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Environmental Impact Assessment Report
Volume 1, Chapter 27: Landscape and Visual

MarramWind Offshore Wind Farm

December 2025

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27 Landscape and Visual

27.1 Introduction

27.1.1.1 This Chapter of the Environmental Impact Assessment (EIA) Report presents the results of the Landscape and Visual Impact Assessment (LVIA) of the likely significant effects on landscape and visual receptors that may arise from the construction, operation and maintenance (O&M) and decommissioning of the onshore Project landward of Mean Low Water Springs (MLWS). **Chapter 17: Seascape, Landscape and Visual** assesses the seascape, landscape and visual effects of the offshore elements of the Project. Both chapters should be read in conjunction with the project description provided in **Chapter 4: Project Description** and the relevant parts of the following chapters:

- **Chapter 19: Ground Conditions and Contamination** due to the relationship between landscape, landscape mitigation and soils in ensuring the growth and establishment of trees, hedges, woodland and grassland required for the Project;
- **Chapter 23: Terrestrial Ecology and Ornithology** due to the association between removing, reinstating, and creating habitats which are also contributors to landscape character and visual amenity and the Project's contribution of a **Nature Positive Plan** to be issued separately from the EIA Report;
- **Chapter 24: Onshore Archaeology and Cultural Heritage** due to the inter-relationships between the landscape and visual effects on some heritage features which may also be landmarks and visitor attractions;
- **Chapter 25: Onshore Noise and Vibration** due to the inter-relationships between visual effects and noise on several visual receptors;
- **Chapter 26: Traffic and Transport** due to the close association on recreational routes including core paths; and
- **Chapter 28: Climate Resilience** due to the need to consider climate change and adaptation and its relevance to landscape change, and landscape mitigation.
- **Chapter 30: Socio-economics** due to the visual effects on recreational receptors and visitor attractions;
- **Chapter 32: Interrelated Effects**; and
- **Chapter 33: Cumulative Effects Assessment**.

27.1.1.2 This Chapter describes:

- the legislation, planning policy, guidance and other documentation that has informed the assessment (**Section 27.2: Relevant legislative and policy context**);
- the outcome of consultation and engagement that has been undertaken to date, including how matters relating to landscape and visual have been addressed (**Section 27.3: Consultation and engagement**);
- the scope of the assessment for landscape and visual, including the study area for the LVIA, as illustrated in **Volume 2, Figure 27.1a LVIA study areas with Onshore Red Line Boundary** (**Section 27.4: Scope of the assessment**);
- the data sources and methods used for gathering baseline data including surveys where appropriate (**Section 27.5: Methodology for baseline data gathering**);
- the overall environmental baseline (**Section 27.6: Baseline conditions**);

- the basis for the EIA Report (**Section 27.7: Basis for the EIA Report**);
- methodology for the EIA Report (**Section 27.8: Methodology for the EIA Report**);
- the assessment of landscape effects (**Section 27.9: Landscape effects**);
- the assessment of visual effects (**Section 27.10: Visual effects**);
- summary of effects (**Section 27.11 Summary of effects**);
- consideration of transboundary effects (**Section 27.12: Transboundary effects**);
- consideration of inter-related effects and cumulative effects (**Section 27.13: Inter-related effects** and **Section 27.14: Cumulative effects assessment**);
- a summary of residual effects for landscape and visual (**Section 27.15: Summary of likely residual significant effects**);
- a reference list is provided (**Section 27.16: References**); and
- a glossary of terms and abbreviations is provided (**Section 27.17: Glossary of terms and abbreviations**).

27.1.1.3 This Chapter is also supported by A3 figures in **Volume 2** as listed in the contents page.

27.1.1.4 This Chapter is also supported by the following A1 visualisations in **Volume 3: Appendix 27.2 Viewpoint Assessment, Appendix A: Viewpoint Figures**, as listed in the contents page.

27.1.1.5 This Chapter is also supported by the following Appendices in **Volume 3**:

- **Appendix 27.1: Landscape and Visual Methodology**;
- **Appendix 27.2: Viewpoint Assessment**; and
- **Appendix 27.3: Residential Visual Amenity Assessment (RVAA)**.

27.2 Relevant legislative and policy context and technical guidance

27.2.1 Legislative and policy context

27.2.1.1 This Section provides a summary of the relevant legislation and policy context that has informed the scope of the LVIA. Further information on policies relevant to the EIA and their status is set out in **Chapter 2: Legislative and Policy Context**, which provides an overview of the relevant legislative and policy context for the Project. **Chapter 2: Legislative and Policy Context** is supported by **Volume 3, Appendix 2.1: Planning Policy Framework**, which provides a detailed summary of international, national, marine and local planning policies of relevance to the EIA. Individual policies of specific relevance to this assessment and associated appendices have been taken into account.

27.2.1.2 This summary provides a foundation for understanding the specific requirements the LVIA, in this Chapter, must address in order to assess and mitigate impacts on relevant receptors and environmental issues.

27.2.1.3 The legislation relevant to the LVIA include:

- The European Landscape Convention 2006);
- Nature Conservation (Scotland) Act (2004); and

- Electricity Act (1989).

27.2.1.4 The policies relevant to landscape and visual includes:

- National Planning Framework 4 (Scottish Government, 2023b)
- Aberdeenshire Local Development Plan (LDP) 2023 (Aberdeenshire Council, 2023b);
- National Policy Statement for Renewable Energy Infrastructure (EN-3) (Department of Energy Security and Net Zero, 2023) may be a material consideration principally for the offshore s.36 consent;
- The Environment Strategy for Scotland: vision and outcomes (Scottish Government, 2020); and
- Natural Heritage Strategy 2019-2022 (Aberdeenshire Council, 2020);
 - ▶ Aim 1: Protection of Natural Heritage;
 - ▶ Aim 2: Enhancement of Nature Heritage; and
 - ▶ Aim 3: Promotion of Natural Heritage.

27.2.2 Relevant technical guidance

27.2.2.1 Other information and technical guidance relevant to the LVIA is listed under references and includes, but is not limited to the following main sources:

- Landscape Sensitivity Assessment Guidance (NatureScot, 2022);
- Assessing the cumulative landscape and visual impact of onshore wind energy developments (NatureScot, 2021); and
- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute and the Institute of Environmental Management and Assessment (IEMA), 2013).

27.3 Consultation and engagement

27.3.1 Overview

27.3.1.1 This Section describes the consultation and stakeholder engagement undertaken for the Project in relation to the LVIA. This includes early engagement, the outcome of and response to the Scoping Opinions (Aberdeenshire Council, 2023a, Scottish Government, 2023a) in relation to the LVIA, non-statutory consultation. An overview of engagement undertaken for the Project as a whole can be found in Section 5.5 of **Chapter 5: Approach to the EIA**.

27.3.2 Key issues

27.3.2.1 A summary of the key issues raised during statutory and non-statutory consultation, specific to the LVIA, is outlined below in **Table 27.1**, together with how these issues have been considered in the production of this EIA Report.

Table 27.1 Stakeholder issues responses – landscape and visual

Stakeholder	Stakeholder issue ID	Date, document, forum	Stakeholder comment	How is this addressed in the EIA Report
Aberdeenshire Council	102	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“The proposed 2 kilometres (km) (landfall and cable corridor) and 5km (substation) study areas are noted.”</i>	A 2km (landfall(s)) and onshore export cable corridor) and 5km (onshore substations) study areas are outlined in Section 27.4.2 .
	103	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“The proposal to refine the study areas at a later stage is accepted – the Council are happy to be involved in discussions.”</i>	No changes made to the studies areas, outer limits of 2km (landfall(s)) and onshore export cable corridor) and 5km (onshore substations) were taken forward to the landscape and visual assessment.
	104	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“The methodology proposed to assess the landscape impacts is acceptable.”</i>	Noted.
	105	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“Visualisations showing the baseline and built development should be included within the EIA Report.”</i>	Visualisations are included in Volume 3, Appendix 27.2 .
	106	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“The construction compound at the landfall site should be included within the visualisations and include any landscaping or mitigation.”</i>	All landfall construction compounds are shown in the visualisations where visible. All landscape mitigation is shown in the visualisations where visible.

Stakeholder	Stakeholder issue ID	Date, document, forum	Stakeholder comment	How is this addressed in the EIA Report
	107	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“The chosen viewpoints for visualisations should be based on a Zone of Theoretical Visibility (ZTV).”</i>	Viewpoints for visualisations are based on the ZTV and illustrated in Volume 3, Appendix 27.2.
	108	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“The Council are happy to consider and provide comment on viewpoint location and visualisation/wireframe images as appropriate.”</i>	Aberdeenshire Council approved viewpoints in meeting on 28 July 2025 (Stakeholder issue ID: 981).
	109	22 March 2023, Scoping Opinion (Aberdeenshire Council, 2023a).	<i>“Visual impact should be considered by a range of receptors where possible and include various landscape character types and landscape designations as appropriate.”</i>	Noted
	880	19 December 2024, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“A LVIA will be required to show the likely landscape and visual effects of the proposed development on the landscape character.”</i>	Noted
	881	19 December 2024, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“Design and Access Statement to be included as part of a formal submission.”</i>	Noted. The Design and Access Statement is included as part of the Application.
	979	19 December 2024, Pre-Application	<i>“Siting and Design: The layout, siting and design of any permanent structures should be carefully considered to minimise its prominence in the landscape.”</i>	Noted

Stakeholder	Stakeholder issue ID	Date, document, forum	Stakeholder comment	How is this addressed in the EIA Report
		Advice Report (Aberdeenshire Council, 2024).		
	982	19 December 2024, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“Visual impact should be considered by a range of receptors where possible and include various landscape character types and landscape designations as appropriate.”</i>	Noted
	983	30 January 2025, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“I am particularly encouraged by the apparent willingness of the applicant to consider wider landscape and visual mitigation and enhancement in the wider area outside the substation and cabling corridor boundaries. In terms of specific matters raised in the presentation.”</i>	Noted
	984	30 January 2025, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“Landscape Character: I am in agreement that a more detailed baseline landscape classification is needed. It seems sensible to separately classify the Ugie valley and the Peterhead urban fringes although some careful consideration will be necessary to define boundaries of different character areas in the Longside Airfield area given the significant changes that will occur to the existing character of the Netherton area should the Scottish and Southern Electricity Network (SSEN) substation be approved in principle.”</i>	Noted
	985	30 January 2025, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“Visualisations: I consider the level of detail shown in the example visualisations was useful and confirm that I would be happy to see this approach rolled out for all visualisations as part of the LVIA.”</i>	Noted

Stakeholder	Stakeholder issue ID	Date, document, forum	Stakeholder comment	How is this addressed in the EIA Report
	986	30 January 2025, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“Viewpoints: The range of viewpoints identified for the substation site options appear appropriate although I would prefer to confirm precise locations once the developer has confirmed the site and the broad dimensions of the infrastructure to be accommodated.”</i>	Noted
	987	30 January 2025, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“Cumulative issues: These are a key concern given the Muir Mhor and Netherton substation proposals (as well as the presence of other disparate industrial developments located in the rural area west of Peterhead). I would wish to see all in-planning energy related developments shown in the visualisations including overhead transmission lines where the likely route is known.”</i>	Noted
	988	30 January 2025, Pre-Application Advice Report (Aberdeenshire Council, 2024).	<i>“Landscape mitigation and enhancement: Offsite woodland and hedgerow planting (where underground and overhead cabling allows) should be undertaken to mitigate landscape and visual effects and to attain long term landscape and biodiversity enhancement. This may necessitate working with other developers of substations (and other similar energy related developments) to realise a landscape strategy and management plan for the wider area west of Peterhead. The aims of such a strategy should be to provide a better framework of planting for development to be located within which helps mitigate the cumulative effects of piecemeal infrastructure.”</i>	Noted
	981	18 June 2025, Email and 28 July 2025, Meeting.	A LVIA viewpoint Technical Note was issued to Aberdeenshire Council for feedback on 18 June 2025. This was then discussed with Carol Anderson (Consultant Landscape Architect for Aberdeenshire Council) in a meeting on 28 July 2025. Carol Anderson confirmed as per the Aberdeenshire Council meeting minutes on 28 July 2025 <i>“the proposed viewpoints were comprehensive and appeared to be in locations where there would be most significant views from the Project.”</i>	Noted: The agreed viewpoints are assessed in Volume 3, Appendix 27.2 .

Stakeholder	Stakeholder issue ID	Date, document, forum	Stakeholder comment	How is this addressed in the EIA Report
NatureScot	110	22 March 2023, Scoping Opinion.	<i>“NatureScot make no comment on the landscape and visual chapter of the scoping report as the effects are considered to be local in nature.”</i>	Noted
	129	22 March 2023, Scoping Opinion Representation.	<i>“We consider that the landscape and visual impacts of the proposal will be local in nature and as such we do not intend to comment further.”</i>	Noted

27.4 Scope of the assessment

27.4.1 Overview

- 27.4.1.1 This Section sets out the scope of the LVIA. This scope has been developed as the Project's design has evolved and responds to stakeholder feedback received to-date, as set out in **Section 27.3**.

27.4.2 Spatial scope and study area

- 27.4.2.1 The study area for the LVIA is illustrated in **Volume 2, Figure 27.1a-c** and extends to 2km for the landfall(s) and the onshore export cable corridor and 5km for the onshore substations.
- 27.4.2.2 The spatial scope of the LVIA is proportionate and reflects professional judgement drawn from the ZTV and viewpoint analysis and IEMA Guidance (IEMA, 2015 and 2017) as explained in **Volume 3, Appendix 27.2**. The LVIA study areas are comparable to similar projects including Moray West, Moray East and Beatrice Offshore Wind Farms.

27.4.3 Temporal scope

- 27.4.3.1 The temporal scope of the LVIA is the entire lifetime of the Project, which therefore covers the construction, O&M and decommissioning stages, as follows:
- construction stage: three phases of construction development totalling up to nine years for the landfall(s), onshore export cable corridor and onshore substations, including use of temporary construction compounds (defined in the assessment methodology as 'medium-term');
 - the O&M for each phase of the Project is expected to be around 35-years, which is likely to result in long-term (reversible) effects on landscape and visual receptors. Considering the 35-year operational stage for each phase, the effect duration has been assessed as 'permanent' although the effects of the onshore Project elements would be reversible; and
 - decommissioning stage – up to nine years (onshore substations) (medium-term). During the decommissioning stage, it is anticipated that the onshore export cables and landfall(s) will be left *in-situ* with ends cut, sealed and buried to avoid landscape and visual effects that would be otherwise associated with their removal.

27.4.4 Identified receptors

- 27.4.4.1 The spatial and temporal scope of the assessment enables the identification of receptors that may experience a change resulting from the Project. Landscape and visual receptors that may be likely to experience significant landscape and visual effects are outlined in **Table 27.2**.

Table 27.2 Identified receptors requiring assessment for LVIA

Receptor group	Receptors included within group
Landscape receptors	Landscape elements: includes vegetation / landcover such as trees, woodland, hedges, scrub and grassland / crops that contribute to the landscape character. Landscape Character Types (LCTs): the assessment has focused on the LCTs and includes reference to their key characteristics and perceptual qualities. Landscape designations: includes Special Landscape Areas (SLA).
Visual receptors	Settlements: includes settlements identified in the Aberdeenshire LDP (Aberdeenshire Council, 2023b). In addition, a RVAA is provided in Volume 3, Appendix 27.3 . Transport routes: Includes 'A' and 'B' class roads and some minor roads. Recreational routes: Includes Scotland's Great Trails, the core path network, Sustrans Cycle Routes and other locally promoted walking and cycling routes. Recreational / tourist / visitor locations: Includes outdoor recreational locations such as golf courses and visitor attractions / tourist destinations that involve an appreciation of the landscape.

27.4.5 Potential effects

27.4.5.1 Potential effects on landscape and visual receptors that have been scoped in for assessment are summarised in **Table 27.3**.

Table 27.3 Potential effects for landscape and visual

Receptor	Activity or impact	Potential effect
Construction stage		
Landscape character: <ul style="list-style-type: none"> LCTs that are within the LVIA study area and wholly or partly within the ZTVs 	Construction activity for the onshore substations, landfall(s) and onshore export cable corridor including the presence of construction compounds, cranes, other machinery, vehicle movements, contrasting colours and associated noise, construction lighting, contractors' facilities and site access.	Direct / indirect, temporary and negative effects on landscape character including key characteristics and perceptual qualities.
Landscape designations: <ul style="list-style-type: none"> SLAs that are within the LVIA study area and wholly or partly within the ZTV 	As above.	Direct / indirect temporary and negative effects on the host SLA and its Special Landscape Qualities (SLQ).
Landscape elements within the LVIA study area	Removal of vegetation (trees / woodland / hedges).	Direct and negative effects that may be temporary (subject to reinstatement) or permanent where mature trees / woodland are removed

Receptor	Activity or impact	Potential effect
		and cannot be reinstated. Effects may also have a wider / combined effect on landscape character / designations and SLQ.
Visual receptors within the LVIA study area: <ul style="list-style-type: none"> • settlements (residents); • transport routes (roads); • recreational routes (e.g. Scotland's Great Trails / core path network); and • recreational / tourist / visitor locations. 	Construction activity for the onshore substations, landfall(s) and onshore export cable corridor including the presence of construction compounds, cranes, other machinery, vehicle movements, contrasting colours and associated noise, construction lighting, contractors' facilities and site access.	Temporary and negative effects on views and visual amenity resulting from visibility of the temporary construction activities within the LVIA study area.
All of the above	Landscape and architectural mitigation as described in Volume 4: Outline Landscape and Architectural Strategy .	Permanent mitigation effects to reinstate and / or provide new and additional landscape with neutral and beneficial effects.
O&M stage		
Landscape character, elements and landscape designations as noted previously under the construction stage	Operation of the onshore substations and reinstatement of the onshore export cable corridor.	Direct effects on the host landscape character, characteristics and elements. Indirect landscape and visual effects related to the visibility of the onshore substations and reinstatement of the onshore export cable corridor.
Visual receptors as noted previously under the construction stage	Operation of the onshore substations and reinstatement of the onshore export cable corridor.	Effects on views and visual amenity resulting from visibility of the onshore substations and reinstatement of the onshore export cable corridor within the LVIA study area.
All of the above	Landscape and architectural mitigation as described in Volume 4: Outline Landscape and Architectural Strategy .	Permanent mitigation effects to reinstate and / or provide new and additional landscape with neutral and beneficial effects.
Decommissioning stage		
Landscape character and elements likely	Decommissioning of the onshore substations including the presence of	Subject to the decommissioning plan, and the screening effects of mature

Receptor	Activity or impact	Potential effect
<p>to be significantly affected by the onshore substations</p> <p>Note: No SLAs would be affected</p>	<p>construction compounds, cranes, other machinery, vehicle movements, contrasting colours and associated noise, construction lighting, contractors' facilities and site access.</p> <p>Landfall(s) and the onshore export cable corridor have been scoped out (see Table 27.4).</p>	<p>landscape mitigation: Temporary and negative effects on landscape character including key characteristics and perceptual qualities, reducing to neutral or beneficial effects on completion.</p> <p>.</p>
<p>Visual receptors likely to be significantly affected by the onshore substations</p>	<p>As above.</p>	<p>Temporary and negative effects on views and visual amenity resulting from visibility of the decommissioning activities. Reducing to neutral or beneficial effects on completion.</p>

27.4.6 Effects scoped out of assessment

- 27.4.6.1 A number of potential effects have been scoped out from further assessment, resulting from a conclusion of no likely significant effect. These conclusions have been made based on site surveys and the sensitivity analysis of the baseline environment, the nature of planned works and the professional judgement on the potential for impact from such projects more widely. The conclusions follow (in a site-based context) existing best practice.
- 27.4.6.2 Additionally, not all of the construction details can be known at the time of the assessment, and although the LVIA has assumed a reasonable worst-case scenario, some detailed considerations have been excluded.
- 27.4.6.3 Each scoped out activity or impact is considered in turn in **Table 27.4**.

