	Year 15	Low to Very Low	Minor adverse to No Effect
	Construction	High	Major adverse
Llinh	Year 1	Medium	Moderate adverse
High	Year 15	Medium to Low	Moderate to Minor adverse
	Construction	High	Major adverse
High	Year 1	Medium	Moderate adverse
	Year 15	Medium to	Moderate to Minor
		Low	adverse
tors			
	Construction	High	Major adverse
High	Year 1	High to Medium	Major to Moderate adverse
	Year 15	Medium to Low	Moderate to Minor adverse
High	Construction	Low to Very Low	Minor adverse to No Effect
	Year 1	Low to Very Low	Minor adverse to No Effect
	Year 15	Low to Very Low	Minor adverse to No Effect
High	Construction	Low to Very Low	Minor adverse to No Effect
	Year 1	Low to Very Low	Minor adverse to No Effect
	Year 15	Low to Very Low	Minor adverse to No Effect
High	Construction	Low to Very Low	Minor adverse to No Effect
	Year 1	Low to Very Low	Minor adverse to No Effect
	Year 15	Low to Very Low	Minor adverse to No Effect
	Construction	High	Major adverse
High	Year 1	Medium	Moderate adverse
	Year 15	Low	Minor adverse

Table 2: Summary of Visual Effects

8. SUMMARY AND CONCLUSION

Landscape Features

- 8.1 There would be some changes to the landform of the site to accommodate the Proposed Development, leading to a short-term Moderate temporary adverse levels of effect. However, once the proposals are completed and with new landscape features either planted or seeded, adverse effects would reduce in the longer term.
- 8.2 The Proposed Development would represent an inevitable change to the current land use from an area of arable land use to an operational BESS. SPT substation and associated infrastructure albeit in context of nearby infrastructure. The proposed temporary compound area is located in a former coal yard. A Moderate adverse level of effect is predicted in the longer-term, although the surrounding influences and benefits of landscape proposals would provide some local enhancements.
- In the long-term, the additional planting in the form of native planting 8.3 around the main compounds, tree and shrub planting on the proposed bunds and site periphery and the introduction of grassland and damp grassland mixes would enhance the landscape structure of the site and would give rise to landscape and biodiversity benefits. The creation of new infiltration feature would also give rise to limited beneficial landscape effects.

Landscape Character

- The Proposed Development would introduce a new feature into the 8.4 landscape, which although of relatively limited height and scale and adjacent to similar such infrastructure would adversely alter the physical and perceptual attributes of the site. The Proposed Development would give rise to Moderate long-term adverse effects upon the landscape character of the site itself, however, the landscape mitigation proposals would provide some enhancements across the site.
- 6.28 The site is located within the north eastern part of LCT 279 Settled Coastal Farmland. The Proposed Development would result in the loss of an area of arable farmland to an operational BESS, SPT substation, associated infrastructure and the addition of native hedgerow, tree and shrub planting and the introduction of suitable seed mixes. This would directly affect a small north eastern part of LCT 279 - Settled Coastal Farmland
- Given the relatively low heights of the Proposed Development and 8.1 screening by the existing wooded bund east, large bund south to the south, woodland southeast, Cockenzie Electricity Distribution Site

northwest and the proposed mitigation measures around and north of the main compounds effects on the wider LCT 279 would be Minor adverse and long-term. Over time as the proposed planting matures effects would reduce as the Proposed Development becomes further integrated within the local landscape.

No notable effects on other neighbouring LCTs or the townscape 8.2 character of Cockenzie & Port Seton and Prestonpans are anticipated.

Visual Receptors

- 8.3 The proposed layout has sought to integrate and minimise potential visual effects through siting the Proposed Development in close proximity to the Cockenzie Electricity Distribution Site, associated infrastructure and use the existing landscape bunds and introduce appropriate mitigation measures.
- 8.4 Notable visual effects on local residents arising from the proposed development would be limited to views experienced by some residents within the southwestern settlement edge of Cockenzie & Port Seton Some receptors on Whin Park. Inglis Farm and The Chimneys would experience a Major adverse short-term and temporary visual effect during construction. Following construction a Moderate adverse visual effect is anticipated for operational Year 1 reducing further as mitigation planting matures by to Moderato to Minor adverse by Year 15.
- 8.5 Visual effects on recreational users on the closest Core Path 284 directly northwest of the Proposed Development would be Major adverse shortterm and temporary during construction. Following construction a Major to Moderate adverse visual effect is anticipated for operational Year 1 reducing further as mitigation planting matures by to Moderato to Minor adverse by Year 15. From the permissive routes within the site visual effects during construction would be Major adverse. Following construction a Moderate adverse visual effect is anticipated for operational Year 1 reducing further as mitigation planting matures by to to Minor adverse by Year 15.
- No notable visual effects are anticipated from other residential, 8.6 recreational and road user receptors.