Table 27.4 Activities or effects scoped out of assessment

Activity or impact	Rational for scoping out
<p>Receptors outwith the ZTV</p>	<p>All receptors within the LVIA study area that are outwith the ZTV will have no view of the onshore infrastructure and are scoped out.</p> <p>LCT 11: Fragmented Rocky Coast is located to the south of Peterhead, outwith the 2km study area and remote from the onshore substations. There is very limited ZTV coverage (Volume 2, Figures 27.2a-b) and for those reasons it has been scoped out of further assessment.</p>
<p>Decommissioning of landfall(s) and onshore export cables – all landscape and visual receptors</p>	<p>It is anticipated that the landfall(s) and onshore export cables will be left in-situ with ends cut, sealed and buried to minimise environmental effects associated with removal. The LVIA has assumed that they will be left <i>in-situ</i>. Therefore, decommissioning of landfall(s) and onshore export cables has been scoped out of the assessment.</p>
<p>Lighting effects during construction, O&M and</p>	<p>It is assumed that during the stages of construction, O&M and decommissioning, the landfall(s), onshore substations and onshore export cables will not require lighting, except for short-term operations</p>

Activity or impact	Rational for scoping out
decommissioning of the onshore infrastructure	such as drilling (24-hour operation over a few days) and movement sensitive security lighting. Therefore, the need for a lighting assessment has been excluded from the LVIA.
Effects on landscape elements resulting from visibility splays / sightlines required for temporary construction roads and haul roads	<p>Temporary construction access roads are indicated on Volume 2, Figure 4.2: Red Line Boundary and indicative onshore infrastructure layout. With the exception of the onshore substation site (northern and eastern accesses), the LVIA has not allowed for the removal / management of landscape elements (for example, trees or hedges / field boundaries) that may need to be removed to allow for temporary construction access and visibility splays / sightlines associated with construction access roads.</p> <p>It has been assumed that landscape within the trenchless crossings such as roadside trees and hedges would be retained, however, some may need to be removed / managed to allow for temporary haul road access along the onshore export cable corridor and through the trenchless area. This possibility has been excluded from the assessment due to the outline nature of the design at this stage.</p>

27.5 Methodology for baseline data gathering

27.5.1 Overview

- 27.5.1.1 Baseline data collection has been undertaken to obtain information about the study area described in **Section 27.4**. The current and future baseline conditions are presented in **Section 27.6**.

27.5.2 Desk study

- 27.5.2.1 Information on the existing landscape resource or baseline conditions included in the LVIA are collected from local plans, OS maps, and relevant literature, as well as information gathered from site and study area surveys. The baseline information is set out as an inventory of the existing landscape resource and focuses on those landscape and visual receptors with most potential to be significantly affected.
- 27.5.2.2 The data sources that have been collected and used to inform this landscape and visual assessment are summarised in **Table 27.5**.

Table 27.5 Data sources used to inform the landscape and visual chapter

Source	Date	Summary	Coverage of study area
SNH	2005	An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms.	Full coverage of study area.
	2019	Landscape Character Assessment (LCA) for maps and descriptions of LCTs.	As above.

Source	Date	Summary	Coverage of study area
NatureScot	2023	A guide to understanding the Scottish Ancient Woodland Inventory.	As above.
Historic Environment Scotland	2019	Gardens and Designed Landscapes (GDL) of Aberdeenshire.	As above.
Aberdeenshire Council	2023d	Aberdeenshire LDP, Appendix 13: Special Landscape Areas.	As above.
	2010	Aberdeenshire Open Space Strategy and Audit.	As above.
	2017b	Core paths in Aberdeenshire.	As above.
VisitScotland	2025	Visitor attractions and tourist destinations.	As above.
Scotland's Great Trails	2018	Scotland's Great Trails map.	As above.
Sustrans	2025	Sustrans Cycle Network.	As above.
The Scottish Rights of Way & Access Society	2025	Heritage Paths.	As above.
	2012	Scottish Hill Tracks, 5 th Edition (not available online).	As above.
Google Earth Pro	2022	Aerial photography.	As above.
OS	2022	1:50,000 and 1:25,000 scale mapping.	As above.
National Trust for Scotland	2022	Any specific visitor attractions / tourist destinations.	As above.

27.5.3 Site surveys

27.5.3.1 Site surveys have been undertaken to record photographs, observe landscape and visual receptors and verify details of the LVIA. The dates of these surveys are summarised in **Table 27.6** and included the following activities:

- field survey verification of landscape and visual receptors to inform recommendations for embedded environmental measures where potentially significant effects are identified;
- field survey verification of the ZTV from landscape and visual receptor locations and transport and recreational routes through the LVIA study area; and
- micro-siting of viewpoint locations and recording of panoramic baseline photography and subsequent visual assessment from the assessment viewpoints.

27.5.3.2 All site survey work was undertaken in fair weather with good to excellent visibility.

Table 27.6 Site surveys undertaken

Survey type	Scope of survey
Initial site visit, April 2023	Photography and landfall(s) site observation.
Photography, July 2023	Optioneering and reconnaissance site observation.
Photography, October 2023	Optioneering and photographic survey.
Photography, April 2024	Landfall(s) photographic survey.
Photography, June 2024	Onshore export cable corridor / onshore substations photographic survey.
Photography, September 2024	Onshore export cable corridor / onshore substations photographic survey.
Photography, June 2025	Photography and assessment verification.

27.5.4 Data limitations

27.5.4.1 The assessment of landscape elements (notably linear treelines / hedges, water features etc.) is limited to the scenario provided in **Volume 3, Appendix 23.10: Figure 1 Tree removal and protection plan**. The location of onshore Project infrastructure is indicative within the Onshore Red Line Boundary and may be subject to change, although it is considered that the assessed scenario is representative of the typical distribution of landscape elements within the Onshore Red Line Boundary and any change is unlikely to give rise to significant effects.

27.6 Baseline conditions

27.6.1 Current baseline

27.6.1.1 Within the study area the landscape topography is generally undulating, mostly between sea level and 45 metres (m) above ordnance datum (AOD), with higher ground to the south at Hillhead of Cocklaw (94m AOD), Hill of Longhaven (114m AOD) and Moss of Cruden (136m AOD) just beyond the LVIA study area. There are several watercourses, the main one being the River Ugie and its tributaries, including the South Ugie Water and Burn of Faichfield. Much of the landscape is characterised by arable and mixed farmland interspersed with small settlements and scattered residential properties. There are occasional blocks of forestry and some smaller areas of woodland and shelterbelts. Field boundaries tend to range between post and wire fencing and poorly maintained hedgerows or overgrown stone walls. Although the area is mainly arable farmland, there are some areas of wetland and moorland. Within the study area there are some distinctive patches of beech and mixed woodland cover, often appearing on small hill tops and slopes, such as East Den and West Den.

- 27.6.1.2 Peterhead is the only large settlement within the study area and is situated on the coast in the east of the LVIA study area. Other smaller inland settlements include Longside and St Fergus.
- 27.6.1.3 This north-eastern region of Aberdeenshire is connected by the A90 from Edinburgh to Fraserburgh, skirting the western edge of Peterhead. Other 'A' class roads within the LVIA study area are limited to the A950 (connecting east / west between Peterhead and Longside and the A982 within Peterhead). There are no active railway lines, although the disused railway lines between Peterhead, Mintlaw and Maud are now recreational routes and form part of the long distance Formartine and Buchan Way (one of Scotland's Great Trails). The North Coast 250 and The Coastal Trail (A90) are notable tourist routes in the LVIA study area.
- 27.6.1.4 The coastline is made up of a series of broad sandy bays including Sandford Bay to the south of Peterhead and a series of broader bays and rocky headlands to the north of Peterhead at Craigewan, Kirkton Head and Scotstown Head, backed by sand dunes and coastal grasslands. These landscapes form the basis of the North East Aberdeenshire SLA and are important tourist / visitor attractions in the area. The large rocky headland at Peterhead forms the basis of the settlement and includes a complex of harbours and Peterhead Bay.
- 27.6.1.5 The St Fergus Gas Terminal is a large industrial area, located on the coast near St Fergus to the north of the LVIA study area. Longside Airfield is a former airfield of mixed use including industrial development / storage, agriculture and some recreational facilities including the Buchan Aero Club and a former rifle range. Onshore wind farm development is also present at St Fergus Moss, and near Kirkton and a series of overhead electrical transmission lines cross the area, notably at Peterhead.

Landscape character within the LVIA study area

- 27.6.1.6 There are four LCTs within the study area as classified by NatureScot's LCA (SNH, 2019a). These are illustrated in **Volume 2, Figure 27.4** and listed as follows:
- LCT 11: fragmented rocky coast;
 - LCT 12: beaches, dunes and links – Aberdeenshire; and
 - LCT 17 which has been subdivided into the following with agreement of Aberdeenshire Council:
 - ▶ LCT 17a: coastal agricultural plain;
 - ▶ LCT 17b: River Ugie; and
 - ▶ LCT 17c: A950 / Longside Airfield.
- 27.6.1.7 The LCT 11: fragmented rocky coast is located to the south of Peterhead, outwith the 2km study area and remote from the onshore substations. There is very limited ZTV coverage (**Volume 2, Figures 27.2a-b** and for those reasons it has been scoped out of further assessment.

Coastal character within the LVIA study area

- 27.6.1.8 The LVIA study area contains one national Coastal Character Type (CCTs) (SNH, 2017a) as illustrated in **Volume 2, Figure 27.4**. The following CCT therefore is included in the assessment:
- CCT 3: Deposition Coastline, Open Views.

Designated landscapes and Wild Land Areas within the LVIA study area

- 27.6.1.9 There are no nationally designated landscapes (National Parks and National Scenic Areas (NSAs)) or Wild Land Areas within the study area.

Local landscape designations

- 27.6.1.10 The LVIA study area contains one local landscape designation as defined in the Aberdeenshire LDP, Appendix 13: Special Landscape Areas (Aberdeenshire Council, 2023d). The SLA's illustrated in **Volume 2, Figure 27.4** and one is included in the LVIA study area as follows:

- North East Aberdeenshire Coast SLA.

Visual receptors within the LVIA study area

- 27.6.1.11 The main visual receptors within the study area are listed as follows:

Settlements and residential properties

- 27.6.1.12 Settlements included within the LVIA are defined in the Aberdeenshire LDP, (Aberdeenshire Council, 2023c), Appendix 7b Settlement Statements – Buchan as follows:

- St Fergus;
- Peterhead; and
- Longside.

- 27.6.1.13 In addition, Inverugie (not referenced in the Aberdeenshire LDP) has also been included because there are several residential properties focused on an old bridge crossing of the River Ugie and the settlement is located within 500m of the Onshore Red Line Boundary which is routed to the north and west.

- 27.6.1.14 The 'settlements' of St Fergus Gas Terminal and Longside Airfield are also included in the Aberdeenshire LDP but are excluded from this assessment as they are not residential locations.

Residential Visual Amenity Assessment

- 27.6.1.15 A RVAA has been undertaken to assess the effects on residential visual amenity likely to arise as a result of the Project. The RVAA is reported in **Volume 3, Appendix 27.3**.

Transport routes

- 27.6.1.16 The transport routes scoped in and included in the LVIA are listed as follows:

- A90 (also North East 250 and The Coastal Trail tourist routes and core path 215.02);
- A950 from Peterhead to Longside;
- there are no 'B' class roads within the LVIA study area; and
- additionally, 14 minor roads close to and overlapping the onshore export cable corridor have been included in the LVIA.

Recreational routes

- 27.6.1.17 The visual assessment has considered the potential visual effects likely to be experienced by people (walkers / cyclists / horse riders / and others) on recreational routes within the LVIA study area as illustrated in **Volume 2, Figure 27.5a** and **Volume 2, Figure 27.5b**.

National recreational routes:

- 27.6.1.18 National recreational routes including Scotland's Great Trails and other promoted long-distance paths, Sustrans Cycle routes and National Tourist Routes within the LVIA study area are listed as follows:
- Scotland's Great Trails: The Formartine and Buchan Way (7LD.03MP.05 core path); and
 - The North East 250 and The Coastal Trail (overlapped with the A90).

Local recreational routes

- 27.6.1.19 Local recreational routes, which have been scoped in and included in the LVIA include core paths within the core path network; and other local routes as follows:
- Core path network:
 - ▶ 208.01 core path at Longside (with proposed link to school on Inn Brae);
 - ▶ 215.11 core path west of Peterhead;
 - ▶ 215.02 core path (also A90 and North East 250 and The Coastal Trail tourist routes);
 - ▶ 7LD.01.18 core path / Kirktown Beach Footpath along coast; and
 - ▶ 217.01 and L30R core path along minor road accessing Scotstown Beach.
 - Buthlaw River Ugie Path Network:
 - ▶ JC Buthlaw Ugie Walk;
 - ▶ JC Faichfield Buthlaw Walk;
 - ▶ JC Longside Innerfummery Loop; and
 - ▶ JC The Grave.
 - Rora Moss Circular - local cycle route.
- 27.6.1.20 Core paths within settlement boundaries have been excluded from the LVIA as they are covered by the settlement assessment.

Recreational and tourist / visitor attractions

- 27.6.1.21 Recreational and tourist / visitor attractions scoped into the LVIA include those features where there is a clear relationship between the feature / destination and the landscape. The assessment excludes locations for team sports and other recreational / tourist destinations where the focus of activity is not on the landscape or is indoors – for example museums, restaurants / cafes and gift shops. The following receptors have been included in the LVIA.
- tourist / visitor attractions:
 - ▶ Reform Tower, Peterhead;
 - ▶ St Fergus Churchyard; and

- ▶ Scotstown Beach, St Fergus.
- recreational attractions:
 - ▶ Peterhead Golf Course and Longside Golf Course; and
 - ▶ Golf Driving Range at Longside Airfield.

27.6.1.22 There are no GDLs, National Trust gardens / land or Historic Environment Scotland visitor sites within the LVIA study area.

27.6.2 Future baseline

27.6.2.1 Landscape change is an ongoing and inevitable process and will continue across the LVIA study area irrespective of whether the Project proceeds. Change could arise through natural processes (for example, the maturity of woodlands) and natural systems (for example, river erosion) or as a result of human activity including development land use and land management.

27.6.2.2 The Aberdeenshire LDP (Aberdeenshire Council, 2023b) indicates strategic, housing and economic growth within the district which is likely to affect Peterhead and other settlements within the study area. Other development land management, and consequently landscape character, is dependent on a number of economic and environmental factors including the future effects of climate change and human adaptation which are difficult to predict at a local level and not a matter for this assessment. It is however likely that mitigation and adaptation in response to changing climate and biodiversity pressures will continue to have an influence on this area in the form of increased renewable energy and other environmental changes such as changes to the current levels of forestry and woodland.

27.6.2.3 The consented SSEN Netherton Hub is a large-scale development, located to the east of the onshore substations which is likely to significantly change the baseline landscape character during its construction and operation.

27.7 Basis for the EIA Report

27.7.1 Maximum design scenario

27.7.1.1 The LVIA process has assessed a parameter-based, design envelope and therefore considers a maximum design scenario (Rochdale Envelope approach) whilst allowing the Project flexibility to make improvements in the future that cannot be predicted at the submission of the application for Planning Permission in Principle (PPiP), marine licences applications and section 36 consent.

27.7.1.2 The assessment of the maximum adverse scenario for each receptor establishes the maximum potential adverse effect and as a result, effects of greater adverse significance would not arise should any other scenario (as described in **Chapter 4: Project Description** and assessed in this Chapter) be taken forward in the final Project design. This approach, however, may lead to an 'over assessment'. For example, the LVIA has assumed as a reasonable 'worst case' that all the excavation of the open cut trenches for the associated onshore export cable corridors would be undertaken during phase 1; however, in the event that more than one landfall is required, the connecting onshore export cables, from the common onshore export cable corridor to the additional landfall(s), may be laid in trenches or installed in ducts to align with the phased installation of the landfall(s). The LVIA has also assumed that trenchless crossing compounds would extend up to 300m x 50m and two would be required on either side of each crossing within the trenchless crossing compound search areas as shown on the figures and visualisations. These cover a larger area and number than may be required.

- 27.7.1.3 The maximum design scenario parameters that have been identified as relevant to the LVIA are outlined in **Table 27.7** and are in line with the Project design envelope (**Chapter 4: Project Description**).

Phasing options for onshore substations

- 27.7.1.4 The LVIA has consistently assessed one phasing scenario, constructing consecutive onshore substations numbered '1', '2', and '3' during the construction stage (as shown in **Volume 4: Outline Landscape and Architectural Strategy, Figure 1: Landscape design plan**) as described as follows:
- phase 1: construction of onshore substation in north-eastern part of northern block;
 - phase 2: construction of onshore substation in north-western part of northern block; and
 - phase 3: construction of the onshore substation in the southern block.
- 27.7.1.5 This has allowed the LVIA to illustrate how the level of effect for different 'point', 'area' or 'sequential' receptor types¹ would vary through the three phases of the construction stage. To allow for any phasing scenario (e.g. 3, 2, 1 or 1, 3, 2, etc.), the reasonable worst-case for each receptor will vary depending on which of the onshore substations has the greatest effect, usually (but not always) related to the one which is closest to the receptor. In the case of sequential receptors, the reasonable worst-case scenario of the phasing options would vary at different points along the route. Therefore, to allow for any phasing scenario and demonstrate a reasonable worst-case scenario, the phase with the greatest level of effect should be considered as applicable to the whole nine-year construction stage.
- 27.7.1.6 For example, **Table 27.15** provides a summary of the construction effects on landscape character during phases 1, 2, 3. It demonstrates that for this phasing scenario the greatest level of effect on the LCT 17a: Coastal Agricultural Plain landscape character would occur during phase 3 of the construction stage (Major / Moderate to Moderate), due to the construction of the largest southern block in phase 3, in addition to the other two onshore substations. To allow for a maximum design envelope encompassing any phasing scenario the maximum level of effect assessed for this receptor would potentially apply to the whole nine-year construction stage (for example, allowing for a scenario where the southern block is constructed in phase 1). In practice, summary **Table 27.20** shows that the landscape effects of the onshore substations for all of phases 1 to 3 during the construction stage would be significant, ranging between Major / Moderate to Moderate (regardless of the fully enclosed or partially enclosed options, as described in **Table 27.7**). Therefore, any alternative phasing scenario would also be significant and fall within this same maximum level of effect during the nine-year construction stage. This conclusion also applies to the assessment of the visual effects, **Table 27.16**, viewpoint analysis in **Volume 3, Appendix 27.2**, and the RVAA (**Volume 3, Appendix 27.3**).
- 27.7.1.7 Common to all onshore substations phasing scenarios is architectural mitigation and the establishment of landscaping around the perimeter areas of the onshore substation zone, that will establish and grow during the construction stage, altering the nature of the landscape and visual effects in the later part of the construction stage and during the O&M stage. The areas of proposed landscaping (as shown in **Volume 4: Outline Landscape and Architectural Strategy, Figure 1: Landscape design plan**) would not be affected by alternative phasing scenarios.

¹ For example, a point-based receptor occurs at one location (e.g. one residential property) whilst an area receptor such as an SLA would cover an area of landscape and sequential receptors apply to transport and recreational routes or linear landscapes such as coastlines.

Table 27.7 Maximum design scenario for impacts on landscape and visual

Impact / activity	Maximum design scenario parameter	Justification
Construction		
<p>Impact C1: Land preparation: site clearance and earthworks</p> <p>Construction activity: including presence of cranes, people plant and vehicle movements, contractor's facilities and site access</p> <p>Landscape elements for example, trees, hedges, woodland</p>	<p><u>Landfall(s)</u> The landfall(s) and onshore export cable corridor are illustrated in Volume 2, Figure 4.1: Red Line Boundary and Indicative Onshore Infrastructure and Volume 2, Figure 27.1b-c.</p> <p>Three landfall options are assessed:</p> <ul style="list-style-type: none"> • Option 1a: Lunderton North; • Option 1b: Lunderton North and South; and • Option 2: Scotstown and Lunderton. <p>Effects arising from the construction stage of the landfall(s) and onshore export cable corridor will involve dynamic landscape change, movement, phasing and progressive restoration of construction and installation activities. The LVIA will be informed by the following maximum design scenario parameters:</p> <ul style="list-style-type: none"> • the temporary landfall(s) construction compound(s) will be used for horizontal directional drilling (HDD) (or similar trenchless technique) activities, cable pulling and construction of the transition joint bays. In relation to trenchless crossings, HDD has been presented in the EIA. Whilst other trenchless methods are available, HDD is presented herein as it is likely to have the largest construction impact; • temporary landfall(s) construction compound area 345m x 70m; • for LVIA purposes it has been assumed that the maximum height of construction plant / vehicles operating within the landfall(s) construction compound would be up to 12m (heavy duty excavator with arm fully extended); • temporary access road(s) up to 6m wide, for location see Volume 2, Figure 4.2; 	<p>The maximum design scenario parameters, including geographical extent, duration, and height will allow the LVIA to assess the maximum potential construction effects on landscape and visual receptors.</p> <p>It is assumed that the construction stage of the landfall(s) and onshore export cable corridor will not require lighting, except for short-term operations such as drilling (24-hour operation for a few days) and movement sensitive security lighting. Therefore, a lighting assessment has been excluded from the LVIA.</p> <p>Consideration of inter-project cumulative effects will ensure the maximum potential adverse effect on landscape and visual receptors is assessed.</p>

Impact / activity	Maximum design scenario parameter	Justification
	<ul style="list-style-type: none"> • up to seven, below ground, transition joint bays, each transition joint bay has a depth up to 2.5m deep; • up to eight cable ducts; • cable ducts installed using HDD (or similar trenchless technique) methodology; and • landfall(s) construction works duration (see the Project's indicative construction programme in Chapter 4: Project Description): <ul style="list-style-type: none"> ▶ phase 1 – up to one year; ▶ phase 2 – up to one year; and ▶ phase 3 – up to one year. <p>The location of these works will be located to the west of the sand dunes within the Onshore Red Line Boundary.</p> <p><u>Onshore export cable corridor</u></p> <ul style="list-style-type: none"> • onshore export cable corridor from the landfall(s) to the onshore substations - the corridor is up to 89m wide and approximately 11km in length. Up to six trenches, each with a trench depth of up to 1.5m; • onshore export cable corridor from the onshore substations to the SSEN Netherton Hub - the corridor is up to 99m wide and approximately 2.35km in length. Up to seven trenches, each with a trench depth of up to 1.5m; • for LVIA purposes it has been assumed that the maximum height of construction plant / vehicles operating within the corridor would be up to 12m (heavy duty excavator with arm fully extended); • the width of the temporary construction haul road is up to 6m wide for location see Volume 2, Figure 4.1; • joint bays are typically located every 600m to 1000m. At each joint bay from landfall(s) to onshore substations there would be up to six joint bays. At each joint bay from onshore 	

Impact / activity	Maximum design scenario parameter	Justification
	<p>substations to SSEN Netherton Hub grid connection there would be up to seven joint bays. The construction duration per location (excluding cable pulling) is six to ten weeks;</p> <ul style="list-style-type: none"> the onshore export cables for phase 1 will be either laid directly in trenches or installed into the cable ducts. In phase 1, cable ducts will also be installed to enable installation of phase 2 and 3 onshore export cables without re-excavation and thus reducing potential landscape and visual effects in phases 2 and 3. The joint bays, required to connect each section of onshore export cable to the next, will be constructed in three phases to align with the phased installation of associated onshore export cables; joint bay construction compounds (each 30m x 85m) would be required during phases 2 and 3; and onshore export cable corridor construction works duration (see the Project's indicative construction programme in Chapter 4: Project Description): <ul style="list-style-type: none"> phase 1 – up to 2.5 year; phase 2 – up to one year; and phase 3 – up to one year. <p>These works will be located to the west and south of the landfall(s) within the landfall zone and within the onshore export cable zones A and B as indicated in Volume 2, Figure 27.1b.</p> <p><u>Construction compounds and access roads</u></p> <ul style="list-style-type: none"> up to three temporary, indicative primary construction compound locations (each 125m x 125m in area, containing construction plant and potentially a concrete batching plant with a maximum height of 20m) required for up to nine years. As a minimum these would be reinstated to the previous land use at the end of the phase 3 construction stage; up to six temporary indicative secondary construction compound locations (each 100m x 100m in area, containing construction plant / materials with a maximum height of 3m) required for up to nine years. As a minimum these would be reinstated to the previous land use at the end of the phase 3 construction stage; and temporary access road(s) up to 6m wide are shown in Volume 2, Figure 4.1. <p><u>Trenched / opencut crossings</u></p>	

Impact / activity	Maximum design scenario parameter	Justification
	<p>The onshore export cable corridor will be required to cross land, including features such as roads, watercourses, utilities, core paths and landscape elements (such as trees, woodland and hedges). These 'crossing points' are shown on plans in Volume 3, Appendix 4.1: Crossings Register, each with a unique reference ID.</p> <ul style="list-style-type: none"> landscape elements (notably linear treelines / hedges, water features etc.) along the onshore export cable corridor are detailed in Volume 3, Appendix 23.10 Arboricultural impact assessment and Volume 3, Appendix 23.2 Habitats and vegetation survey report and Volume 3, Appendix 23.10: Figure 1 Tree removal and protection plan); landscape elements crossed by opencut trenches will be removed (where they cannot be avoided or mitigated by a reduced working width or coppicing / pruning). These will be reinstated at the first available planting season as described in Volume 4: Outline Landscape and Architectural Strategy; landscape elements crossed by trenchless means will be retained, unless removal is required for temporary construction access or other reason; a trenchless crossing compound (up to 300m x 50m in area) would be required on either side of trenchless crossings (as indicated by the locations of trenchless crossing compound search areas shown in Volume 2, Figure 4.1). The trenchless crossing compounds would contain construction plant with a maximum height of 12m (heavy duty excavator with arm fully extended); the duration required for each trenchless crossing would be limited to six to 12 months per location, excluding cable pulling. During phases 2 and 3 there would be a reduced area and activity related to cable pulling and joint bays. As a minimum these would be reinstated to the previous land use at the end of the phase 3 construction stage; and the temporary construction corridor may require widening beyond the standard width to allow enough space for access / equipment at crossing points with roads, rivers or utilities, and to avoid other obstacles to installation. 	
	<p><u>Onshore substations</u> Three onshore substations will be co-located within the onshore substation site, one for each Project phase (Volume 2, Figure 27.1b). The three onshore substations will be built</p>	<p>The maximum design scenario parameters, including geographical extent, duration, and height will allow</p>

Impact / activity	Maximum design scenario parameter	Justification
	<p>sequentially to align with the phased energisation of the wind turbine generators (WTGs). Further information on the indicative construction programme for the construction of the onshore substations is provided in Chapter 4: Project Description.</p> <p>In respect of the onshore substations, the LVIA has assessed an outer envelope (maximum footprint and height of development) sufficient to include all of the onshore substations within the onshore substation zone (Volume 2, Figure 27.1b).</p> <p>The LVIA has been informed by the following maximum design scenario parameters:</p> <ul style="list-style-type: none"> the maximum permanent footprint of all three onshore substations is up to 15 hectares (ha), with an additional temporary construction compound area up to 3.06ha; maximum footprint and height of the onshore substations (as detailed in Chapter 4: Project Description). The maximum design envelope in which the onshore substations could be located is defined by two blocks, described as a 'northern block' and a 'southern block', with the taller high voltage direct current (HVDC) onshore substations' infrastructure located in the southern block and the high voltage alternating current (HVAC) onshore substations' infrastructure in the northern block. The maximum design scenario for the height of the onshore substations is based on the following: <ul style="list-style-type: none"> the maximum height (30.75m AOD) of the onshore substations within the southern block has been based on the proposed platform height for the maximum design scenario parameters (52.82m AOD), plus the foundation and building plinth depth (up to 750mm), plus the maximum height of the onshore substations HVDC infrastructure (up to 30m); the maximum height (18.25m AOD) of the onshore substation within the northern block within the ZTVs and annotated viewpoints has been based on the proposed platform height for the maximum design scenario parameters (48.37m AOD), plus the foundation and building plinth depth (up to 750mm), plus the maximum height of the onshore substations HVAC infrastructure (up to 17.5m). Note: the HVAC infrastructure illustrated in Volume 3, Appendix 27.2, Figures 1-4 uses a platform height of 46.98m 	<p>the LVIA to assess the maximum potential construction effects on landscape and visual receptors.</p> <p>It is assumed that the construction stage for the onshore substations will not require lighting, except for short-term operations such as drilling (24-hour operation for a few days) and movement sensitive security lighting. Therefore, a lighting assessment has been excluded from the LVIA.</p> <p>Consideration of inter-project cumulative effects will ensure the maximum potential adverse effect on landscape and visual receptors is assessed.</p>

Impact / activity	Maximum design scenario parameter	Justification
	<p>AOD for phase 1 onshore substation and 48.37m for phase 2 onshore substation; and</p> <ul style="list-style-type: none"> ▶ the maximum height of construction equipment, buildings, plant, machinery and vehicles within the northern and southern blocks and the temporary construction compound area has allowed for up to 12m (heavy duty excavator with arm fully extended) and up to 70m (max height of crane fully extended). • At this stage a decision has not been made on whether the electrical components and equipment necessary to connect the electricity generated by the Project to the national electricity transmission network will be fully housed in buildings or whether this equipment will be partially placed outdoors. Therefore, two options have been assessed in the LVIA as follows: <ul style="list-style-type: none"> ▶ fully enclosed onshore substations; and ▶ partially enclosed onshore substations. • the total construction duration would be up to nine years across three phases: <ul style="list-style-type: none"> ▶ phase 1 up to three years; ▶ phase 2 up to three years; and ▶ phase 3 up to three years. • two onshore substations construction / O&M site accesses and internal roads including bell mouths and visibility splays with the potential to affect landscape elements. Two permanent access roads up to 6m wide (up to 4.2ha in area). 	
Impact C2: (as per Impact C1) - Landscape Character and Visual Receptors	Refer to Impact C1 in relation to landfall(s), onshore export cable corridor and onshore substations.	Landscape elements are the component parts of the landscape character and effects on the landscape elements are relevant to the wider key characteristics of the baseline landscape character. Both landscape receptors (elements and

Impact / activity	Maximum design scenario parameter	Justification
		landscape character units) are closely related receptors that require assessment against a consistent set of maximum design scenario parameters.
Impact C3: (as per Impact C1) - Landscape Designations	Refer to Impact C1 in relation to landfall(s) and onshore export cable corridor only.	<p>Landscape elements and landscape character contribute to the SLAs and their SLQs or reasons for designation. As closely related receptors they require assessment against a consistent set of maximum design scenario parameters.</p> <p>The onshore substations site is located remotely from the North East Aberdeenshire SLA designations and would not be significantly affected due to the intervening distance and screening from successive layers of existing landform, vegetation, and built form.</p>
O&M		
Impact O1: O&M of landfall(s) and onshore export cable corridor Landscape receptors: Landscape elements for example, trees, hedges, woodland Landscape Character, Landscape Designations and Visual Receptors	<p>During the O&M stage the landfall(s) and onshore export cables will be buried below ground with manhole access to joint bays or similar would be flush with the ground surface and there will be no above ground infrastructure such as fencing, signing or kiosks.</p> <p>Effects arising from the O&M will involve maintenance of small-scale surface features (joint bays) and medium to long-term or permanent effects arising from the loss of landscape elements (for example, mature trees / woodland) along the onshore export cable corridor which cannot be mitigated or avoided. In some cases, these will need to be replaced with alternative native planting suitable to the operational constraints of the onshore export cables.</p>	<p>The maximum design scenario parameters, including geographical extent, duration, and height will allow the LVIA to assess the maximum potential construction effects during O&M.</p> <p>Consideration of inter-project cumulative effects will ensure the maximum potential adverse effect on</p>

Impact / activity	Maximum design scenario parameter	Justification
		<p>landscape and visual receptors is assessed.</p> <p>It is assumed that the O&M of the landfall(s) and onshore export cables will not require lighting, except for movement sensitive security lighting.</p>
<p>Impact O2: O&M of onshore substations</p> <p>Landscape receptors: Landscape elements for example, trees, hedges, woodland Landscape Character, Landscape Designations and Visual Receptors</p>	<p>During the O&M stage the onshore substations will enter a period of 'stasis' in comparison to the changing construction phases of the nine-year construction stage. During the nine-year construction stage, it is anticipated that the first phase of the Project would become fully operational in 2037 following commissioning of the WTGs for phase 1. It is anticipated the second phase of the Project would become fully operational in 2040 and the third phase in 2043. The operational lifetime of the Project for each phase is expected to be around 35 years.</p> <p>During the O&M stage the Volume 4: Outline Landscape and Architectural Strategy would have been implemented and would reduce and mitigate some significant effects on landscape and visual receptors. During this period the architectural rendering would be maintained throughout the O&M stage. Landscaping within the onshore substation zone would also be maintained (for ten years) until established and thereafter managed throughout the O&M stage. As planting matures, landscape and visual effects would reduce further and would lead to beneficial landscape effects.</p> <p>Effects arising from the O&M stage will involve maintenance activities which are unlikely to be significant and the on-going presence of the onshore substations and associated, maturing landscape mitigation. LVIA has been informed by the following maximum design scenario parameters:</p> <ul style="list-style-type: none"> the maximum permanent footprint of all three onshore substations is up to 15ha with two permanent access roads up to 6m wide (up to 4.2ha in area); maximum footprint and height of the onshore substations (as detailed in Chapter 4: Project Description). The maximum design envelope in which the onshore substations could be located is defined by two blocks, northern and southern, with the taller HVDC onshore substation infrastructure located in the southern block and the HVAC onshore substation infrastructure in the northern block (see Volume 2, Figure 27.1b and 27.1c). 	<p>The maximum design scenario parameters, including geographical extent, duration, and height will allow the LVIA to assess the maximum potential effects during O&M.</p> <p>There will be no requirement for O&M lighting at the onshore substations except for short-term time critical maintenance (days) and movement sensitive security lighting.</p> <p>Consideration of inter-project cumulative effects will ensure the maximum potential adverse effect on landscape and visual receptors is assessed.</p>

Impact / activity	Maximum design scenario parameter	Justification
	<p>The maximum design scenario for the height of the onshore substations is based on the following:</p> <ul style="list-style-type: none"> ▶ the maximum height (30.75m AOD) of the onshore substations within the southern block has been based on the proposed platform height (52.82m AOD), plus the foundation and building plinth depth (up to 750mm), plus the maximum height of the onshore substation HVDC infrastructure (30m); and ▶ the maximum height (18.25m AOD) of the onshore substation within the northern block, has been based on the proposed platform height (48.37m AOD), plus the foundation and building plinth depth (up to 750mm), plus the maximum height of the onshore substation HVAC infrastructure (up to 17.5m). <ul style="list-style-type: none"> • two permanent access roads up to 6m wide (up to 4.2ha in area). 	
Decommissioning		
<p>Impact D1: Onshore substations - construction activity as per construction stage – restoring site to previous land use</p> <p>Landscape receptors: Landscape elements for example, trees, hedges, woodland Landscape Character, Landscape Designations and Visual Receptors</p>	<p>During decommissioning the onshore substation site would be subject to a decommissioning plan and the decommissioning effects would be similar to those during construction, although gradually reducing as the onshore substations are removed. Depending on the decommissioning plan these works may be screened by mature woodland, trees and hedgerows established during the O&M stage.</p> <p>The LVIA has been informed by the following maximum design scenario parameters comprising a reverse of the construction activities:</p> <ul style="list-style-type: none"> • the maximum height of decommissioning equipment, buildings, plant, machinery and vehicles within the Rochdale Envelope (North and South) and the temporary construction compound area has allowed for up to 12m (JCB with arm fully extended) and up to 70m (max height of crane fully extended); and • the duration of the decommissioning would be undertaken in phases over a nine year period. 	<p>The maximum design scenario parameters, including geographical extent, duration, and height will allow the LVIA to assess the maximum potential effects during decommissioning.</p> <p>There will be no requirement for construction lighting, except for short-term operations and movement sensitive security lighting.</p> <p>Consideration of inter-project cumulative effects will ensure the maximum potential adverse effect on landscape and visual receptors is assessed.</p>

27.7.2 Embedded environmental measures

- 27.7.2.1 As part of the Project design process, a number of embedded environmental measures have been adopted to reduce the potential for adverse impacts on landscape and visual receptors. These embedded environmental measures have evolved over the development process as the EIA has progressed and in response to consultation.
- 27.7.2.2 These measures also include those that have been identified as good or standard practice and include actions that would be undertaken to meet existing legislation requirements. As there is a commitment to implementing these embedded environmental measures, and also to various standard sectoral practices and procedures, they are considered inherently part of the design of the Project and are set out in this EIA Report.
- 27.7.2.3 **Table 27.8** sets out the relevant embedded environmental measures within the design and how these affect the landscape and visual assessment.

Table 27.8 Relevant landscape and visual embedded environmental measures

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
Construction				
M-001	Underground cables will be used to connect from the landfall(s) transition joint bays to the onshore substations. An additional section of the onshore export cable corridor will run from the onshore substations to the grid connection point at SSEN Netherton Hub. Cables are typically installed in ducts in a standard buried trench arrangement (or directly into the trench) with appropriate insulation, providing protection from temperature extremes and changes in soil moisture.	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.	This measure will avoid and mitigate effects on landscape and visual receptors through the use of underground cables.
M-002	Sensitive sites will be avoided by the temporary and permanent onshore project footprint including Special Protection Areas, Special Areas of Conservation, Sites of Special Scientific Interest, National Nature Reserve (NNR), Local Nature Reserves, Local Wildlife Sites, Ancient woodland, areas of consented development, areas of historic landfill and other known areas of potential contamination, Scottish National Trust land, listed buildings and scheduled monuments, potable water supply abstractions, floodplains and geomorphic risk areas.	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.	This measure will avoid and mitigate effects on sensitive landscape and visual receptors through siting of infrastructure elements.
M-005	To reduce the environmental impact of the landfall(s), a trenchless solution is to be implemented to install ducts. Determination of the most suitable trenchless landfall crossing method will be undertaken during the detailed design stage of the Project, following geotechnical investigation of the onshore and nearshore areas.	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.	This measure will avoid and mitigate effects on coastal landscape and visual receptors through the use of underground infrastructure at landfall(s).