Conclusion

8.7

- 8.8 applied within other areas.
- 8.9

The Proposed Development would locate a Battery Energy Storage System and SPT substation within an area of arable land, with a temporary construction compound within a former coal yard, southeast of the Cockenzie Electricity Distribution Site. The main BESS site would be sited away from the existing mature woodland to the southeast and gappy hedgerow to the northwest.

Mitigation measures would include landscape bunds north of the main BESS site and north of the existing pylon line. New native planting along the northern, western and eastern perimeter of the main BESS. An extension of the existing green finger east of the site though tree and shrub planting north of the existing wayleave and appropriate seed mixes

As the proposed planting matures the Proposed Development would be further integrated within the local landscape with some additional biodiversity opportunities. Overall the total extent of the landscape and visual effects would be localised and limited in nature.

9. **CUMULATIVE APPRAISAL**

- 9.1 The aim of the cumulative appraisal is to identify any interactions with other similar development types (including electricity infrastructure developments and associated infrastructure) which could result in further notable landscape and visual effects not identified within the LVIA. GLVIA (para 7.1) states that cumulative effects: "...result from the incremental changes caused by other past, present or reasonably foreseeable actions together with the project."
- GLVIA3 (para 7.14) goes onto states that: "Schemes at pre-planning 9.2 or scoping stage are not generally considered in the assessment of cumulative effects because firm information on which to base the assessment is not available and because of the uncertainty of about what will occur that is not 'reasonably foreseeable"."
- This cumulative appraisal therefore considers similar consented 9.3 developments, and current valid planning applications. Pre-application screening and scoping stage proposals are not considered within this cumulative assessment given the uncertainty that such schemes would come forward to the planning stage. It should be noted that operational developments similar to the proposed development are considered as part of the baseline assessment within the LVA. However, where necessary this cumulative appraisal provides additional narrative regarding such operational developments.
- 94 As recommended by NatureScot cumulative guidance (Assessing the cumulative landscape and visual impact of onshore wind energy developments 2021), this cumulative appraisal, focuses on the "... additional cumulative change which would be brought about by the proposed development" (page 6). While this guidance specifically accounts for wind farms, many overarching principles are of relevance to cumulative assessment of other development types such as solar farms.
- The cumulative appraisal is based on the same landscape and visual 9.5 baseline and receptors as the LVA (Appendix 1), and the methodology is also the same in terms of forming and expressing judgements. Where the magnitude of change that would occur as a result of the introduction of the proposed development in the LVIA is identified as either low or negligible, potential cumulative effects are often not assessed in cumulative assessment as it is considered that such an addition would not give rise to a notable cumulative effect.
- Cumulate landscape effects arise from combined direct and or indirect 9.6 effects on the same receptor, such as two developments within the same landscape character area or one development within, and another development visible form a different landscape character area.

- Three types of cumulative visual effects are considered: combined, 9.7 successive:
 - **Combined** where two or more cumulative developments are seen together at the same time from the same viewpoint, and in the same field of view. The effects of an extension of an existing development or the positioning of a new development such that it would be seen as extending the presence of built infrastructure.
 - Successive -where two or more developments are present in views from the same location but cannot be seen in the same field of view and the observer must turn to see them.
 - Sequential where two or more cumulative developments are not seen from the same viewpoint, even if the observer turns around to extend his/her perception of the surrounding landscape. The receptor has to move to another location to see cumulative developments. The frequency of occurrence greatly depends on factors such as: distance to developments, distance to another viewpoint and speed of travel.
- 9.8 To provide for a robust assessment of potential cumulative landscape and visual effects, all landscape receptors, visual receptor including viewpoints considered in the LVA have been reviewed. The distance, context, and screening have been considered.