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
M-006	<p><u>Vegetation (trees / woodland / hedgerows)</u></p> <p>Vegetation will be retained where possible as detailed in Volume 3, Appendix 23.10: Arboricultural Impact Assessment and Volume 3, Appendix 23.10, Figure 1 Tree removal and protection plan. Otherwise, vegetation removal will be undertaken in line with British Standard 5837-2012 (Trees in relation to design, demolition and construction) and scheduled to avoid bird breeding seasons. Ancient woodland will be retained with a stand-off of a minimum of 25m from any surface construction works (HDD (or similar trenchless technique)) a depth >6m). With regards to other woodland / forestry, the onshore export cable construction corridor will be reduced, where practical, to minimise tree loss and where the construction corridor passes close to woodland that is being retained, BS5837:2012 root protection to apply.</p> <p>Hedgerows with trees / tree lines which are crossed by the onshore export cable corridor will be notched to reduce landscape impacts. All hedgerows that are to be retained, coppiced, notched (vegetation removed only where trenching occurs) or lost are to be mapped. Vegetation may be coppiced / pruned to allow access and visibility splays at junctions.</p>	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.	This measure will avoid and mitigate effects on landscape elements and landscape and visual receptors.
M-011	<p>A lighting design of all temporary and permanent lighting will be developed once contractors are appointed. Joint guidance provided by the Bat Conservation Trust and Institution of Lighting Professionals (2023). The lighting design will account of the potential effects on terrestrial ecology and people (residents) by taking measures to minimise lighting usage, minimise light spill, use most appropriate wave lengths of light and locate lighting in the most appropriate locations – this is to decrease the</p>	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.	This measure will avoid and mitigate effects on landscape and visual receptors at night.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
	potential displacement effects on light sensitive fauna, such as bats.			
M-016	In areas (or during periods of adverse weather) there may be the requirement to import aggregates to minimise erosion or transport of sediment from construction. Options such as bog-matting, geotextiles, floating roads will be considered by the principal contractor for sensitive sections of the onshore export cable corridor to reduce impact. Volume 4: Outline Construction Environmental Management Plan will include a commitment to review and implement additional protective measures for soil stockpiles, if needed, to control sediment run-off due to heavy rainfall/flood conditions and maintain soils in a drier condition.	Scoping	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.	This measure will avoid and mitigate effects on landscape and visual receptors.
M-019	The onshore export cable will be constructed in sections. The trenches will be excavated, the cable ducts will be laid, the trenches backfilled, and the reinstatement process commenced in as short a timeframe as practicable.	Scoping	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.	This measure will limit the duration of effects on landscape and visual receptors.
M-024	<u>Inspection and completion</u> Condition surveys and inspections will be undertaken before, during and after the construction stage. If damage has been identified during the construction stage, the damage will be repaired.	Scoping	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.	This measure will avoid and mitigate effects on landscape and visual receptors.
M-026	Signage and / or temporary core path diversions will be provided during construction where necessary to avoid the construction working areas.	Scoping	Volume 4: Outline Construction Traffic Management Plan, Appendix B Outline Core	This measure will mitigate effects on visual receptors and recreational routes.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
			Path Management Plan and planning conditions.	
M-027	At any sensitive features identified along the route, the working width of the temporary construction corridor will be reduced as far as practicable to avoid or minimise potential environmental effects. Where it is necessary to cross sensitive features, such as watercourses and woodland, trenchless construction methods will be used to install ducts under the crossed feature, which the onshore export cables are then pulled through via entry and exit pits.	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.	This measure will avoid and mitigate effects on landscape elements and landscape and visual receptors.
M-063	A CEMP to be implemented by the contractor in accordance with Volume 4: Outline Construction Environmental Management Plan . The contractor will ensure that the relevant environmental measures within the CEMP and health and safety procedures are implemented. A CEMP will identify the project management structure roles and responsibilities with regard to managing and reporting on the environmental impact of the construction stage.	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.	This measure will avoid and mitigate effects on landscape elements and landscape and visual receptors.
M-070	Soils and excavated materials will be managed in accordance with Scottish Environment Protection Agency regulatory guidance on Promoting the Sustainable Reuse of Greenfield Soils in Construction, and Waste Management Guidelines for the re-use of excavated materials and remediation. The best practice for soil handling in the Defra Construction Code of Practice will be applied for handling of topsoil and subsoil. A Soil Management Plan (SMP) will be developed for use during construction to protect soil resources and agricultural land quality. The SMP will be used in conjunction with a Peat Management Plan as required for example, if the Project encounters areas of peat.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.	This measure will ensure that soil fertility is retained for landscape works and reinstatement of land.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
M-103	<p><u>On-going design</u> Where practical, sensitive sites for landscape and visual receptors will be avoided by the onshore project footprint including:</p> <ul style="list-style-type: none"> landscape elements of high sensitivity (for example, ancient woodland and veteran trees / Tree Protection Orders and other valued trees / woodland; and visual receptors including settlements and residential properties, national level recreational routes, and important tourist / visitor attractions including beaches and popular hills. <p>Loss or disturbance of sensitive sites for landscape and visual receptors, arising from temporary works will be mitigated, as far as possible, through sensitive design restoration and enhancements.</p>	Scoping Amended at EIA Report	Chapter 27: Landscape and Visual, Volume 4: Outline Landscape and Architectural Strategy, Onshore Red Line Boundary, Volume 4: Outline Construction Environmental Management Plan, and planning conditions.	This measure will avoid and mitigate effects on landscape elements and landscape and visual receptors.
M-104	<p><u>Construction access and compounds</u> All temporary construction access and contractor's compounds will be sensitively sited to avoid and / or reduce and mitigate adverse landscape and visual effects. Following final phase of construction, these areas will be returned to previous conditions. Any areas of hardstanding are likely to remain between phases.</p>	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan, description of Project and planning conditions.	This measure will avoid and mitigate effects on landscape elements and landscape and visual receptors.
M-108	<p><u>Onshore export cable</u> Volume 4: Outline Landscape and Architectural Strategy provides a mitigation framework to support an application for PPIP, with all detailed siting, design, implementation and mitigation measures to be confirmed through post-consent conditions. It includes information on the reinstatement of landscape elements (for example, trees, woodland and hedgerows) which may be removed as a result of construction, including construction / HDD (or similar trenchless technique) compounds and construction</p>	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan, Volume 4: Outline Landscape and Architectural Strategy, description of Project and planning conditions.	This measure will mitigate effects on landscape elements and landscape and visual receptors.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
	<p>access. Attention will be given to species selection and landscape patterns within each LCA / habitat type post-consent.</p> <p>Woodland cannot be replaced above the onshore export cable, but hedgerows and grassland can be reinstated, including areas of temporary vegetation loss that will be reinstated at the first available planting / seeding season following completion.</p> <p>Reinstatement of vegetation will seek to provide landscape enhancement where appropriate and feasible. Opportunities for enhancement will be identified following further evolution of the Project design and with stakeholder engagement.</p> <p>It is envisaged that the Project will be built out across a number of phases, with the onshore grid infrastructure for each phase transferring to a dedicated Offshore Transmission Owner appointed by Ofgem for the operational stage. All new planting will be subject to a ten-year establishment period with appropriate maintenance and on-going management throughout the O&M.</p>			
M-109	Construction compounds would be contained by perimeter wooden hoarding up to 2.4m high to minimise effect on visual receptors.	Scoping Amended at EIA Report	Volume 4: Outline Construction Environmental Management Plan, description of Project and planning conditions.	This measure will mitigate effects on visual receptors.
M-110	<u>Recreational routes</u> A crossing register / crossing method statement will be prepared which includes crossing methodology for each crossing of a recreational route. Signage and / or temporary	Scoping	Volume 4: Outline Construction Environmental Management Plan, Volume	This measure will inform the visual assessment and allow continued recreation.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
	recreational route diversions will be provided during construction and opportunities taken where possible to provide a diversion of similar or enhanced amenity.		4: Outline Construction Traffic Management Plan, Appendix B Outline Core Path Management Plan description of Project and planning conditions.	
M-111 (see also M-108)	<p><u>Onshore substations</u> The final form of the onshore substations will be finished to a suitable standard of design and material selection to accord with the architectural strategy in Volume 4: Outline Landscape and Architectural Strategy.</p> <p>Opportunities for enhancement will be identified following further evolution of the Project design and with stakeholder engagement.</p> <p>All new planting will be subject to a ten-year establishment period with appropriate maintenance and on-going management throughout the O&M.</p>	Scoping Amended at EIA Report	Volume 4: Outline Landscape and Architectural Strategy , description of Project and planning conditions.	This measure will mitigate effects on landscape and visual receptors.
M-185	Due to the proximity of the onshore substations to receptors on the A950 and the topography of the onshore substation site, HVAC electrical infrastructure (maximum height of 18.25m) to be placed to the north of the onshore substation site; and HVDC (maximum height of 30.75m) placed to the south of the onshore substation site, as described further in Section 27.7.1 .	EIA Report.	Volume 4: Outline Landscape and Architectural Strategy , description of Project and planning conditions.	This measure will mitigate effects on landscape and visual receptors, particularly along the A950 and to the north.
M-201	Landscape mitigation planting, including 'advance planting' and phased planting onsite within the available land parcel of the onshore substations.	EIA Report.	Volume 4: Outline Landscape and Architectural Strategy and planning conditions.	This measure will mitigate effects on landscape and visual receptors.
O&M				

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured	Relevance to LVIA
M-066	The permanent rights of servitude for the onshore export cable corridor will be kept to the minimum width needed for safe access for cable maintenance or replacement purposes during operation of the Project.	Scoping	Planning conditions.	This measure will mitigate effects on landscape and visual receptors during O&M.
M-093	All new planting at the onshore substation site will be subject to a ten-year establishment period with appropriate maintenance and management as described Volume 4: Outline Landscape and Architectural Strategy .	Scoping Amended at EIA Report	Volume 4: Outline Landscape and Architectural Strategy , description of Project and planning conditions.	This measure will ensure mitigation is implemented to minimise effects on landscape and visual receptors.
Decommissioning				
M-107	A decommissioning plan will be prepared for the Project in line with the latest relevant available guidance.	Scoping	Planning conditions.	This measure will mitigate effects on landscape and visual receptors.

- 27.7.2.4 Further detail on the embedded environmental measures in **Table 27.8** is provided in the **Volume 3, Appendix 5.2: Commitments Register**, which sets out how and where particular embedded environmental measures will be implemented and secured.

27.7.3 ZTV and viewpoint analysis

- 27.7.3.1 The ZTV and viewpoint analysis is used to further define the scope of the assessment process. In particular, a significance threshold indicating the distance from the onshore infrastructure, where significant effects may be likely, has been identified through the viewpoint assessment set out in **Volume 3, Appendix 27.2**. This has been used to focus the baseline information and detailed reporting of the assessment in this Chapter.

ZTV visibility analysis

- 27.7.3.2 The ZTVs in **Volume 2, Figures 27.2a-b** and **Volume 2, Figures 27.3a-g** are calculated using ArcGIS and Resoft Wind Farm© softwares to generate the ZTV of the onshore infrastructure. This software creates a three-dimensional computer model of the existing landscape and the development using OS Terrain 5 data. Buildings (8m tall) and woodland (12m tall) are imprinted on the OS Terrain 5 data to replicate the visual blocking effect these features have. The maximum design scenario parameters set out in **Table 27.7** have been used to define the ZTVs illustrated in the figures as follows:
- **Volume 2, Figure 27.2a** –illustrates the ZTV within the 5km study area for the onshore substations during O&M calculated to a maximum height of 30.75m within the southern block and 18.25m within the northern block. Theoretical visibility is almost continuous within 1km to 2km distance in all directions and extends west to 3km to 4km distance and limited to higher ground in the south-west and the north-northwest. There is little or no ZTV coverage at Peterhead and along the coast.
 - **Volume 2, Figure 27.2b** –illustrates the ZTV within the 5km study area for the onshore substations during construction calculated to a maximum height of 12m (accounting for a heavy-duty excavator with arm fully extended) and 70m (accounting for a fully extended crane working within the maximum design scenario for the onshore substations and the temporary construction compound). Theoretical visibility is more extensive, although there remains limited ZTV coverage at Peterhead and along the coast.
 - **Volume 2, Figure 27.3a** – illustrates the ZTV within 2km of the Lunderton North landfall and onshore export cable corridor (landfall zone) during construction with a maximum height of 12m (accounting for a heavy-duty excavator with arm fully extended working in this area). Theoretical visibility is contained by landform (including the dunes) and blocks of mature forestry / woodland, reducing ZTV coverage on areas such as the beach and coastline.
 - **Volume 2, Figure 27.3b** – illustrates the ZTV within 2km of the Lunderton South landfall and onshore export cable corridor (landfall zone) during construction with a maximum height of 12m (accounting for a heavy-duty excavator with arm fully extended working in this area). Theoretical visibility is contained by landform and blocks of mature forestry / woodland, although there would be ZTV coverage of coastal areas overlapping with Peterhead Golf Course.
 - **Volume 2, Figure 27.3c** – illustrates the ZTV within 2km of the Scotstown landfall and onshore export cable corridor (landfall zone) during construction with a maximum height of 12m (accounting for a heavy-duty excavator with arm fully extended working in this area). Theoretical visibility is more extensive and overlaps with open areas of this

landscape including the edge of St Fergus and the picnic site and carpark for Scotstown Beach. Screening from the sand dunes limits ZTV coverage along the beach / coastline.

- **Volume 2, Figure 27.3d** – illustrates the ZTV within 2km of the onshore export cable corridor (zone A) during construction with a maximum height of 12m (accounting for a heavy-duty excavator with arm fully extended working in this area). Theoretical visibility is contained by landform and successive layers of trees, woodland and hedges, notably to the east along the River Ugie and in the Inverugie area.
- **Volume 2, Figure 27.3e** – illustrates the ZTV within 2km of the onshore export cable corridor (zone B) during construction with a maximum height of 12m (accounting for a heavy-duty excavator with arm fully extended). Theoretical visibility is partly contained by landform although there are fewer trees, woodland and hedges in this area.
- **Volume 2, Figure 27.3f** – illustrates the ZTV within 2km of the primary construction compounds (labelled 'A', 'B' and 'C') during construction with a maximum height of 20m to allow for a concrete batching plant. Theoretical visibility is contained by landform and successive layers of mature vegetation.
- **Volume 2, Figure 27.3g** – illustrates the ZTV within 2km of the indicative secondary construction compounds (labelled 'A' to 'F') during construction with a maximum height of 3m to allow for construction plant / materials. Theoretical visibility is contained by landform and successive layers of mature vegetation.

Viewpoint selection

27.7.3.3 Viewpoints have been selected to cover a range of receptor locations, taking account of the following assessment assumptions:

- a range of viewpoints from where there are likely to be significant effects;
- those representative of views within the LVIA study area and from specific viewpoints (including some elevated, distant viewpoints);
- key landscape and visual receptors;
- a range of distances; and
- an integrated approach representing several aspects from same location.

27.7.3.4 Viewpoints are selected from the ZTVs within the LVIA study area. These locations are then verified on site. For the avoidance of doubt, if an area on the map is shown to be outwith the ZTV then there will be no view of the onshore infrastructure from that location.

27.7.3.5 With regards to the viewpoint locations, the following may be noted:

- the SNH (2017c) recognises “*the need to limit the list of viewpoints to a reasonable number*”;
- an appropriate balance must be struck through the LVIA consultation process to agree a proportionate number of viewpoints;
- not all receptors require a viewpoint – receptors are still assessed and may refer to representative viewpoints; and
- mitigation planting illustrated in the photomontages is shown at the following approximate heights, based on tree growth rate information from Evans (1984) and **Volume 3, Appendix 23.10** and **Appendix C Tree Survey Schedule** as follows:
 - ▶ year 5 to 10: Planting shown at between up to approximately 5m high; and

- years 10 to 15: Planting shown at between up to approximately 8m high.

- 27.7.3.6 According to Evans (1984) growth rates of native species, likely to be included as mitigation planting can range from approximately 10 centimetres (cm) to 50cm per year for Oak (*Quercus robur* and *Quercus petraea*) and to up to approximately 1m to 2m per year for willows (*Salix alba* and *Salix fragilis* and poplars (*Populus tremula* and *Populus nigra*); according to variable, local environmental conditions such as soil type and weather.
- 27.7.3.7 All of the viewpoint locations have been agreed with Aberdeenshire Council with a list of the viewpoints used to assist the LVIA is set out in **Table 27.9**. The viewpoint analysis for all 22 viewpoints is provided in **Volume 3, Appendix 27.2**.

Table 27.9 Viewpoint selection

Figure No.	Viewpoint name and number	GLVIA 3 Viewpoint type / receptor
27.2.1a-r	Viewpoint 1: A950 junction with access to Downiehills Farm.	Representative close-range view towards the onshore substations, viewing from A950 to the north.
27.2.2a-i	Viewpoint 2: Minor road south of Forehill House.	Representative close-range view towards the onshore substations, viewing from minor road to the south-east.
27.2.3a-k	Viewpoint 3: Minor road east of Stockbridge.	Representative close-range view towards the onshore substations, viewing from minor road to the south-west.
27.2.4a-i	Viewpoint 4: A950 junction to Longside Airfield.	Representative close-range view towards the onshore substations, viewing from A950 to the west.
27.2.5a-d	Viewpoint 5: Downiehills Cottage.	Representative close-range view towards the onshore export cable corridor and the onshore substations, viewing from minor road.
27.2.6a-b	Viewpoint 6: Toddlehill near quarry.	Specific mid-range view towards the onshore export cable corridor and the onshore substations, viewing from minor road north of residential properties.
27.2.7	Viewpoint 7: Cowsrieve.	Representative mid-range view towards the onshore substations, viewing from elevated minor road.
27.2.8a-b	Viewpoint 8: Formartine Buchan Way near Easterton Cottages.	Specific view towards the onshore export cable corridor from road bridge over Formartine Buchan Way in former railway cutting.
27.2.9	Viewpoint 9: A90 near Meg's Moss.	Representative mid-range view towards the onshore substations, viewing from the A90 on the eastern Peterhead boundary.
27.2.10	Viewpoint 10: A950, near Flushing.	Representative mid to distant view towards the onshore substations, viewing from A950.
27.2.11	Viewpoint 11: Upper Savock.	Specific mid to distant view towards the onshore export cable corridor and the onshore substations, viewing from minor road.
27.2.12a-c	Viewpoint 12: A90 junction at Hallmoss.	Specific close-range view towards the onshore export cable corridor, viewing from A90.

Figure No.	Viewpoint name and number	GLVIA 3 Viewpoint type / receptor
27.2.13a-c	Viewpoint 13: Minor road near Kincairn.	Specific close-range view towards the onshore export cable corridor, viewing from minor road.
27.2.14	Viewpoint 14: Reform Tower.	Specific mid to distant view towards the onshore export cable corridor and the onshore substations, viewing from Meet Hill in Peterhead.
27.2.15a-b	Viewpoint 15: core path, Craigewan.	Representative close to mid-range view towards the Lunderton North and Lunderton South landfall(s) and the onshore export cable corridor, viewing from elevated sand dunes path.
27.2.16a-b	Viewpoint 16: core path, Peterhead Golf Course.	Representative close to mid-range view towards the Lunderton North and Lunderton South landfall(s) and the onshore export cable corridor, viewing from Peterhead Golf Course.
27.2.17	Viewpoint 17: Minor road near Newton.	Representative close-range view towards the onshore export cable corridor and the onshore substations, viewing from minor road.
27.2.18	Viewpoint 18: A90 Layby near Cuttie Burn.	Specific, distant view towards the onshore export cable corridor and the onshore substations, viewing from elevated minor road.
27.2.19a-c	Viewpoint 19: A90 near Inverquinzie Cotts.	Specific close-range view towards the onshore export cable corridor, viewing from A90.
27.2.20a-c	Viewpoint 20: St Fergus Links.	Representative close-range view towards the Scotstown landfall and the onshore export cable corridor, viewing from coastal area.
27.2.21a-b	Viewpoint 21: Minor road near South Scotston.	Representative close-range view towards the Scotstown landfall and the onshore export cable corridor, viewing from minor road.
27.2.22a-b	Viewpoint 22: St Fergus Links near Scotstown Beach.	Representative close-range view towards the Scotstown landfall and the onshore export cable corridor, viewing from sand dunes.

Viewpoint analysis

- 27.7.3.8 The viewpoint analysis has been conducted from 22 viewpoint locations which have been agreed with Aberdeenshire Council. Each of the viewpoints are illustrated in **Volume 3, Appendix 27.2, Figures 1 – 22** and illustrated as baseline photographs and visualisations (annotated photographs and / or photomontages as agreed through consultation).
- 27.7.3.9 **Volume 3, Appendix 27.2, Figures 1-4** include indicative photomontages of the onshore substations and the embedded landscape and architectural mitigation (**Volume 4: Outline Landscape and Architectural Strategy**), during construction phase 1 (years 1 to 3), phase 2 (years 4 to 6), and a final phase of development showing all three substations completed during years 10 to 15 of the O&M stage. Each photomontage also illustrates the fully enclosed and partially enclosed onshore substation options.

- 27.7.3.10 Mitigation planting illustrated in the photomontages is shown at the following approximate heights, based on tree growth rate information from Evans (1984) and **Volume 3, Appendix 23.10, Appendix C** as follows:
- year 5 to 10: Planting shown at between up to approximately 5m high; and
 - years 10 to 15: Planting shown at between up to approximately 8m high.
- 27.7.3.11 **Volume 3, Appendix 27.2, Figures 5-22** illustrate annotated photographs showing the Project's onshore infrastructure as wirelines, indicating the maximum design parameters and relevant search areas for construction stage, phase 1 only.

27.7.4 Geographical extent of likely significant visual effects

- 27.7.4.1 The outer distance from the Project's indicative onshore infrastructure, where significant effects may be likely, has been identified by the viewpoint analysis of the viewpoints listed in **Table 27.9**.
- 27.7.4.2 The viewpoint analysis indicates that significant visual effects are likely to be visible from Viewpoints 1 to 7, 15 and 16, and 18 to 21, often viewing multiple elements of onshore infrastructure during the construction stage and notably during phase 1. This analysis is summarised in **Table 27.10** and explained further in **Volume 3, Appendix 27.2**.
- 27.7.4.3 Importantly this analysis is indicative of the maximum likely range of significant visual effects, assuming a clear and uninterrupted view. It is not definitive and should only be used as a guide to assist in focusing the LVIA.

Table 27.10 Viewpoint analysis

Onshore infrastructure	Indicated threshold for significant effects	Viewpoint analysis of worst case
Lunderton North Landfall	660m During phases 1 to 3 construction.	Lunderton North landfall (with a maximum parameter height of 12m): the likely threshold for significant visual effects is approximately <660m distance as illustrated by Viewpoint 16 (Volume 3, Appendix 27.2, Figure 16).
Lunderton South landfall	740m During phases 1 to 3 construction.	Lunderton South landfall (with a maximum parameter height of 12m): the likely threshold for significant visual effects is approximately <740m distance as illustrated by Viewpoints 15 and 16 (Volume 3, Appendix 27.2, Figures 15-16).
Scotstown Landfall	830m During phases 1 to 3 construction.	Scotstown landfall (with a maximum parameter height of 12m): the likely threshold for significant visual effects is approximately <830m distance as illustrated by Viewpoints 20, 21 and 22 (Volume 3, Appendix 27.2, Figures 20-22).
Onshore substations (Northern Block)	850m During construction phases 1 to 3, O&M and decommissioning.	Onshore substations (Northern Block maximum design parameter height 18.25m): the likely threshold for significant visual effects is approximately <850m distance from the onshore substations as illustrated by Viewpoints 1-6 (Volume 3, Appendix 27.2, Figures 1-6).
Onshore substations (Southern Block)	1.5km During construction phases 1 to 3, O&M and decommissioning.	Onshore substations (Southern Block parameter maximum design parameter height 30.75m): the likely threshold for significant visual effects is approximately <1.5km distance from

Onshore infrastructure	Indicated threshold for significant effects	Viewpoint analysis of worst case
		the onshore substations as illustrated by Viewpoints 1-7 (Volume 3, Appendix 27.2, Figures 1-7).
Onshore export cable corridor landfall zone	930m During construction phases 1 to 3.	Landfall zone onshore export cable corridor (including Segments L1-L4 and trenchless crossing compounds with a maximum parameter height of 12m): the likely threshold for significant visual effects is approximately <930m distance from the onshore export cable corridor as illustrated by Viewpoints 12, 13, 16 and 18 to 22 (Volume 3, Appendix 27.2, Figures 12, 13, 16 and 18-22).
Onshore export cable corridor zone A	480m During construction phase 1.	Onshore export cable corridor zone A (including Segments A1 and A2 and trenchless crossing compounds with a maximum parameter height of 12m): the likely threshold for significant visual effects is approximately <480m distance from the onshore export cable corridor as illustrated by Viewpoints 1, 5 and 8 (Volume 3, Appendix 27.2, Figures 1, 5 and 8).
Onshore export cable corridor zone B	440m During construction phase 1.	Onshore export cable corridor zone B (including Segment B1 and trenchless crossing compounds with a maximum parameter height of 12m): the likely threshold for significant visual effects is approximately <440m distance from the onshore export cable corridor as illustrated by Viewpoints 3 and 4 (Volume 3, Appendix 27.2, Figures 3-4).
Primary construction compounds	440m During construction phases 1 to 3.	Primary construction compound (with a maximum parameter height of 20m): the likely threshold for significant visual effects is approximately <440m distance as illustrated by Viewpoints 1, 5, 12, 19 and 21 (Volume 3, Appendix 27.2, Figures 1, 5, 12, 19 and 21).
Secondary construction compounds	490m During construction phases 1 to 3.	Secondary construction compound (with a maximum parameter height of 3m): the likely threshold for significant visual effects is approximately <490m distance as illustrated by Viewpoints 4, 13 and 18 (Volume 3, Appendix 27.2, Figures 4, 13 and 18).

27.8 Methodology for EIA Report

27.8.1 Introduction

- 27.8.1.1 The Project-wide approach to assessment is set out in **Chapter 5: Approach to the EIA**. Whilst this has informed the approach used in the LVIA, it is necessary to set out how this methodology has been applied and appropriately adapted to address the specific needs of the LVIA. A full description of the LVIA methodology is provided in **Volume 3, Appendix 27.1**.

27.8.2 Significance evaluation methodology

Overview

- 27.8.2.1 The landscape and visual effects (and whether they are significant) are determined by an assessment of the nature or 'sensitivity' of each landscape or visual receptor or group of receptors and the nature of the effect or 'magnitude of change' that will result from the indicative onshore Project infrastructure. The assessment is separated into two receptor groups: landscape receptors and visual receptors. The landscape receptors include landscape elements (trees, hedges and woodland for example), landscape character and the SLQ of designated landscapes. Visual receptors include the views from settlement, transport and recreational routes / locations and visitor / tourist attractions that would be experienced by people appreciating the landscape.
- 27.8.2.2 The evaluation of sensitivity takes account of the value and susceptibility of the receptor to the Project. This is combined with an assessment of the magnitude of change which takes account of the size and scale of the proposed change and the geographical extent of that change. By combining assessments of sensitivity and magnitude of change, a level of landscape or visual effect can be evaluated and determined.
- 27.8.2.3 The resulting level of effect is described in terms of whether it is significant or Not Significant and the type of effect is described as either direct or indirect; temporary (reversible) or permanent; cumulative; and beneficial, neutral or adverse. The assessment also considers the inter-related or cumulative effects resulting from different components of the onshore infrastructure, for example views of both the onshore substations and part of the onshore export cable corridor. There are no inter-related effects arising from the onshore and offshore infrastructure as the latter is too far out to sea to be visible and has been scoped out of the assessment in **Chapter 17: Seascape, Landscape and Visual**. Inter-related Project effects and Cumulative effects are considered further in **Chapter 32: Inter-Related Effects** and **Chapter 33: Cumulative Effects Assessment** respectively.
- 27.8.2.4 The time period or duration for the assessment covers the construction stage, the O&M stage and decommissioning stage. The assessment also includes landscape and architectural mitigation described in **Volume 4: Outline Landscape and Architectural Strategy** to be implemented and established during the nine-year construction stage.
- 27.8.2.5 In terms of seasonal variability related to leaf cover or hedgerow maintenance, the LVIA has assumed a reasonable worst-case scenario of Winter views when there would be low or no leaf cover and hedgerows have been cut (where there is evidence that these are maintained).
- 27.8.2.6 The LVIA involves a combination of quantitative and qualitative assessment and wherever possible a consensus of professional opinion is sought through consultation, internal peer review, and the adoption of a systematic, impartial, and professional approach.

Determining the significance of effects

- 27.8.2.7 A matrix presented in **Table 27.11** is used as a guide to illustrate the LVIA process. In line with the emphasis placed in GLVIA3 upon the application of professional judgement, an overly mechanistic reliance upon a matrix is avoided through the provision of clear and accessible narrative explanations of the rationale underlying the assessment made for each landscape and visual receptor. Such narrative assessments provide a level of detail over and above the outline assessment provided by use of the matrix alone. Wherever possible, cross references will be made to baseline figures and / or to photomontages and visualisations to support the rationale. The matrix, as presented in **Table 27.11**, should

therefore be considered as a guide and any deviation from this guide will be clearly explained in the assessment rationale.

Table 27.11 Evaluation of landscape and visual effects

Sensitivity	Magnitude of change					
	High	High - medium	Medium	Medium - low	Low	Negligible - zero
High	Major	Major	Major / Moderate	Moderate*	Moderate*	Minor
High - medium	Major	Major / Moderate	Moderate*	Moderate*	Moderate / Minor	Minor
Medium	Major / Moderate	Moderate*	Moderate*	Moderate / Minor	Minor	Minor / Negligible
Medium - low	Moderate*	Moderate*	Moderate / Minor	Minor	Minor / Negligible	Negligible
Low	Moderate*	Moderate / Minor	Minor	Minor / Negligible	Negligible	Negligible
*Note: Moderate levels of effect may be significant subject to the assessor's opinion, which shall be clearly explained.						

- 27.8.2.8 Significant landscape and visual effects are highlighted in **bold** and shaded in yellow in **Table 27.11** and relate to all those effects that result in a '**Major**' or a '**Major / Moderate**' level of effect. In some circumstances, '**Moderate**' levels of effect (shaded blue) also have the potential, subject to the assessor's professional opinion, to be considered as significant and these exceptions are also highlighted in bold and will be explained as part of the assessment, where they occur. Green boxes in **Table 27.11** indicate an effect that is **Not Significant**.
- 27.8.2.9 The type of effect will also be described and may be direct or indirect; temporary (short / medium / long-term and reversible) or permanent; cumulative; and beneficial, neutral, or adverse.

27.9 Landscape effects

27.9.1 Introduction

- 27.9.1.1 This Section provides an assessment of the effects on landscape receptors resulting from the construction, O&M and decommissioning of the indicative onshore Project infrastructure. The assessment follows the methodology set out in **Section 27.8** and described in more detail in **Volume 3, Appendix 27.1**.

Scope of landscape assessment

- 27.9.1.2 The landscape assessment includes the following indicative Project onshore infrastructure, located landward of MLWS:

- **Landfall(s)** including offshore export cable corridor from MLWS to the landfall transition joint bays (including associated construction areas), and the onshore export cable corridor from the landfall transition joint bays to the River Ugie. The landfall options that are assessed in this EIA Report include:
 - ▶ **option 1: Lunderton** - all export cable circuits would make landfall at Lunderton, based on the following scenarios:
 - option 1a: all export cable circuits make landfall at Lunderton North, including onshore export cable Segments L2 and L3; or
 - option 1b: all export cable circuits would make landfall at a combination of Lunderton North and Lunderton South including onshore export cable, Segments L2, L3 and L4;
 - ▶ **option 2: Scotstown and Lunderton** - export cable circuits would make landfall at a combination of Lunderton (North and / or South) and Scotstown including onshore export cable Segments L1, L2, L3 and L4.
- **onshore export cable corridor zone A** (onshore export cable corridor from the River Ugie south to the onshore substations);
- **onshore substation zone** including the onshore substations; and
- **onshore export cable corridor zone B** (onshore export cable corridor from onshore substations to the point connection at the SSEN Netherton Hub).

27.9.1.3 The Project's onshore infrastructure and related zones are illustrated in **Volume 2, Figure 27.1b**.

Mitigation and residual effects

27.9.1.4 Embedded mitigation forms part of the Project and residual, landscape effects assessed here, are those remaining after all of the embedded environmental measures have been taken into account. Embedded environmental measures relevant to all of the landscape assessments below include M-002, M-011, M-024, and M-103 as reflected in **Table 27.8**. Further embedded environmental measures relevant to specific receptors are indicated in each assessment.

27.9.1.5 The landscape assessment has taken account of embedded mitigation, described in **Table 27.8** and in **Volume 4: Outline Landscape Architectural Strategy**.

27.9.2 Landfall options 1a, 1b and 2

27.9.2.1 The landscape assessment for each of the landfall options is provided in **Sections 27.9.2.24 to 27.9.2.103**, and a summary of the landscape effects of the landfall options is provided here and in **Table 27.12**.

27.9.2.2 As explained previously in **Section 27.7.1** the maximum design scenario has assumed as a reasonable 'worst case' that all the excavation of the open cut trenches within the associated onshore export cable corridors Segments L1, L2, L3, and L4 would be undertaken during phase 1; however, in the event that more than one landfall is required, the connecting onshore export cables, from the common onshore export cable corridor to the additional landfall(s), may be laid in trenches or installed in ducts to align with the phased installation of the landfall(s). Consequently, significant effects identified for phase 1 could theoretically occur in phases 2 or 3 subject to the detailed construction programme. Maximum construction activity at the landfall(s) and Segments L1, L2, L3, and L4 would

only occur once, and its duration (short-term) would be unaffected. Reinstatement works would follow as described in **Volume 4: Outline Landscape Architectural Strategy**.

Summary of landscape effects of Landfall Option 1a: Lunderton North

- 27.9.2.3 Option 1a comprises the landfall at Lunderton North (Option 1a), and onshore export cable Segments L2 and L3 as illustrated in **Volume 2, Figure 27.1b**.
- 27.9.2.4 During phase 1 there would be **Significant** effects on two landscape character units (LCT 12: Beaches, Dunes and Links, and LCT 17a: Coastal Agricultural Plain) within approximately 500m of the landfall construction compound search area, up to two onshore export cable corridors (Segments L2 and L3) and associated primary and secondary temporary construction compounds. Five landscape elements mostly comprising hawthorn hedges would be removed during phase 1 and these would be reinstated subject to the Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** (M-006, M-019, M-103, M-108).
- 27.9.2.5 Assuming construction of the onshore export cable corridor Segments L2 / L3 is completed in phase 1, then during construction phases 2 and 3 the landscape elements would have been reinstated along the onshore export cable corridors and the effect would be **Not Significant** on the majority of the area within the Onshore Red Line Boundary. Short-term construction work would occur within more limited areas at the landfall (transition joint bays / HDD (or similar trenchless technique) compounds)) and along the onshore export cable corridor at joint bays, with the primary and secondary construction compounds remaining throughout the construction period (medium-term). Individually these would not be significant because of the reduced area, however this is an open landscape with elevated views and during periods of maximum construction activity the combined effects of multiple construction compounds, assuming these are concurrent would be **Significant**, albeit for short-term and temporary periods.
- 27.9.2.6 In the event that the onshore export cable corridor Segments L2 / L3 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.
- 27.9.2.7 There would be no significant effects on the coastal landscape (CCT 3: Deposition Coastline, Open Views), the LCT 17b: River Ugie or the SLQs of the North Aberdeenshire Coast SLA during construction or O&M. There may, however, be some **Beneficial Effects (Not Significant)** because of hedgerow reinstatement that improves on the existing poor hedgerow quality and better aligns with the landscape character (M-006, M-019, M-103, M-108).

Summary of landscape effects of Landfall Option 1b: Lunderton North and South

- 27.9.2.8 Option 1b comprises the landfall(s) at Lunderton North (Option 1a) and Lunderton South (Option 1b) and the connecting onshore export cable Segments L2, L3 and L4, as illustrated in **Volume 2, Figure 27.1b**.
- 27.9.2.9 During phase 1 there would be **Significant** effects on three landscape character units CCT 3: Deposition Coastline, Open Views, LCT 12: Beaches, Dunes and Links, and LCT 17a: Coastal Agricultural Plain) within approximately 500m of the two landfall(s) construction compound search areas, up to three onshore export cable corridors (Segments L2, L3 and L4) and associated primary and secondary construction compounds. Six landscape elements, mostly comprising hawthorn hedges, would be removed during phase 1 and these would be reinstated subject to the Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy**.

- 27.9.2.10 Additionally, there would be **Significant** landscape effects on part of the North East Aberdeenshire Coast SLA and two SLQs related to perceptual qualities and views experienced by people on coastal paths, occurring intermittently during construction.
- 27.9.2.11 Assuming construction of the onshore export cable corridor Segments L2 / L3 / L4 is completed in phase 1, then during construction phases 2 and 3 the export cable corridors Segments L2 / L3 / L4 would have been reinstated along the onshore export cable corridors and the effect would be **Not Significant** on the majority of the area within the Onshore Red Line Boundary. Short-term construction work would occur within more limited areas at landfall(s) (transition joint bays / HDD (or similar trenchless technique) compounds)) and along the onshore export cable corridor at joint bays, with the primary and secondary construction compounds remaining throughout the construction period (medium-term). Although individually these would not be significant, during periods of maximum construction activity the combined effects of multiple construction compounds would be **Significant**, albeit for short-term and temporary periods.
- 27.9.2.12 In the event that the onshore export cable corridor Segments L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.
- 27.9.2.13 During O&M there would be no significant effects on these coastal landscapes (CCT 3: Deposition Coastline, Open Views, LCT 12: Beaches, Dunes and Links, and LCT 17a: Coastal Agricultural Plain) or the SLQs of the North Aberdeenshire Coast SLA. There may, however, be some **Beneficial Effects (Not Significant)** because of hedgerow reinstatement that improves on the existing poor hedgerow quality and better aligns with the landscape character.
- 27.9.2.14 There would be no significant effects on LCT 17b: River Ugie during construction or O&M.

Summary of landscape effects of Landfall Option 2: Scotstown

- 27.9.2.15 Option 2 comprises the landfall(s) at Lunderton North (Option 1a), Lunderton South (Option 1b) and Scotstown (Option 2) and the connecting onshore export cable Segments L1, L2, L3 and L4 as illustrated in **Volume 2, Figure 27.1b**.
- 27.9.2.16 During phase 1 there would be **Significant** effects on three landscape character units CCT 3: Deposition Coastline, Open Views, LCT 12: Beaches, Dunes and Links, and LCT 17a: Coastal Agricultural Plain) within approximately 500m to 850m of the two landfall(s) construction compound search areas, up to four onshore export cable corridors (Segments L1, L2, L3 and L4) and associated primary and secondary construction compounds. A total of twelve landscape elements, mostly comprising hawthorn hedges, would be removed during phase 1 and these would be reinstated subject to the Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** (M-108).
- 27.9.2.17 As noted in respect of Option 1b, there would be **Significant** landscape effects on part of the North East Aberdeenshire Coast SLA and two SLQs experienced intermittently during construction.
- 27.9.2.18 Assuming reasonable worst case construction, as described in **Section 27.7.1** of the onshore export cable corridor Segments L1 / L2 / L3 / L4 is completed in phase 1, then during construction phases 2 and 3 **Significant** effects in this area would reduce to those works associated with the landfall(s) (transition joint bays / HDD (or similar trenchless technique) compounds)) and along the onshore export cable corridor at joint bays, with the primary and secondary construction compounds remaining throughout the construction period (medium-term).