Other Cumulative Developments

- 9.9 This cumulative appraisal uses a 3km study area informed by the LVA. There are a number of similar consented developments in proximity to the Proposed Development as shown on Figure 11. The status, size and distance of the other cumulative developments from the proposed developments are outlined below.
 - 22/00440/P (directly south of the site) Construction of new link road including the formation of two new signalised junctions and associated works. Granted Permission in July 2022;
 - 21/01474/PPM (approximately 0.5km northwest of the main) -Renewal of planning permission in principle 18/00189/PPM for proposed onshore transmission works associated with the Inch Cape Offshore Wind Farm comprising the construction, operation and decommissioning of an onshore substation, electricity cables and associated infrastructure required to export electricity from the Inch Cape Offshore Wind Farm to the National Electricity Transmission System. Granted Permission in March 2022. Other planning references of relevance to this site include: 21/00001/ PAN 18/00189/PPM, and 17/00008/PAN - - Planning permission in principle for proposed onshore transmission works associated;
 - 21/01448/P (approximately 50m northwest of the main site) -

Erection of 1 wind turbine, welfare units, plant equipment, fencing and gates for a temporary period of 18 months. Granted Permission in March 2022:

- 21/00290/PPM (site approximately 200m northwest of the main site) - Planning permission in principle for onshore substation, underground electricity cables and associated temporary and permanent infrastructure to export electricity from the Seagreen Offshore Wind Farm into the national electricity transmission network. Granted Permission in August 2021. Other planning references relevant to this site include 20/00010/PAN; and
- 08/00045/FUL (adjacent south to the main site) Erection of new primary substation and associated works. Consent Granted. This is the small operational substation between the proposed BESS sites and south of the proposed SPT substation.
- 9.10 No apparent application developments were identified. Therefore the cumulative appraisal considers the consented developments 22/00440/P. 21/01474/PPM, 21/01448/P and 21/00290/PPM,

Cumulative Landscape Effects

- 9.11 In terms of potential landscape effects resulting from the introduction of the Proposed Development the LVA identifies a medium magnitude of change and a Moderate adverse effect on the landscape of the site itself. Landscape effects on the host LCT 279 - Settled Coastal Farmland are identified in the LVA as a minor magnitude of change and an overall Minor adverse effect on the overall LCT.
- 9.12 All consented developments shown on **Figure 11** would be located within LCT 279 - Settled Coastal Farmland and would largely be located within areas of the remnant footprint of the former Cockenzie coal fired power station. This would include 22/00440/P which includes the existing access directly south of the Proposed Development, 21/01474/PPM which would occupy much of the remnant power station site, 21/01448/P which would be located in the north eastern corner of the former power station site and 21/00290/PPM which would marginally extend the presence of electricity infrastructure west of the Cockenzie Electricity Distribution Site.
- 9.13 The introduction of the Proposed Development to this consented pattern of development associated with the former Cockenie power station would marginally extend the presence of electricity infrastructure west of the existing Cockenzie Electricity Distribution Site up to the existing pylon line. The cumulative magnitude of change is judged to be low and would result in an a combined direct Minor adverse cumulative level of landscape effect on LCT 279 - Settled Coastal Farmland.

Cumulative Visual Effects

as:

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9.14 From visual receptors considered in the LVA visual effects are identified

Whin Park, a low magnitude of change at Year 1 reducing to a very low magnitude of change at year 15. Views of consented 21/00290/ PPM would be largely screened by intervening vegetation south of the road. It is possible that some elements of the consented developments including 21/01474/PPM and 21/00290/PPM would be seen behind the Cockenzie Electricity Distribution Site. However, given the low to very low magnitude of change predicted for the introduction of the Proposed Development notable cumulative interactions with these consented developments are considered unlikely and are not considered further in this appraisal.

Ignlis Farm, a medium magnitude of change at Year 1 reducing to a medium to low magnitude of change at year 15. Views of consented developments would be largely limited to 22/00440/P which would be located directly south of the Proposed Development. Views of other consented developments to the west would be largely screened by intervening vegetation and built form. Potential for cumulative visual effects on Inglis Farm are considered further below.

The Chimneys, a medium magnitude of change at Year 1 reducing to a medium to low magnitude of change at year 15. Views of consented developments would be largely limited to 22/00440/P which would be located directly south of the Proposed Development and 21/00290/PPM partly screened behind the Cockenzie Electricity Distribution Site . Views of other consented developments to the west would be largely screened by intervening vegetation and built form. Potential for cumulative visual effects on The Chimneys are considered further below.

Core Path 284; would pass between consented 21/00290/PPM and 22/00440/P and is therefore considered further below.

B6371 / Core Path 144, a low to very low magnitude of change at Year 1 and Year 15. The majority of the consented developments within the study area would be screened from views from these transient receptors by the existing tree lines, bunds and buildings west of the road and Core Path. Notable cumulative interactions with these consented developments are considered unlikely and are not considered further in this appraisal.

B1348 / NCNR 76, Core Paths / John Muir Way, north of the site, a low to very low magnitude of change at Year 1 and Year 15. The main source of visual effects on these transient routes would be the introduction of consented 21/01448/P. 21/01474/PPM and 21/00290/PPM. Given the low to very low magnitude of change predicted for the introduction of the Proposed Development notable cumulative interactions with these consented developments are considered unlikely and are not considered further in this appraisal.

- Core Paths south and east of the site, a low to very low magnitude of change at Year 1 and Year 15. The main source of visual effects on these transient routes would be the introduction of 21/00290/ PPM. Given the low to very low magnitude of change predicted for the introduction of the Proposed Development notable cumulative interactions with these consented developments are considered unlikely and are not considered further in this appraisal.
- Permissive routes within the site, lie in close proximity to consented 21/00290/PPM and 22/00440/P and are therefore considered further below.
- 9.15 The cumulative visual appraisal therefore considers potential cumulative effects on Inglis Farm, The Chimneys, Core Path 284 and the permissive routes within the site.

Inglis Farm

9.16 The Proposed Development would be located directly north of the mid section of consented 22/00440/P which involves the upgrade of the existing link road (between the B1348 and B6371). At Years 1 and 15 the proposed mitigation measures for the Proposed Development would largely screen potential combined views looking south towards the improved link road behind. On balance the overall combined cumulative magnitude of change is judged to be low to very low which would result in a Minor adverse cumulative visual effect to No Effect.

The Chimneys

- 9.17 The Proposed Development would be located directly north of the mid section of consented 22/00440/P, and approximately 200m northwest of consented 21/00290/PPM. The latter development involves the introduction of electricity infrastructure southwest of the Cockenzie Electricity Distribution Site. At Year 1 and 15 the proposed mitigation measures for the Proposed Development would largely screen the improved link road behind. It is possible that the higher elements of 21/00290/PPM would be seen behind and partly screened behind the Cockenzie Electricity Distribution Site in combination with the Proposed Development at Year 1. By Year 15 once the proposed planting has established views of consented 21/00290/PPM would be largely screened.
- 9.18 On balance the combined cumulative magnitude of change is at Year 1 is judged to be low which would result in a Minor adverse cumulative visual effect. By Year 15 once mitigation measures are established the

overall combined cumulative magnitude of change is judged to be low to very low which would result in a Minor adverse cumulative visual effect to No Effect.

Core Path 284

- 9.19 The Proposed Development would be located directly north of the mid section of consented 22/00440/P, and approximately 200m northwest of consented 21/00290/PPM.
- 9.20 The introduction of the Proposed Development in combination with the infrastructure that would be associated with consented 21/00290/PPM would result in combined, successive and sequential views of new infrastructure to the south and northwest which are already affected by existing electricity infrastructure.
- 9.21 While views experienced from the Core Path already feature large scale elements of existing electricity infrastructure (including Cockenzie Electricity Distribution Site, associated infrastructure and pylon lines) seen the introduction of the Proposed Development and consented 22/00440/P would bring the presence of infrastructure closer to the route.
- 9.22 On balance the cumulative magnitude of change is at Year 1 and 15 is judged to be medium to low which would result in a Moderate to Minor adverse cumulative visual effect.

Permissive routes within the site

- 9.23 The Proposed Development would be located directly north of the mid section of consented 22/00440/P, and approximately 200m northwest of consented 21/00290/PPM. At Year 1 and 15 the proposed mitigation measures for the Proposed Development would largely screen the improved link road behind. It is possible that the higher elements of 21/00290/PPM would be seen in sequential views behind and partly screened behind the Cockenzie Electricity Distribution Site in combination with the Proposed Development at Year 1. By Year 15 once the proposed planting has established views of consented 21/00290/PPM would be largely screened.
- 9.24 While views experienced from the permissive routes within the site already feature large scale elements of existing electricity infrastructure (including Cockenzie Electricity Distribution Site, associated infrastructure and pylon lines) seen the introduction of the Proposed Development and consented 22/00440/P would bring the presence of infrastructure closer to the route
- 9.25 On balance the cumulative magnitude of change is at Year 1 is judged to

be low which would result in a Minor adverse cumulative visual effect. By Year 15 once mitigation measures are established the overall combined cumulative magnitude of change is judged to be low to very low which would result in a Minor adverse cumulative visual effect to No Effect.

Conclusions

- Year 15.
- 15 is predicted.

9.26 The addition of the Proposed Development in combination with other similar consented developments which would largely occupy the remnant footprint of former Cockenzie power station would result in a Minor adverse cumulative landscape effect on LCT 279 - Settled.