- 27.9.2.19 In the event that the onshore export cable corridor Segments L1 / L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.
- 27.9.2.20 There would be no significant effects on these coastal landscapes (CCT 3: Deposition Coastline, Open Views, LCT 12: Beaches, Dunes and Links, and LCT 17a: Coastal Agricultural Plain) or the SLQs of the North Aberdeenshire Coast SLA during O&M. There may, however, be some **Beneficial Effects (Not Significant)** because of hedgerow reinstatement that improves on the existing poor hedgerow quality and better aligns with the landscape character.
- 27.9.2.21 There would be no significant effects on LCT 17b: River Ugie during construction or O&M.

Reinstatement and management of landscape elements

- 27.9.2.22 The coastal nature of the landscape character means that landscape elements are more limited and often comprise incomplete hawthorn hedges or small trees which are not a key characteristic of the coastal landscape character. Each of these would be reinstated at the earliest available planting season and maintained for ten years in accordance with approach detailed in **Volume 4: Outline Landscape Architectural Strategy**. Two alternative options should be considered at the detailed design as follows:
- Non-reinstatement – in some cases a decision may be taken not to reinstate landscape elements, particularly where there are isolated fragments that could struggle to re-establish and do not make a positive contribution to the simple and open nature of the underlying landscape character. In these cases, field boundaries would be completed with post and wire fencing only and compensatory planting or landscape enhancement work undertaken elsewhere within the Onshore Red Line Boundary and agreed with the relevant landowner and Aberdeenshire Council.
 - Complete reinstatement – as far as possible each hedgerow would be reinstated as a complete field boundary (rather than reinstated as incomplete / fragmented hedgerows which may struggle to establish over the longer term). This would have greater environmental and biodiversity benefits in establishing a complete landscape element and wildlife corridor. Suggested locations include areas VR2a-y as indicated in **Volume 4: Outline Landscape Architectural Strategy, Appendix A, Figure 5 sheets 1-4**.
- 27.9.2.23 In this manner an overarching approach to landscape management is more likely to achieve long-term and neutral / beneficial effects on landscape character through the O&M stage.

Table 27.12 Summary of landscape effects of landfall options

Landscape receptor within landfall zone	Sensitivity	Level of effect		
		Landfall Option 1a: Lunderton North.	Landfall Option 1b: Lunderton North and / or South.	Landfall Option 2: Lunderton North and / or South and Scotstown.
Construction – temporary short - medium term adverse effects				
CCT 3: Deposition Coastline, Open Views	High	Minor.	Moderate (<500m, L4) ² .	Major to Moderate (<850m, L1 and L4).
LCT 12: Beaches, Dunes and Links	High to medium.	Major to Major / Moderate (<500m, L2 and L3).	Major to Major / Moderate (<500m, L2, L3 and L4).	Major to Moderate (<500m, L1, L2, L3 and L4).
LCT 17a: Coastal Agricultural Plain	Medium	Major to Major / Moderate (<500m, L2).	Major to Major / Moderate (<500m, L2, L3 and L4).	Major to Moderate (<500m, L1, L2, L3 and L4).
LCT 17b: River Ugie	High to medium.	Moderate / Minor (L2).	No Effect.	No Effect.
North East Aberdeenshire Coast SLA	High-medium.	No Effect.	Moderate (<500m, L4).	Major to Major / Moderate (<850m, L1 and L4).
O&M – long-term (reversible) neutral / beneficial effects				
CCT 3: Deposition Coastline, Open Views	High	No Effect.	No Effect.	No Effect.
LCT 12: Beaches, Dunes and Links	High to medium.	No Effect.	No Effect.	No Effect.
LCT 17a: Coastal Agricultural Plain	Medium	Not Significant beneficial effect.*	No Effect.	No Effect.
LCT 17b: River Ugie	High to medium.	No Effect.	No Effect.	No Effect.
North East Aberdeenshire Coast SLA	High to medium.	No Effect.	No Effect.	No Effect.
Note* - Not Significant beneficial effect subject to detailed Landscape Management Plan as set out in Volume 4: Outline Landscape Architectural Strategy.				

² The approximate geographical extent of the significant effect is provided as a distance from the affected onshore export cable corridor reference number as indicated in **Volume 2, Figure 27.1b**.

Landscape effects on CCT 3: Deposition Coastline, Open Views

- 27.9.2.24 The coastal character (CCT 3: Deposition Coastline, Open Views) is illustrated in **Volume 2, Figure 27.4** and defined by SNH, 2005 as:

“Long straight stretches of coastline with cliffs rising to some 30 metres height and often with a raised beach edge. There are few significant headlands although geological differences create variety where softer sandstone forms an indented coast with bays and inlets, arches and caves; harder volcanic rocks produce a more resistant coastline of promontories, low cliffs and rocky shoreline. Notable groups on the north east coast. Productive arable farming occurs up to the cliff edge and tree cover is minimal. Compact fishing villages are located at the base of cliffs in small bays, while castles and cliff-top forts perch on dramatic headland locations, for example Dunottar, near Stonehaven. These are highlighted against the simple sea backdrop. These settlements and built features all appear to be spaced at even intervals and thus provide a visual rhythm of foci along the coast. Views over the North Sea are generally expansive and open, although parts of the Caithness coast have views of Hoy over the Pentland Firth. Shipping is a common feature in gazing out to sea. Some isolated industry occurs along this coast, for example the cement works and Torness Power Station, south of Dunbar.”

Sensitivity

- 27.9.2.25 Locally this area comprises a sandy bay between the rocky headlands of Black Stones in the north and Craigewan in the south. It is backed by dunes and the Craigewan Links / Peterhead Golf Course, with a mix of forestry and agriculture beyond its boundary further east. The area is overlapped by the North Aberdeenshire Coast SLA and due to the high scenic value, recreational interest and the high susceptibility of this simple and open landscape the sensitivity of this receptor is assessed as **high**.

Magnitude and level of effect: Option 1a

- 27.9.2.26 The onshore export cable corridor would be routed via a trenchless crossing through the whole of the CCT and due to the screening effects of mature, mixed forestry / woodland (which is to be protected via the trenchless crossing beneath the root zone) (M-001, M-005, M-006, M-027) there would be limited views of construction activity at the Lunderton North landfall construction compound and associated onshore export cable Segments L2 / L3 above the top of forestry screening as indicated in **Volume 3, Appendix 27.2, Figure 16b and 16c**, including any perimeter hoarding up to 2.4m high, drilling rigs, construction plant and any temporary construction access road (M-063, M-104, M-109). Consequently, there would be a **negligible** magnitude of change with a **Minor** and **Not Significant** effect on this receptor.
- 27.9.2.27 The landfall construction compound at Lunderton North would be required intermittently during part of phases 2 to 3 for landfall construction and cable ducting. As for phase 1 there would be limited views of construction activities and **negligible** magnitude of change with a **Minor** and **Not Significant** effect on this receptor.
- 27.9.2.28 In the event that the onshore export cable corridor Segments L2 / L3 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect: Option 1b

- 27.9.2.29 In combination with the assessment provided for Option 1a: Lunderton North, the onshore export cable corridor would be trenchless on the seaward side of the landfall(s) construction

compound (M-001, M-005) the landfall construction compound at Lunderton South and onshore cable corridor segment L4 would be visible from the coastline and views across the coastline as indicated in **Volume 3, Appendix 27.2, Figure 15b** and **Figure 16a**, including any perimeter hoarding up to 2.4m high, drilling rigs, construction plant and short sections of temporary construction access road (approximately 100m to 200m in length) (M-001, M-063, M-104, M-109). The magnitude of change for would be **medium to low** with a **Moderate** and **Significant** level of effect resulting from the addition of the landfall construction compound in views from the dunes within approximately 500m.

- 27.9.2.30 The landfall(s) construction compound(s) may be required intermittently during part of phases 2 to 3 to for each consecutive phase. During these periods of construction activity, the magnitude of change would be **medium to low** with a **Moderate** and **Significant** level of effect on this receptor. The nature of the construction effects would be temporary (short term over three phases) and adverse, changing to neutral with **No Effect** post reinstatement.
- 27.9.2.31 In the event that the onshore export cable corridor Segments L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect: Option 2

- 27.9.2.32 In combination with the assessment provided for Options 1a-b, the landfall construction compound for Scotstown would be visible from the coastline at South Scotston, as indicated in **Volume 3, Figure 20b** and **Volume 3, Appendix 27.2, Figure 22a-b**, including any perimeter hoarding up to 2.4m high, drilling rigs, construction plant and short sections of temporary construction access road (approximately 100m to 200m in length) (M-001, M-063, M-104, M-109). The magnitude of change would range between **high to low** with a **Major to Moderate** and **Significant** level of effect resulting from the addition of the Scotstown landfall and the effects of all three landfall(s) viewed from the dunes within approximately 750m to 1km. The onshore export cable corridor would be trenchless and not visible on the seaward side of the landfall(s) construction compound (M-001, M-005).
- 27.9.2.33 The three landfall(s) construction compounds may be required intermittently during part of phases 2 to 3 for each consecutive phase. During these periods of construction activity, the magnitude of change would be **medium to low** with a **Moderate** and **Significant** level of effect. The nature of the construction effects would be temporary (short term over three phases) and adverse, changing to neutral with **No Effect** post reinstatement.
- 27.9.2.34 In the event that the onshore export cable corridor Segments L1 / L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during O&M: Options 1a, 1b and 2

- 27.9.2.35 There would be **No Effect** during O&M following completion of the construction stage.

Landscape effects on LCT 12: Beaches, Dunes and Links

27.9.2.36 The LCT 12: Beaches, Dunes and Links is illustrated in **Volume 2, Figure 27.4** and classified by NatureScot's LCA (SNH, 2019b) as:

"The Beaches, Dunes and Links – Aberdeenshire Landscape Character Type extends from Fraserburgh to Peterhead, and from Collieston to Aberdeen on the eastern coast of Aberdeenshire. The areas form consistent stretches of long, broad sandy beaches backed by rolling extensive dunes. The coastline is even with Rattray Head, Scotstown Head and Forvie Ness forming subtle points edging long gently curving beaches. A very wide, gentle gradual transition occurs between this low-lying landscape and the very gently undulating and open Coastal Agricultural Plain to the west with largely uninterrupted views occurring from adjoining farmed coastal plains to sea."

27.9.2.37 The key characteristics of the LCT are defined (SNH, 2019b) as:

- *"long and gently curved sandy beaches backed by wind-sculpted seaward dunes to the east and comparatively solid landward dunes to the west;*
- *low-lying scrubby grassland and occasional areas of wetland and pools forming immediate coast hinterland;*
- *gradual transition between coast and Coastal Agricultural Plain of flat to very undulating pastures used mainly for sheep grazing;*
- *saltmarsh, pools and inlets around higher farmland pastures;*
- *few trees, with vegetation limited to coastal grassland, moss and marram which hold shifting sands together;*
- *farm buildings in the area west of Loch of Strathbeg sited on subtly higher knolls above salt marsh.³*
- *containment within the dunes contrasting with expansive long beaches and open skies; and*
- *sense of naturalness and remoteness."*

27.9.2.38 Locally this area comprises coastal agricultural land to the west of dunes, mixed forestry / woodland and the Craigewan Links / Peterhead Golf Course, with a sandy bay and easterly sea views beyond. There are scattered farms and settlement along the A90 in the western half of this linear tract of coastal land to the north of the River Ugie. South of the River Ugie is the urban townscape of Peterhead.

Sensitivity

27.9.2.39 The area is overlapped by the North Aberdeenshire Coast SLA indicating high to medium value. However, the agricultural areas, closer to the A90 have a reduced (medium) scenic value, more limited recreational interest and reduced sea views indicating a Medium value along the western areas and fringes of this LCT. The agricultural landscape is also of reduced susceptibility (medium) due to the regular cycle of cultivation and changing crops, albeit these are much smaller scale operations affecting a wider agricultural area. This landscape is also relatively simple and open. The sensitivity of this receptor is therefore

³ The LVIA study area does not include Loch Strathbeg.

assessed as **high to medium** with the highest sensitivity along the coast, reducing further inland towards the A90 corridor.

Magnitude and level of effect during construction: Option 1a

- 27.9.2.40 During construction phase 1 the onshore export cable corridor would cross this landscape and the A90 to the north (Segment L2) and south (Segment L3) of Lunderton Cottages with the onshore export cable corridors joining together west of the A90 and continuing into the adjacent LCT 17a: Coastal Agricultural Plain. Up to five construction compounds would be located within this area, comprising the landfall construction compound, two pairs of trenchless crossing compounds along the A90, and the primary and secondary construction compounds to the south and north respectively. The compounds would be contained by perimeter wooden hoarding up to 2.4m high (M-001, M-063, M-104, M-109). These construction compounds would be connected by short sections of temporary construction access road (approximately 100m to 200m in length) (M-104).
- 27.9.2.41 The width of the onshore export cable corridor during construction (up to 89m wide) would entail opencut sections (~1.6km) with soil storage, haul roads, and perimeter hoarding up to 2.4m high, characterised by the contrasting colours, sounds and movement of construction traffic, machinery and construction workers leading to a large-scale change to the landscape character (M-001, M-063, M-104, M-109). Viewing from high ground it is likely that construction activity along part of the onshore export cable corridor zone A and the onshore substations would also be visible in the far distance, subject to vegetative screening, although this would not be significant. The trenchless crossings of the A90 (CRL201 and CRL301 **Volume 3, Appendix 4.1**) would retain all roadside vegetation, however, some may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access requirements (M-001, M-006, M-063, M-103, M-104, M-108).
- 27.9.2.42 This concentrated area of construction activity, linked by opencut sections of the onshore export cable corridor would entail contrasting colours, construction traffic, sound and movement of machinery and construction workers leading to a large-scale change to the landscape character directly affecting areas approximately 750m to 1km across (M-063). Visibility would be curtailed almost immediately to the north and east by mature mixed forestry. woodland along the Cuttie Burn and to the west of the dunes. To the south, visibility would extend approximately 200m to 300m as far as a low hill at Hallmoss (34m AOD), whilst visibility would extend further west, up to approximately 400m to 500m as far as Bearhill (46m AOD) where the landscape is more open. Within this area the magnitude of change would be **high to medium** and the level of effect would be **Major to Major / Moderate and Significant**.
- 27.9.2.43 The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively and it is likely this approximately 1km section could be completed within approximately 12 months. The reinstatement of the land along Segments L2 / L3 to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months (M-006, M-019, M-103, M-108). The nature of this effect would also be direct, temporary and adverse.
- 27.9.2.44 Two landscape elements (small groups of hawthorn G74 and G107) would be removed as a worst-case, further eroding the remnant landscape pattern or trees / hedgerows in this area subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** (M-108). Individually they would however be of limited landscape value (Class C) and have been assessed as of **medium to low** sensitivity. Hedgerows are not a key characteristic of this landscape, and the loss of these hedge fragments would constitute a **low** magnitude leading to a **Minor / Negligible** and **Not Significant** level of effect. The nature of this effect would also be direct, temporary and

adverse and would be followed by reinstating planting undertaken in the first available planting season.

- 27.9.2.45 Construction activity at the landfall construction compound would occur intermittently during part of phases 2 to 3 for each consecutive phase, repeating the effects assessed for phase 1 in these areas. Similarly, the primary and secondary construction compounds would remain for the whole of the construction period. The onshore export cable corridor would, however, have been reinstated and construction activity at the trenchless crossing compounds would be reduced in scale. Smaller construction compounds would also be established at joint bays to pull cables through pre-installed ducts along the onshore export cable corridor.
- 27.9.2.46 During periods of maximum construction activity in phases 2 to 3 the magnitude of change would be **medium to low** with a **Moderate** and **Significant** level of effect. The nature of the construction effects would be temporary (short term) and adverse, changing to neutral with **No Effect** post reinstatement.
- 27.9.2.47 In the event that the onshore export cable corridor Segments L2 / L3 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during construction: Option 1b

- 27.9.2.48 In combination with the assessment provided for Option 1a: Lunderton North, a further 1.5km section of onshore export cable corridor (Segment L4) would be visible to the south of Lunderton, routed between the landfall construction compound at Lunderton South, the trenchless crossing compound search area at Hallmoss and joining the previously assessed onshore export cable corridor (Segment L2) to the north of Hallmoss Cottage.
- 27.9.2.49 The width of the onshore export cable corridor during construction (up to 89m wide for Segments L2 / L3 / L4) would entail open-cut sections with soil storage, haul roads, and perimeter hoarding up to 2.4m high, characterised by the contrasting colours, sounds and movement of construction traffic, machinery and construction workers leading to a large-scale change to the landscape character directly affecting a 1.5km swath of landscape that would be cumulative with Segments L2 and L3 (M-001, M-063, M-104, M-109). Visibility of Segment L4 would be more widespread, as it crosses high ground to the north of Mains of Inverugie, before dropping down to the lower Hallmoss area and the A90 (see **Volume 3, Appendix 27.2, Figure 13a-c**). To the south, visibility would extend within approximately 300m with some screening from Castle Hill, whilst visibility would extend further, up to approximately 500m as far as Bearhill (46m AOD) where the landscape is more open. Within this area the magnitude of change from Segments L2, L3 and L4 would be **high to medium** and the level of effect would be **Major to Major / Moderate** and **Significant**.
- 27.9.2.50 The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively when installed. The reinstatement of the land to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months (M-006, M-019, M-103, M-108). The nature of this effect would also be direct, temporary, adverse and cumulative with Segments L2 and L3.
- 27.9.2.51 One small area of hawthorn (H14, Class C2) would be removed during phase 1 and reinstated subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** (M-108).
- 27.9.2.52 Construction activity at the landfall(s) construction compounds would occur intermittently during part of phases 2 to 3 and the primary and secondary construction compounds would remain for the whole of the construction stage. Smaller construction compounds would be

visible at joint bays to pull cables through pre-installed ducts along the onshore export cable corridor. During periods of maximum construction activity in phases 2 to 3 the magnitude of change would be **medium to low** with a **Moderate** and **Significant** level of effect due to the combined effects of multiple construction activities within this area. The nature of the construction effects would be temporary (short term) and adverse, changing to neutral with **No Effect** post reinstatement.