9.27 Accounting for existing elements of electricity infrastructure, existing screening and proposed mitigation measures across the site cumulative effects on nearby visual receptors would be limited. This would include a Minor adverse cumulative visual effect to No Effect on Inglis Farm. A Minor adverse cumulative visual effect on The Chimneys at Year 1 reducing to a Minor adverse cumulative visual effect to No Effect at

9.28 Cumulative visual effects on recreational routes would be limited to those within the site, with a Moderate to Minor adverse cumulative visual effect predicted for Core Path 284 at Years 1 and 15. For the permissive routes within the site a Minor adverse cumulative visual effect at Year 1 reducing to a Minor adverse cumulative visual effect to No Effect at Year

9.29 It should be noted that is possible that the construction phase of the Proposed Development and the consented developments within the study area could occur at a similar time which would result in a higher temporary and short term magnitude of cumulative landscape and visual change from the receptors considered. However given the uncertainty of this occurrence an overall level of cumulative landscape and visual effect resulting from construction activities has not been considered.

REFERENCES

The following documents have been consulted during the preparation of this LVA:

- National Planning Framework for Scotland 4 (2023);
- East Lothian Council Local Development Plan (2018);
- Guidelines for Landscape and Visual Impact Assessment (3rd edition) - Landscape Institute/ Institute of Environmental Management and Assessment (2013);
- Landscape Institute (June 2013) GLVIA3 Statement of Clarification 1/13, LI;
- Visual Representation of Development Proposals, Technical Guidance Note 06/19, September 2019;
- Residential Visual Amenity Assessment Technical Guidance Note 2/19: and
- NatureScot National Landscape Character Assessment (2019).

INTRODUCTION

This appendix presents the assessment criteria adopted for the appraisal of landscape and visual effects arising from the proposed development.

The primary source of best practice for LVA in the UK is The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute and the Institute for Environmental Management and Assessment, 2013). The assessment criteria adopted to inform the appraisal of effects has been developed in accordance with the principles established in this best practice document. It should however be acknowledged that GLVIA3 establishes guidelines not a specific methodology. The preface to GLVIA3 states:

"This edition concentrates on principles and processes. It does not provide a detailed or formulaic 'recipe' that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand."

purpose.

The purpose of an LVA when undertaken outside the context of an EIA is to identify and describe the relative level of any landscape and visual effects arising as a result of the proposals. As confirmed in GLVIA3 Statement of Clarification 1/13 (Landscape institute, 10th June 2013) an LVA for development which has been screened as not requiring EIA should avoid concluding whether the effects are significant or not and this is the approach adopted in this LVA.

An LVA must consider both:

- effects); and
- visual effects).

landscape and visual effects.

APPENDIX 1: ASSESSMENT CRITERIA

The criteria set out below have therefore been specifically tailored for this appraisal to ensure that the methodology is appropriate and fit for

• effects on the landscape as a resource in its own right (the landscape

• effects on specific views and visual amenity more generally (the

Therefore, separate criteria are set out below for the assessment of

NATURE (SENSITIVITY) OF LANDSCAPE FEATURES

The nature or sensitivity of an individual landscape feature or element reflects its susceptibility to change and any values associated with it. It is therefore a function of factors such as its quality, rarity, contribution to landscape character, degree to which the particular element can be replaced and cultural associations or designations that apply. A particular feature may be more 'sensitive' in one location than in another often as a result of local values associated with the feature or in relation to its function as a key or distinctive characteristic of that local landscape. Therefore it is not possible to simply place different types of landscape features into sensitivity bands. Where individual landscape features are affected, professional judgement is used as far as possible to give an objective evaluation of its sensitivity. Justification is given for this evaluation where necessary.

The nature or sensitivity of individual landscape features has been described as very high, high, medium, low or very low.

NATURE (SENSITIVITY) OF LANDSCAPE CHARACTER

The nature or sensitivity of landscape character reflects its susceptibility to change and any values associated with it. It is essentially an expression of a landscape's ability to accommodate a particular type of change. It varies depending on the physical and perceptual attributes of the landscape including but not necessarily limited to: scale; degree of openness; landform; existing land cover; landscape pattern and complexity; the extent of human influence in the landscape; the degree of remoteness/wildness; perception of change in the landscape; the importance of landmarks or skylines in the landscape; inter-visibility with and influence on surrounding areas; condition; rarity and scenic quality of the landscape, and any values placed on the landscape including any designations that may apply.

In this appraisal, the nature or sensitivity of landscape character is considered with reference to published landscape character areas/types and where relevant local landscape units as defined in this LVA for the purposes of this study. Information regarding the key characteristics of these local character areas/units has been extrapolated from relevant published studies where possible. Together with on-site appraisal, an assessment of landscape sensitivity to development has been undertaken employing professional judgement for relevant local landscape character areas/types/units.

The nature or sensitivity of landscape character has been described as very high, high, medium, low or very low.

NATURE (SENSITIVITY) OF VISUAL RECEPTORS

The nature or sensitivity of a visual receptor group reflects their susceptibility to change and any values associated with the specific view in question. It varies depending on a number of factors such as the occupation of the viewer, their viewing expectations, duration of view and the angle or direction in which they would see the site. Whilst most views are valued by someone, certain viewpoints are particularly highly valued for either their cultural or historical associations and this can increase the sensitivity of the view. The following criteria are provided for guidance only and are not exclusive:

- Very Low Sensitivity People engaged in industrial and commercial activities or military activities.
- Low Sensitivity People at their place of work (e.g. offices); short • - medium stay patients at hospital, shoppers; users of trunk/major roads and passengers on commercial railway lines (except where these form part of a recognised and promoted scenic route).
- . Medium Sensitivity - Users of public rights of way and minor roads which do not appear to be used primarily for recreational activities or the specific enjoyment of the landscape; recreational activities not specifically focused on the landscape (e.g. football); motel users.
- . High Sensitivity – Residents at home; users of long distance or recreational trails and other sign posted walks; users of public rights of way and minor roads which appear to be used for recreational activities or the specific enjoyment of the landscape; users of caravan parks, campsites and 'destination' hotels; tourist attractions with opportunities for views of the landscape (but not specifically focused on a particular vista); slow paced recreational activities which derive part of their pleasure from an appreciation of setting (e.g. bowling, golf); allotments.
- ٠ Very High Sensitivity - People at recognised vantage points (often with interpretation boards), people at tourist attractions with a focus on a specific view, visitors to historic features/estates where the setting is important to an appreciation and understanding of cultural value.

It is important to appreciate that it is the visual receptor (i.e. the person) that has a sensitivity and not a property, public right of way or road. Therefore, a large number of people may use a motorway for example but this does not increase the sensitivity of the receptors using it. Conversely, a residential property may only have one person living in it but this does not reduce the sensitivity of that one receptor. The number of receptors affected at any given location may be a planning consideration, but it does not alter the sensitivity of the receptor group.

Where judgements are made about the sensitivity of assessment viewpoints, the sensitivity rating provided is an evaluation of the sensitivity of the receptor group represented by the viewpoint and not a reflection of the number of people who may experience the view.

NATURE (MAGNITUDE) OF EFFECTS - GENERAL NOTE

explanation.

Prior to the publication of GLVIA3, LVA practice had evolved over time in tandem with most other environmental disciplines to consider significance principally as a function of two factors, namely: sensitivity of the receptor and magnitude of the effect (the term 'magnitude' being a word most commonly used in LVA and most other environmental disciplines to describe the size or scale of an effect).

and spatial extent of the effect.

The flow diagram on page 39 of GLVIA3 now suggests that the magnitude of effect is a function of three factors (the size/scale of the effect, the duration of the effect and the reversibility of the effect).

In the context of the above discussion the following criteria have been adopted to describe the magnitude of effects.

The following discussion sets out the approach adopted in this LVA in relation to a specific issue arising in GLVIA3 which requires a brief

Box 3.1 on page 37 of GLVIA3 references a 2011 publication by IEMA entitled 'The State of EIA Practice in the UK' which reiterates the importance of considering not just the scale or size of effect but other factors which combine to define the 'nature of the effect' including factors such as the probability of an effect occurring and the duration, reversibility

For clarification, the approach taken in this LVA has been to consider magnitude of effect solely as the scale or size of the effect in the traditional sense of the term 'magnitude'. Having identified the magnitude of effect as defined above the LVA also describes the duration and reversibility of the identified effect before drawing a conclusion on the overall level of effect taking all of these factors into account.

NATURE (MAGNITUDE) OF EFFECTS ON LANDSCAPE FEATURES

Professional judgement has been used as appropriate to determine the magnitude of direct physical effects on individual existing landscape features using the following criteria as guidance only:

- Very Low Magnitude of Change No loss or alteration to existing landscape features;
- Low Magnitude of Change Minor loss or alteration to part of an existing landscape feature;
- Medium Magnitude of Change Some loss or alteration to part of an existing landscape feature;
- High Magnitude of Change Major loss or major alteration to an existing landscape feature;
- Very High Magnitude of Change Total loss or alteration to an existing landscape feature.