- 27.9.2.53 In the event that the onshore export cable corridor Segments L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during construction: Option 2

- 27.9.2.54 In combination with the assessment provided for landfall Options 1a-b, there would be a third landfall construction compound option at Scotstown and a further 2.5km section of onshore export cable corridor (Segment L1) is routed through this LCT between the Scotstown landfall, the A90, the Cuttie Burn, and the connection with Segment L2 near Lunderton. Much of Segment L1 would be trenchless and includes the trenchless section between the Scotstown landfall construction compound and the A90 (CRL102 **Volume 3, Appendix 4.1**) and a further trenchless crossing of the Cuttie Burn (CRL103 **Volume 3, Appendix 4.1**) further south (M-001, M-005, M-027). This longer section (Segment L1) has been sub-divided into two areas (South Scotstown, north of the A90 and south of the A90 to the Cuttie Burn, and the connection with Segment L2 near Lunderton) to explain the level and nature of landscape effects:

South Scotston, north of A90

- 27.9.2.55 North of the A90, visibility of construction activity at the landfall(s) and trenchless construction compounds from South Scotston may occur intermittently during phases 1 to 3, as noted previously. They would entail perimeter hoarding up to 2.4m high, drilling rigs, construction plant and short sections of temporary construction access road (approximately 100m to 200m in length) (M-001, M-063, M-104, M-109). This part of the LCT is open and simple in character and the construction activity would add further complexity to this landscape, which already contains several small industrial compounds associated with the St Fergus Gas Terminal which is also visible to the north. Onshore wind development is also visible in the wider landscape from this area of the LCT. In addition, construction plant at the primary construction compound, near the A90 would be visible above existing forestry / woodland to the south-west. Although the proposed landfall and adjacent trenchless crossing construction compounds would appear isolated from opencut sections of the onshore export cable corridor, the magnitude of change would range between **high to low**, affecting the open and quiet nature of this landscape (**high to medium** sensitivity) leading to a **Major to Moderate** and **Significant** level of effect resulting from the addition of these construction compounds to this landscape and when viewed from the dunes and open landscape within approximately 850m. Views to the south would be more tightly contained by woodland / forestry, affecting areas within approximately 500m. These effects are illustrated in **Volume 3, Appendix 27.2, Figure 20b** and **Figure 22a-b**.
- 27.9.2.56 The landfall(s) and trenchless construction compounds would be required intermittently during part of the phases 1 to 3 and the nature of this effect would be short-term and adverse, changing to neutral post reinstatement.
- 27.9.2.57 In the event that the onshore export cable corridor Segments L1 / L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

South of A90 to Cuttie Burn and the connection with Segment L2 near Lunderton

- 27.9.2.58 An approximate 800m section of open-cut onshore export cable corridor is proposed between the A90 and the Cuttie Burn (maximum width of 89m). In addition, up to five construction compounds would be present in this part of the landscape, including up to three pairs of trenchless crossing compounds, and a primary and secondary construction compound. They would entail perimeter hoarding up to 2.4m high, drilling rigs, construction plant and short sections of temporary construction access road (approximately 100m to 200m in length) (M-001, M-063, M-104, M-109). This part of the landscape is remote from the coast and largely, undulating agriculture with occasional eastward views to the dunes and sea.
- 27.9.2.59 Construction activity in this part of the onshore export cable corridor would entail contrasting colours, construction traffic, sound and movement of machinery and construction workers leading to a large-scale change to the landscape character for a short-term period (see **Volume 3, Appendix 27.2, Figure 19a-c and Figure 18**). Due to the undulating landform and woodland screening, visibility would extend to within approximately 500m from the onshore infrastructure. Within this area the magnitude of change would range between **high to low**, affecting the open and agricultural nature of this landscape (**high to medium** sensitivity) leading to a **Major to Moderate** and **Significant** level of effect during phase 1. Viewing from high ground (Bearhill), it is likely that construction activity along part of the onshore export cable corridor zone A and the onshore substations would be visible in the far distance, subject to vegetation screening, although this would not be significant.
- 27.9.2.60 Three landscape elements (a hawthorn tree (T14) and small groups of hawthorn (G21 and G23)) would be removed as a worst-case, further eroding the remnant landscape pattern or trees / hedgerows in this area. Individually they would, however, be of limited landscape value (Class B to C) and have been assessed as of **medium to low** sensitivity. Hedgerows are not a key characteristic of this landscape, and the loss of these hedge fragments would constitute a **low** magnitude leading to a **Minor / Negligible** and **Non-Significant** level of effect. The nature of this effect would also be direct, temporary and adverse and would be reinstated subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** (M-108).
- 27.9.2.61 The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively during phase 1. The reinstatement of the land to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months (M-006, M-019, M-103, M-108). The nature of this effect would also be direct, temporary and adverse.
- 27.9.2.62 Construction activity at the landfall(s) construction compounds would be required intermittently during part of phases 2 to 3 and the primary and secondary construction compounds would remain for the whole of the construction period. Smaller construction compounds would be visible at joint bays to pull cables through pre-installed ducts along the onshore export cable corridor. During periods of maximum construction activity in phases 2 to 3 the magnitude of change would be **medium to low** with a **Moderate** and **Significant** level of effect due to the combined effects of multiple construction activity within this area. The nature of the construction effects would be temporary (short term) and adverse, changing to neutral with **No Effect** post reinstatement.
- 27.9.2.63 In the event that the onshore export cable corridor Segments L1 / L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during O&M: Options 1a, 1b and 2

- 27.9.2.64 There would be **No Effect** during O&M, following completion of the construction stage for the onshore export cable corridor, subject to the reinstatement of vegetation according to the detailed Landscape Management Plan as described in **Volume 4: Outline Landscape Architectural Strategy**.

Landscape effects on LCT 17a: Coastal Agricultural Plain

- 27.9.2.65 The LCT 17a: Coastal Agricultural Plain is illustrated in **Volume 2, Figure 27.4** and classified by NatureScot's LCA (SNH, 2019c) as:

"The Coastal Agricultural Plain is an extensive Landscape Character Type comprising a low-lying and often very open sweep of exposed farmland in eastern Aberdeenshire where the influence of the sea is particularly strong. It is characterised by its gently undulating landform, relatively large scale, extensive mosses and the influence of development including transmission masts, electricity transmission lines, the A90 and A953, and the gas terminal at St Fergus on its eastern edge. The transition between the Beaches Dunes and Links Landscape Character Type in the east and the hinterland formed by this landscape is very gradual."

- 27.9.2.66 The key characteristics of the LCT are defined (SNH, 2019c) as:

- *"low-lying and very gently undulating landform, with a pattern of subtle ridges and valleys in the north-east;*
- *prominent landmark feature of Mormond Hill on the western edge of the area, which includes the White Horse and White Stag quartz hillside figures, the only such in Scotland;⁴*
- *water courses in broad shallow valleys;*
- *mainly arable farming, with fairly extensive areas of moss and wetland;*
- *large, open, geometric fields;*
- *coniferous forest particularly extensive in southern part of the area;*
- *limited broadleaf woodland, forming rare shelterbelts and small groups around farms;*
- *well settled landscape of dispersed farms, many newer houses and a number of settlements, and occasional mansions in designed landscapes;*
- *communication structures and tall masts on some higher ground, and power transmission lines radiating from Peterhead power station, which itself is highly visible;*
- *major roads crossing the area; and*
- *consistent views of high coastal dunes and sea, giving a strong coastal context."*

- 27.9.2.67 Locally this area comprises coastal agricultural land that is typical of the LCT description, to the north of the River Ugie and west of the A90. A row of pylons crosses the landscape between Bearhill and Castle Hill and there are large farm buildings at Hallmoss and Lunderton as well as scattered settlement along minor roads and the A90.

⁴ The LVIA study area does not include the landmark features on Mormond Hill.

Sensitivity

- 27.9.2.68 The area is not designated and has a reduced (**medium**) scenic value due in part to the presence of pylons. There is also limited recreational interest and reduced sea views, collectively indicating a medium value. The agricultural landscape is of reduced susceptibility (**medium**) due to the regular cycle of cultivation, albeit these are much smaller scale operations affecting a wider agricultural area. This landscape is also relatively simple and open. The sensitivity of this receptor is therefore assessed as **medium**.

Magnitude and level of effect during construction: Option 1a

- 27.9.2.69 During construction phase 1 the onshore export cable corridor (Segment L2) would cross this landscape from the trenchless crossing compounds which would be visible to the north of Lunderton, within the adjacent LCT 12: Beaches, Dunes and Links, and extending across the open, agricultural landscape north-east to south-west, crossing under the pylons and via a opencut minor road crossing (CRL 203 **Volume 3, Appendix 4.1**) to the River Ugie valley. The trenchless crossing compounds and a secondary construction compound would also be visible at the top of the adjacent River Ugie valley. The width of the onshore export cable corridor (up to 89m wide) would entail opencut sections with soil storage, haul roads, and perimeter hoarding up to 2.4m high, characterised by the contrasting colours, sounds and movement of construction traffic, machinery and construction workers leading to a large-scale change to the landscape character directly affecting approximately 850m swath of landscape with the (primary, secondary, landfall(s) and trenchless) construction compounds also visible in the adjacent LCT (M-001, M-006, M-063, M-103, M-104, M-108). A partial view of this is provided in **Volume 3, Appendix 27.2, Figure 12a-c** and **Figure 13a-c**. Viewing from high ground (Bearhill and Cairnhill) it is likely that construction activity along part of the onshore export cable corridor zone A and the onshore substations would be visible in the far distance, subject to vegetation screening, although this would not be significant.
- 27.9.2.70 Five landscape elements would be removed from the landscape as follows:
- Hawthorn hedgerow with mixed native trees (G67-68 and G72, Class B-C) forming remnant landscape pattern of **medium** sensitivity. The loss of these hedge fragments would constitute a **medium to low** magnitude leading to a **Moderate / Minor and Not Significant** level of effect. The nature of this effect would also be direct, temporary and adverse.
 - Hawthorn hedgerow with mixed native trees (G69, T48-49, Class B-U) forming remnant landscape pattern of **medium** sensitivity. The loss of these hedge fragments would constitute a **medium to low** magnitude leading to a **Moderate / Minor and Not Significant** level of effect. The nature of this effect would also be direct, temporary and adverse.
 - Hawthorn hedgerow (G101-103, T76, T78, T81-83, G120, Class B-U) forming lapsed hedge / remnant landscape pattern of **medium to low** sensitivity. The loss of these hedge fragments would constitute a **medium to low** magnitude leading to a **Minor and Not Significant** level of effect. The nature of this effect would also be direct, temporary and adverse.
 - Two, hawthorn hedges on either side of minor road (H9 and H15, Class B) forming remnant landscape pattern of **medium** sensitivity. The loss of these hedge fragments would constitute a **medium** magnitude leading to a **Moderate and Significant** level of effect, due to their greater prominence in the landscape, lining a minor road. The nature of this effect would also be direct, temporary and adverse.

- The trenchless crossings would retain all vegetation within the trenchless crossing area⁵ (M-001, M-006); however, some may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access roads (M-063, M-103, M-104, M-108).

- 27.9.2.71 Collectively the loss of these features would be greater, further eroding the remnant landscape pattern hedgerows in this area, with the effects visible along the onshore export cable corridor in succession, adding to adverse landscape effects. Visibility of the whole construction works would be more extensive (1km to 2km) in this open landscape with low cut hedges and few trees, curtailed only by the low hills (Bearhill and Castle Hill) and the incised River Ugie valley. Viewed from elevated roads and properties within approximately 500m, the magnitude of change during phase 1 would be **high to medium** and the level of effect would be **Major to Major / Moderate and Significant**. The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively and it is likely this 1km section could be completed within approximately 12 months. The nature of this effect would also be direct, temporary and adverse.
- 27.9.2.72 Beyond this period of more intensive activity the reinstatement of land along the onshore export cable corridor to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months (M-006, M-019, M-103, M-108). The reinstatement of vegetation (subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy**) (M-108) would be undertaken in the first available planting season and would take five to ten years to fully establish.
- 27.9.2.73 Assuming construction of the onshore export cable corridor Segment L2 is completed in phase 1, then construction activity during construction phases 2 to 3 within this LCT would reduce to the primary and secondary construction compounds which would remain for up to nine years along with smaller scale, short-term periods of construction work carried out at a series of joint bays, located along the onshore export cable corridor (to pull cables through pre-installed ducts). This work would be completed progressively within approximately 12 months duration for each construction stage. Further construction compounds would be visible in the adjacent LCT 12: Beaches, Dunes and Links and the division between these landscapes is diffuse.
- 27.9.2.74 During periods of maximum construction activity in phases 2 to 3 the magnitude of change would be **medium to low** with a **Moderate / Minor** and **Not Significant** level of effect, due to the reduced sensitivity of this LCT which is undesignated. The nature of the construction effects would be temporary (short term) and adverse, changing to neutral with **No Effect** post reinstatement.
- 27.9.2.75 In the event that the onshore export cable corridor Segment L2 is constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during construction: Option 1b

- 27.9.2.76 In combination with the assessment provided for Option 1a: Lunderton North, approximately 500m of the onshore export cable corridor (Segment L4) would overlap with this LCT between the A90 and the previously assessed onshore export cable corridor (Segment L2) to the north of Hallmoss Cottage. The magnitude of change would be similar to those previously described (**high to medium**) and the level of effect would be **Major to Major / Moderate and Significant** within 500m of the onshore export cable corridor (Segment L4). The duration of this effect would be short-term with the construction works for the onshore

⁵ Coloured 'green' on **Volume 2, Figure 27.1c** and titled 'indicative trenchless crossing' – often covering a large area.

export cable corridor carried out progressively. The reinstatement of the land to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months (M-006, M-019, M-103, M-108). The nature of this effect would also be direct, temporary, adverse and cumulative with Segments L2 and L3.

- 27.9.2.77 As described previously for Option 1a: Lunderton North the level of construction effects for Lunderton South would reduce for phases 2 to 3 (assuming construction of Segments L2 / L4 is completed in phase 1), reflecting short-term periods of construction work at the joint bays located along the onshore export cable corridor (**medium to low** magnitude). The level of effect during construction activity would reduce to **Moderate / Minor** and **Not Significant** level of effect, due to the reduced sensitivity of this LCT which is undesignated. The nature of the construction effects would be temporary (short term) and adverse, changing to neutral with **No Effect** post reinstatement.
- 27.9.2.78 In the event that the onshore export cable corridor Segments L2 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during construction: Option 2

- 27.9.2.79 An open-cut, section of the onshore export cable (Segment L1) corridor skirts the eastern foot of Bearhill, extending for approximately 800m between the Cuttie Burn and Lunderton, before joining Segment L2 (Option 1a). There would be one trenchless crossing compound to the south of the Cuttie Burn (CRL103 **Volume 3, Appendix 4.1**) (M-027). This part of the landscape is remote from the coast and largely, undulating agriculture with occasional eastward views to the sea.
- 27.9.2.80 The magnitude of change would be similar to those previously described (**high to medium**) and the level of effect would be **Major to Major / Moderate and Significant** within 500m of the onshore export cable corridor (Segment L1). The nature of this effect would also be direct, temporary, adverse and cumulative with Segments L2, L3 and L4. Viewing from high ground (Bearhill) it is likely that construction activity along part of the onshore export cable corridor zone A and the onshore substations would be visible in the far distance, subject to vegetation screening, although this would not be significant. The duration of this effect would be short-term with the construction works carried out progressively and reinstatement of the land to an agriculture appearance occurring within 1 year as described previously. The nature of this effect would also be direct, temporary and adverse.
- 27.9.2.81 Three landscape elements (hawthorn tree (T41) and two small groups of hawthorn (G54 and G69) would be removed as a worst-case. Individually they would however be of limited landscape value (Class B to C) and have been assessed as of **medium to low** sensitivity. Hedgerows are not a key characteristic of this landscape, and the loss of these hedge fragments would constitute a **low** magnitude leading to a **Minor / Negligible** and **Non-Significant** level of effect. The nature of this effect would also be subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** with replanting undertaken in the first available planting season and taking five to ten years to fully establish (M-006, M-019, M-103, M-108).
- 27.9.2.82 As described previously for Option 1a/b, the level of construction effects at Scotstown would reduce for phases 2 to 3 (assuming construction of Segments L1 / L2 / L4 is completed in phase 1), reflecting short-term periods of construction work at the joint bays located along the onshore export cable corridor (**medium to low** magnitude). The level of effect during construction activity would reduce to **Moderate / Minor** and **Not Significant** level of effect, due to the reduced sensitivity of this LCT which is undesignated. The nature of the construction effects would be temporary (short term) and adverse, changing to neutral with **No Effect** post reinstatement.

- 27.9.2.83 In the event that the onshore export cable corridor Segments L1 / L2 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during O&M: Options 1a, 1b and 2

- 27.9.2.84 There would be **No Effect** during O&M following completion of the construction stage for the onshore export cable corridor, subject to the reinstatement of vegetation according to the detailed Landscape Management Plan as described in **Volume 4: Outline Landscape Architectural Strategy** (M-108).

Landscape effects on LCT 17b: River Ugie

- 27.9.2.85 The LCT 17b: River Ugie is illustrated in **Volume 2, Figure 27.4**. This subdivision has been agreed with Aberdeenshire Council and the key characteristics local to the onshore export cable corridor are described as an incised river valley, often well wooded with steeply sloping sides creating an enclosed riverside space with informal riverside paths / fishing beats. Positive features include historic stone bridges and Ravenscraig Castle. Areas to the west of the onshore export cable corridor have a more open and gently sloping valley profile allowing wider river meanders and ox-bow lakes, whilst areas to the east of the A90 have a more coastal / river estuary character with the River Ugie providing a scenic addition to the northern part of Peterhead.

Sensitivity

- 27.9.2.86 The area is not designated, although the river valley is a scenic area with heritage and recreational interest indicating a **high to medium** scenic value. The river valley is steeply sloping / incised at the crossing point (CRL204 **Volume 3, Appendix 4.1**) and the presence of mature trees along the river indicate a **high** susceptibility to construction that would be difficult to mitigate. The sensitivity of this receptor is therefore assessed as **high to medium**.

Magnitude and level of effect during construction: Options 1a, 1b and 2

- 27.9.2.87 All three options (1a, 1b and 2) would affect the same area of this LCT.
- 27.9.2.88 During construction phase 1 the onshore export cable corridor (Segment L2) would cross an agricultural field to the north of the valley and connect into the trenchless crossing compound to the north and south, avoiding the river valley and associated trees. The river and its enclosing steep valley sides and mature trees would be crossed via a trenchless crossing (CRL204 **Volume 3, Appendix 4.1**) (M-027) resulting in a **zero** magnitude of change and **no direct effects** on landscape elements or the landscape character of the LCT 17b: River Ugie.
- 27.9.2.89 The trenchless crossing compounds to the north and south of the river may just be visible beyond the top of the sloping valley sides and trees and a secondary construction compound is located further to the north. Whilst these components would be more widely visible from the adjacent LCT 17a: Coastal Agricultural Plain, their visibility and magnitude of change to the landscape character of the LCT 17b: River Ugie would be **low** and the level of effect would be **Moderate / Minor and Not Significant**.
- 27.9.2.90 The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively and it is likely this section could be completed within approximately 12 months. The nature of this effect would also be direct, temporary and adverse, changing to neutral post reinstatement.

- 27.9.2.91 The secondary construction compound would remain for up to nine years along with smaller scale, short-term periods of construction work carried out progressively at several joint bays during construction phases 2 and 3 (completed within approximately 12 months). The close-range magnitude of change related to the construction compounds would range between **high to medium**, although affecting a much smaller geographical area, reducing the magnitude of change to **low**. The level of effect would be **Moderate / Minor and Not Significant**. The nature of this effect would be medium-term duration, direct and adverse, changing to neutral post reinstatement.

Magnitude and level of effect during O&M: Options 1a, 1b and 2

- 27.9.2.92 There would be **No Effect** during O&M following completion of the construction stage for the onshore export cable corridor.

Landscape effects on North East Aberdeenshire Coast SLA

- 27.9.2.93 The assessment of landscape planning designations differs from landscape character or visual assessment in that it considers the effects of the Project on the SLQs of the designation. These SLQs encapsulate what is valued and provide the reasons for the designation as described in the NatureScot and Historic Environment Scotland, Guidance on Designating Local Landscape Areas (2020).
- 27.9.2.94 This part of the assessment accords with the methodology set out in **Volume 3, Appendix 27.1**. In addition, the assessment of landscape planning designations has also been guided by NatureScot's Special Landscape Qualities - Guidance on assessing effects (2025). Although this guidance has been developed for developments with the potential to impact NSAs or National Parks, it has been adopted more widely as an approach to assessing local landscape designations.
- 27.9.2.95 The North East Aberdeenshire Coast SLA is defined in the Aberdeenshire LDP 2023 Appendix 13: Aberdeenshire SLAs (Aberdeenshire Council, 2023d) and illustrated in **Volume 2, Figure 27.4**. The document describes that the "*aspects and features of this landscape [that] are considered worthy of recognition*" and these are listed in
- 27.9.2.96 For assessment purposes they have been adopted as the SLQ or particular features that should be protected by the designation.
- 27.9.2.97 The Designation Statement (Aberdeenshire Council, 2023d) describes the SLA as follows:

"The northeast Aberdeenshire Coast is a strip of coastal farmland with a strong sense of place. The SLA is unified by its east facing orientation onto the North Sea and wide sandy beaches, backed by extensive dynamic dune systems with some outcrops of rugged cliffs. A collapsed sea cave, the Bullers of Buchan, is a notable geomorphological feature.