NATURE (MAGNITUDE) OF EFFECTS ON LANDSCAPE CHARACTER

The magnitude of effect on landscape character is influenced by a number of factors including: the extent to which existing landscape features are lost or altered, the introduction of new features and the resulting alteration to the physical and perceptual characteristics of the landscape. Professional judgement has been used as appropriate to determine the magnitude using the following criteria as guidance only. In doing so, it is recognised that usually the landscape components in the immediate surroundings have a much stronger influence on the sense of landscape character than distant features whilst acknowledging the fact that more distant features can have an influence on landscape character as well.

- Very Low Magnitude of Change No notable loss or alteration to existing landscape features; no notable introduction of new features into the landscape; and negligible change to the key physical and/or perceptual attributes of the landscape.
- Low Magnitude of Change - Minor loss or alteration to existing landscape features; introduction of minor new features into the landscape; or minor alteration to the key physical and/or perceptual attributes of the landscape.
- Medium Magnitude of Change Some notable loss or alteration to existing landscape features; introduction of some notable new features into the landscape; or some notable change to the key physical and/or perceptual attributes of the landscape.
- High Magnitude of Change A major loss or alteration to existing landscape features; introduction of major new features into the

landscape; or a major change to the key physical and/or perceptual attributes of the landscape.

Very High Magnitude of Change - Total loss or alteration to existing landscape features; introduction of dominant new features into the landscape; a very major change to the key physical and/or perceptual attributes of the landscape.

NATURE (MAGNITUDE) OF EFFECTS ON VIEWS AND VISUAL AMENITY

Visual effects are caused by the introduction of new elements into the views of a landscape or the removal of elements from the existing view.

Professional judgement has been used to determine the magnitude of impacts using the following criteria as guidance only:

- Very Low Magnitude of Change No change or negligible change • in views;
- Low Magnitude of Change Some change in the view that is not prominent but visible to some visual receptors;
- Medium Magnitude of Change Some change in the view that • is clearly notable in the view and forms an easily identifiable component in the view;
- High Magnitude of Change A major change in the view that is ٠ highly prominent and has a strong influence on the overall view.
- Very High Magnitude of Change A change in the view that has a • dominating or overbearing influence on the overall view.

Using this set of criteria, determining levels of magnitude is primarily dependant on how prominent the development would be in the landscape, and what may be judged to flow from that prominence or otherwise.

For clarification, the use of the term 'prominent' relates to how noticeable the features of the development would be. This is affected by how close the viewpoint is to the development but not entirely dependent on this factor. Other modifying factors include: the focus of the view, visual screening and the nature and scale of other landscape features within the view. Rather than specifying crude bands of distance at which the proposed development would be dominant, prominent or incidental to the view etc, the prominence of the proposed development in each view is described in detail for each viewpoint taking all the relevant variables into consideration.

TYPE OF EFFECT

The assessment identifies effects which may be 'beneficial', 'adverse' or 'neutral'. Where effects are described as 'neutral' this is where the beneficial effects are deemed to balance the adverse effects.

DURATION OF EFFECT

For the purposes of this appraisal, the temporal nature of each effect is described as follows:

- Long Term over 5 years
- •

REVERSIBILITY OF EFFECT

following terms:

- •

LEVEL OF EFFECT

The purpose of an LVA when produced outside the context of an EIA is to identify the relative level of effects on landscape and visual amenity arising from the proposed development. The judgements provided within the LVA may then inform the planning balance to be carried out by the determining authority.

In this LVA, the relative level of the identified landscape and visual effects has been determined by combining judgements regarding the sensitivity of the landscape or view, magnitude of change, duration of effect and the reversibility of the effect. The level of effect is described as Major, Major/ Moderate, Moderate, Moderate/Minor or Minor. No Effect may also be recorded as appropriate where the effect is so negligible it is not even noteworthy. In determining the level of residual effects, all mitigation measures are taken into account.

Medium Term – between 1 and 5 years

Short Term – under 1 year

The LVA also describes the reversibility of each identified effect using the

Permanent – effect is non reversible Non-permanent – effect is reversible

APPENDIX 2: PHOTOGRAPHIC RECORD

- Canon 5D - Canon EF 50mm, f/1.4 USM - 09/05/2023 @ 10:03 - 339889, 675329

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 10m - 85m - Cylindrical - A1

Visualisation Type Horizontal Field of View

- Type 1 - 90° Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

- Canon 5D - Canon SD - Canon EF 50mm, f/1.4 USM - 09/05/2023 @ 10:03 - 339889, 675329 Viewpoint height (AOD) Distance from site Projection Sheet Size

– 10m - 85m - Cylindrical - A1

Visualisation Type Horizontal Field of View

- Туре З - 90° Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260 VIEWPOINT 01 – PHOTOMONTAGE (YEAR 1) Whin Park, north of site

- Canon 5D - Canon EF 50mm, f/1.4 USM - 09/05/2023 @ 10:03 - 339889, 675329

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 10m - 85m - Cylindrical - A1

Visualisation Type Horizontal Field of View

- Туре З - 90° Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260 VIEWPOINT 01 – PHOTOMONTAGE (YEAR 5) Whin Park, north of site

- Canon 5D - Canon 55 - Canon EF 50mm, f/1.4 USM - 09/05/2023 @ 10:03 - 339889, 675329 Viewpoint height (AOD) Distance from site Projection Sheet Size

– 10m - 85m - Cylindrical - A1

Visualisation Type Horizontal Field of View

- Туре З - 90° Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

VIEWPOINT 01 – PHOTOMONTAGE (YEAR 15) Whin Park, north of site

Camera make & model

- Canon 5D Lens make & focal length- Canon EF 50mm, f/1.4 UDate & time of photograph- 09/05/2023 @ 10:13OS grid reference- 340135, 675314 - Canon EF 50mm, f/1.4 USM

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 11m - 73m - Cylindrical - A1

Visualisation Type- Type 1Horizontal Field of View- 90°Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

VIEWPOINT 02 – EXISTING Permissive path. north of site

Camera make & model Lens make & focal length
 Date & time of photograph
 - 09/05/2023 @ 10:13

 OS grid reference
 - 340135, 675314

- Canon 5D - Canon EF 50mm, f/1.4 USM Viewpoint height (AOD) Distance from site Projection Sheet Size

– 11m - 73m - Cylindrical - A1

Visualisation Type Horizontal Field of View Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

– Type 3 – 90°

VIEWPOINT 02 – PHOTOMONTAGE (YEAR 1) Permissive path. north of site

- Canon 5D - Canon EF 50mm, f/1.4 USM - 09/05/2023 @ 10:13 - 340135, 675314

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 11m – 73m - Cylindrical - A1

Visualisation Type Horizontal Field of View Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

– Type 3 – 90°

VIEWPOINT 02 – PHOTOMONTAGE (YEAR 5) Permissive path. north of site

- Canon 5D - Canon EF 50mm, f/1.4 USM - 09/05/2023 @ 10:13 - 340135, 675314

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 11m – 73m - Cylindrical - A1

Visualisation Type Horizontal Field of View Height of camera AGL Page size / Image size (mm) - 841 x 297 / 820 x 260

- Type 3 - 90° – 1.5m

VIEWPOINT 02 – PHOTOMONTAGE (YEAR 15) Permissive path. north of site

Camera make & model Lens make & focal length

- Canon 5D - Canon EF 50mm, f/1.4 USM
 Date & time of photograph
 - 09/05/2023 @ 10:20

 OS grid reference
 - 340213, 675257

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 12m – 106m - Cylindrical - A1 Visualisation Type- Type 1Horizontal Field of View- 90°Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

VIEWPOINT 03 – EXISTING Permissive path. east of site

Camera make & model Lens make & focal length

- Canon 5D - Canon EF 50mm, f/1.4 USM
 Date & time of photograph
 - 09/05/2023 @ 10:20

 OS grid reference
 - 340213, 675257

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 12m - 106m - Cylindrical - A1

Visualisation Type- Type 3Horizontal Field of View- 90°Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

VIEWPOINT 03 – PHOTOMONTAGE (YEAR 1) Permissive path. east of site

Camera make & model Lens make & focal length

- Canon 5D - Canon EF 50mm, f/1.4 USM
 Date & time of photograph
 - 09/05/2023 @ 10:20

 OS grid reference
 - 340213, 675257

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 12m - 106m - Cylindrical - A1

Visualisation Type- Type 3Horizontal Field of View- 90°Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

VIEWPOINT 03 – PHOTOMONTAGE (YEAR 5) Permissive path. east of site

- Canon 5D - Canon EF 50mm, f/1.4 USM - 09/05/2023 @ 10:20 - 340213, 675257

Viewpoint height (AOD) Distance from site Projection Sheet Size

– 12m – 106m - Cylindrical - A1 Visualisation Type- Type 3Horizontal Field of View- 90°Height of camera AGL- 1.5mPage size / Image size (mm)- 841 x 297 / 820 x 260

VIEWPOINT 03 – PHOTOMONTAGE (YEAR 15) Permissive path. east of site

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