There are occasional pockets of scrubby woodland, but otherwise trees are limited in this windswept landscape. The Loch of Strathbeg, northeast of Crimond, is a large inland loch and is a RSPB reserve. Forvie National Nature Reserve (NNR), east of Newburgh, is a landscape of shifting sand dunes with patches of dune heath and marram grass. The Ythan Estuary runs along the edge of the NNR. The ecological value of the estuary and surrounds are recognised as being of national and international importance for nature conservation, as well as contributing to the landscape character of the area.

Settlements and industry have had a major impact on this landscape, most notably the St Fergus Gas Terminal. Elsewhere, traditional fishing villages that have a strong

relationship with the coast are nestled into the sheltered landform. There are numerous features of built heritage interest along the coast.

The area is visible from the A90 and uninterrupted views out to sea are available from coastal paths, including the clifftop walk at the Bullers of Buchan and the long distance Formartine and Buchan Way. Notable beaches include the expansive sands at Balmedie Country Park and Cruden Bay. There are also numerous golf courses along the coast."

Sensitivity

- 27.9.2.98 The North East Aberdeenshire Coast SLA is a local landscape designation indicating **high to medium** value and there are areas of higher scenic quality along the coastline and lower or less remarkable value further inland. In terms of susceptibility the soft coastline, dunes and agricultural landscape are assessed as of **medium** susceptibility, due to the ease by which they could be reinstated and the nature of the regular cycles of cultivation and changing crops, the latter albeit relating to smaller scale operations affecting a wider agricultural area. The sensitivity of this receptor is therefore greatest along the coast where the SLQs are most clearly expressed (**high to medium**) and generally reduced further inland and along the A90 corridor to **medium**.

Magnitude and level of effect during construction

- 27.9.2.99 Each of the SLQ's have been considered alongside Landfall Options 1a, 1b and 2 in **Table 27.13**.
- 27.9.2.100 There would be **No Significant** effects on the SLQs of the North Aberdeenshire Coast SLA during construction for Option 1a.
- 27.9.2.101 Options 1b and 2 would have a **Significant** effect on two of the SLQs in the southern part of the SLA:
- *Overriding horizontal composition, emphasised by low-laying landform and "soft" gradual transition from land to sea; and*
 - *A popular coast for visitors, with coastal paths, accessible dunes, golf courses and popular beaches.*
- 27.9.2.102 The nature of these effects would be medium-term duration, direct and adverse, changing to neutral post reinstatement.

Magnitude and level of effect during O&M: Options 1a, 1b and 2

- 27.9.2.103 There would be **No Effect** during O&M following completion of the construction stage for the onshore export cable corridor.

Table 27.13 North East Aberdeenshire Coast SLA - SLQs

North East Aberdeenshire SLA - SLQs	Assessment of SLQs: Option 1a: Lunderton North	Assessment of SLQs: Option 1b: Lunderton North and South	Assessment of SLQs: Option 2: Scotstown
<p><i>“Overriding horizontal composition, emphasised by low-lying landform and “soft” gradual transition from land to sea</i></p>	<p>No significant landscape or visual effects have been identified that would affect the ‘horizontal composition’, ‘low-lying landform’ and ‘soft gradual transition from land to sea’, within the eastern coastal areas of the SLA which are the main focus of this designation. This is largely a result of the trenchless landfall crossing (M-005) and the less gradual transition from inland areas to the sea in this area which are separated by forestry / woodland and dunes which screen onshore export cable corridor Segments L2 / L3. An example of these screening effects is provided in Volume 3, Appendix 27.2, Figure 16a.</p> <p>Within the western part of this SLA at Lunderton, this SLQ is less relevant as there are no sea views and no gradual transition in landscape character (from land to sea) can be perceived, due to the landform and intervening forestry / woodland and dune topography. Although there is ‘low-lying landform’ with ‘horizontal composition’ it is not of ‘special’ quality partly because it lacks sea views. Although the construction of the onshore infrastructure in this area</p>	<p>There would be a localised significant effect on this SLQ with the Lunderton South landfall construction compound and a section of onshore export cable corridor (Segment L4) affecting the horizontal composition and the appearance of a gradual transition from land to sea when viewed from the track at Mains of Inverugie, Craigewan Links and the dunes within approximately 300m.</p> <p>The magnitude of change would be medium to low with a Moderate and Significant level of effect as indicated in Volume 3, Appendix 27.2, Figure 15b.</p> <p>Construction activity at the two landfall construction compounds (Lunderton North and South) would occur intermittently during phases 2 to 3 in combination with other construction compounds described previously (Moderate and Significant level of effect) and the nature of this effect would be short-term, temporary and adverse, changing to neutral post reinstatement.</p> <p>In the event that the onshore export cable corridor Segment L4 is</p>	<p>In addition to the effects of landfall(s) at Lunderton North and South, and onshore export cable corridor Segments L2, L3 and L4, there would be a further significant effect on this SLQ resulting from the Scotstown landfall construction compound and Segment L1, further affecting the horizontal composition and the appearance of a gradual transition from land to sea when viewed from the Scotstown area, including the dunes and picnic area within approximately 850m, due to the open nature of this area.</p> <p>The magnitude of change would be high to medium with a Major / Moderate and Significant level of effect as indicated in Volume 3, Appendix 27.2 Figure 20b and Figure 22a-b.</p> <p>Construction activity at the three landfall construction compounds (Lunderton North and South and Scotstown) would occur intermittently during phases 2 to 3 in combination with other construction compounds (Major / Moderate and Significant level of effect) and the nature of this effect would be short-</p>

North East Aberdeenshire SLA - SLQs	Assessment of SLQs: Option 1a: Lunderton North	Assessment of SLQs: Option 1b: Lunderton North and South	Assessment of SLQs: Option 2: Scotstown
	would have significant landscape and visual effects, it would not alter the horizontal / low-lying nature of the landform and could not affect the 'soft' and gradual transition from land to sea. Consequently, there would be No Effect on this SLQ.	constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.	term, temporary and adverse, changing to neutral post reinstatement. In the event that the onshore export cable corridor Segment L1 / L4 is constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.
<i>Expansive beaches backed by rolling dunes. The views from beaches are typically directed out to sea or along the coast</i>	Due to the trenchless crossings proposed for Landfall Option 1a, no landscape or visual effects have been identified that would have a landscape or visual effect on beaches, dunes and associated seaward / coastal views. Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.		
<i>Rugged and dramatic cliffs to the south of Boddam, with intricate landforms such as the Bullers of Buchan</i>	Rugged and dramatic cliffs are not a feature of the Landfall Option 1a and Boddam and Bullers of Buchan are not within the LVIA study area. Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.		
<i>Important nature conservation sites: Forvie National Nature Reserve covering an extensive area around the mouth of the Ythan; and the Loch of Strathbeg</i>	The Forvie National Nature Reserve, the mouth of the Ythan; and the Loch of Strathbeg are not within the LVIA study area. There are no national level nature conservation sites within the LVIA study area, although the Rattray to Peterhead Local Nature Conservation Site is located along the coast / beach and dunes areas as illustrated in Volume 3, Appendix 23.1, Figure 23.1: Non-statutory designated sites within 2km of the Onshore Red Line Boundary (see also Chapter 23: Terrestrial Ecology and Ornithology). Due to the trenchless crossings proposed for Landfall Option 1a no landscape or visual effects have been identified that would affect these areas and the seaward / coastal views (M-027). Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.		

North East Aberdeenshire SLA - SLQs	Assessment of SLQs: Option 1a: Lunderton North	Assessment of SLQs: Option 1b: Lunderton North and South	Assessment of SLQs: Option 2: Scotstown
<i>Lighthouses such as Rattray form landmark features along the coast as by necessity they have prominent locations and colours, and a vertical form</i>	<p>Rattray Lighthouse is not within the LVIA study area. There are no lighthouses within the LVIA study area, and no significant effects have been identified.</p> <p>Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.</p>		
<p><i>A popular coast for visitors, with coastal paths, accessible dunes, golf courses and popular beaches</i></p>	<p>Two core paths (7LD.01.18 and L30R) and the local path network (the 'Fergus Links') are located in the dunes and would pass in close proximity to the landfall Option 1a and the onshore export cable corridor Segments L2 / L3. The underground elements of the landfall (M-005) and trenchless crossings (M-027) would not be visible from these core paths, and the associated landfall construction activity would be largely screened by mature coniferous forestry or localised dune landform. From the beach, views are restricted by dunes and there would be no views of construction or O&M activity. People on the coast / beaches, coastal paths, accessible dunes, and golf courses have been assessed as of high sensitivity. The magnitude of change would be low to negligible, resulting in a Moderate to Minor and Not Significant effect.</p> <p>Views from the coastal paths and dunes are illustrated in Volume 3, Appendix</p>	<p>People on the coast / beaches, coastal paths, accessible dunes, and golf courses have been assessed as of high sensitivity. Two landfall(s) and onshore export cable corridor Segment L4 would be present and the level of effect would be greater (medium to low) with a Moderate and Significant level of effect as indicated in Volume 3, Appendix 27.2, Figure 15b.</p> <p>Construction activity at the two landfall construction compounds (Lunderton North and South) would occur intermittently during phases 2 to 3 in combination with other construction compounds described previously (Moderate and Significant level of effect) and the nature of this effect would be short-term, temporary and adverse, changing to neutral post reinstatement.</p> <p>In the event that the onshore export cable corridor Segment L4 is constructed in either phase 2 or phase 3 then the associated landscape effects</p>	<p>Three landfall(s) and onshore export cable corridor Segments L1 / L4 would be visible and allowing for high sensitivity, the level of effect would increase to high to medium with a Major and Significant level of effect as indicated in Volume 3, Appendix 27.2, Figure 20b and Figure 22a-b.</p> <p>Construction activity at the three landfall construction compounds (Lunderton North and South and Scotstown) would occur intermittently during phases 2 to 3 in combination with other construction compounds (Major / Moderate and Significant level of effect) and the nature of this effect would be short-term, temporary and adverse, changing to neutral post reinstatement.</p> <p>In the event that the onshore export cable corridor Segments L1 / L4 is constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.</p>

North East Aberdeenshire SLA - SLQs	Assessment of SLQs: Option 1a: Lunderton North	Assessment of SLQs: Option 1b: Lunderton North and South	Assessment of SLQs: Option 2: Scotstown
	27.2, Figure 15, Figure 16, and Figure 22.	would occur in either phase 2 or phase 3 and not phase 1.	
<i>Prehistoric sites of national importance, including the Mesolithic landscapes at Sands of Forvie and Blackdog</i>	Sands of Forvie and Blackdog are not within the LVIA study area. Chapter 24: Onshore Archaeology and Cultural Heritage identifies no prehistoric sites of national importance. Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.		
<i>Features of built heritage typically prominent in the open landscape. The iconic Slains Castle and its association with Bram Stoker</i>	Slains Castle is not within the LVIA study area. Features which might be considered as of built heritage / landscape interest within the LVIA study area include: <ul style="list-style-type: none"> The St Fergus Church and Churchyard – this feature is remote from landfall Option 1a with views towards it viewing away in the opposite direction. There would be no significant effects from Option 1a. The St Fergus Gas Terminal could also be regarded as an ‘industrial landmark’. It is remote from the Landfall Option 1 and would not be significantly affected by Option 1a. Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.		
<i>Remains of World War II anti-invasion defences along the beaches, in particular at the mouth of the Ythan River and around Rattray Head</i>	The Ythan River and Rattray Head are not within the LVIA study area. Remains of World War II anti-invasion coastal defences are present in the LVIA study area (see Chapter 24: Onshore Archaeology and Cultural Heritage , NK14NW0084; NK15SW0008; NK14NW0080; NK14NW0081; NK14NW0082; Canmore ID 367561; and 367562). The landfall(s) / onshore export cable would be in a trenchless crossing (M-005, M-027), and views of related onshore construction works would be screened by dunes and woodland / forestry. Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.		
<i>Coastal settlement generally associated with small harbours, such as at Collieston and Cruden Bay. The siting and</i>	Collieston, Cruden Bay and Inverallochy are not within the LVIA study area. There would be no significant effects on coastal settlement or associated harbours within the LVIA study area, including St Fergus, Peterhead, Inverugie (see Section 27.10). Consequently, there would be No Effect on this SLQ from any of the landfall(s) options.		

North East Aberdeenshire SLA - SLQs	Assessment of SLQs: Option 1a: Lunderton North	Assessment of SLQs: Option 1b: Lunderton North and South	Assessment of SLQs: Option 2: Scotstown
<i>orientation of buildings can be highly distinctive, as seen at Inverallochy”</i>			

27.9.3 Onshore export cable corridor zone A

- 27.9.3.1 The onshore export cable corridor zone A is routed through the Aberdeenshire landscape between the River Ugie and the A950, north of the onshore substation zone. This part of the onshore export cable corridor crosses through large areas of undulating LCT 17a: Coastal Agricultural Plain and the LCT 17c: A950 / Longside Airfield sub-area. Route options occurring within LCT 17c (Segments A1 to the west of Torterston, and Segment A2 to the east of Torterston) is included in the assessment.
- 27.9.3.2 In summary, there would be significant landscape effects resulting from the onshore export cable corridor zone A affecting both LCT 17a: Coastal Agricultural Plain and the LCT 17c: A950 / Longside Airfield sub-area. Notably the construction works would lead to the loss of mature trees / woodland with a permanent and significant, although localised landscape effect. The LCT 17b: River Ugie is assessed previously as part of the landfall options and would not be significantly affected due to the trenchless crossing of the river valley and associated mature trees, all of which would be retained.

Table 27.14 Summary of landscape effects of onshore export cable corridor zone A

Landscape receptor within onshore export cable corridor zone A	Sensitivity	Level of effect	
		Onshore export cable corridor zone A	
		Segment A1	Segment A2
Construction – temporary short -medium term adverse effects			
LCT 17a: Coastal Agricultural Plain	High to medium.	Major to Moderate (<500m).	N/A
LCT 17c: A950 / Longside Airfield	Medium to medium - low.	Major / Moderate to Moderate (<500m).	Major / Moderate to Moderate (<500m).
O&M – long-term / permanent neutral / beneficial effects			
LCT 17a: Coastal Agricultural Plain	High to medium.	Non-Significant beneficial effect.*.	N/A
LCT 17c: A950 / Longside Airfield	Medium to medium - low.	Moderate (loss of mature trees / woodland) and elsewhere Non-Significant beneficial effect.*	Non-Significant Beneficial Effect.
Note* - Non Significant beneficial effect subject to the detailed Landscape Management Plan as set out in Volume 4: Outline Landscape Architectural Strategy.			

Landscape effects on LCT 17a: Coastal Agricultural Plain

- 27.9.3.3 The LCT 17a: Coastal Agricultural Plain is illustrated in **Volume 2, Figure 27.4** and is described previously in **Section 27.9.2** for the landfall options.
- 27.9.3.4 This area comprises an undulating agricultural landscape (ranging between 40m and 25m AOD), to the north of Longside Airfield which is typical of the LCT 17a: Coastal Agricultural

Plain description. This area is crossed by one of Scotland's Great Trails (national importance), the Formartine and Buchan Way, which follows the route of a former railway line. South of this recreational route the landscape character is increasingly influenced by the more developed and industrial influences of Longside Airfield and from similar influences along the A950 to the west of Peterhead which include a biofuels facility, coachworks, water works, golf driving range and rifle range and a number of larger sheds and storage facilities. The future baseline of this landscape would change further as a result of the consented Netherton Hub SSSEN substation. From high ground, distant pylons and some onshore wind development is also visible in the wider landscape.

Sensitivity

- 27.9.3.5 The area is not designated indicating medium value, although there are some open and attractive views across the agricultural landscape which include views of the sea, areas of woodland, patterns of hedgerows and trees and some distant hills. The Formartine and Buchan Way crosses this landscape indicating higher value. This is in contrast to areas of LCT 17a: Coastal Agricultural Plain of reduced value that include pylons and the A90. The agricultural landscape is of reduced susceptibility (**medium**) due to the regular cycle of cultivation, albeit these are much smaller scale operations affecting a wider agricultural area. This landscape is also relatively simple and open. The sensitivity of this receptor is therefore assessed as **high to medium**.

Magnitude and level of effect during construction

- 27.9.3.6 During construction phase 1 the onshore export cable corridor (Segment A1) would cross this landscape from the trenchless crossing compound (CRL204 **Volume 3, Appendix 4.1**) to the south of the River Ugie, crossing minor roads (CRA101 and CRA103) and the Formartine and Buchan Way (CRA102 **Volume 3, Appendix 4.1**) (M-027). The minor roads and the Formartine and Buchan Way would be crossed via an open trench. A secondary construction compound is also proposed to the south of Easterton (near CRA101 **Volume 3, Appendix 4.1**). Due to intervening landform and successive layers of field boundary vegetation it is unlikely that adjacent parts of the onshore export cable corridor (either the landfall options to the north or the onshore export cable corridor to the south of CRA103 (**Volume 3, Appendix 4.1**)) would be widely visible. It is however likely that the construction activity associated with the onshore substations would be visible in the south from some locations.
- 27.9.3.7 During phase 1, the width of the onshore export cable corridor during construction (up to 89m) would entail open-cut sections with soil storage, haul roads, and perimeter hoarding up to 2.4m high, characterised by the contrasting colours, sounds and movement of construction traffic, machinery and construction workers leading to a ground-level change to the landscape character directly affecting a 1.5km swath of landscape. The secondary and trenchless crossing construction compounds would be partly contained by perimeter hoarding up to 2.4m high, with associated construction plant and where required drilling rigs appearing over the top of the fencing. The secondary construction compound would also be accessed by a short section of temporary construction access road (approximately 250m in length) (M-001, M-063, M-104, M-109). A view from within this LCT is provided in **Volume 3, Appendix 27.2, Figure 8a-b** and a partial, distant view of this section of the route is illustrated in **Volume 3, Appendix 27.2, Figure 13a-c**.
- 27.9.3.8 In total, 18 landscape elements (in five locations) would be removed from the landscape as follows:
- Easterton - minor road open-cut crossing (CRA101 **Volume 3, Appendix 4.1**): Mixed hedge with mixed native trees (H27 and H25, Class B) of **medium** sensitivity. The loss of up to 89m of complete hedge on either side of the minor road would constitute a

medium magnitude leading to a **Moderate and Significant** level of effect, due to their greater prominence in the landscape, lining a minor road. The nature of this effect would also be direct, temporary and adverse.

- Formartine and Buchan Way opencut crossing (CRA102 **Volume 3, Appendix 4.1**): Mixed hedge with gorse and mixed native trees (H28 and T156 to T158, Class B-C) along former railway line cutting on either side of this recreational route (high value) indicating a **high to medium** sensitivity. The loss of up to 89m would create an obvious gap visible from this important route although affecting a relatively short section within a cutting and has been assessed as of **medium to low** magnitude leading to a **Moderate and Significant** level of effect, due to their association with this route. The nature of this effect would also be direct, temporary and adverse.
- Field boundary opencut crossing: hawthorn hedgerow with mixed native trees (G165, Class B) forming part of complete hedgerow of **high to medium** sensitivity. The loss of up to 89m would constitute a **medium to low** magnitude leading to a **Moderate and Significant** level of effect, on this complete element forming part of a wider landscape pattern. The nature of this effect would also be direct, temporary and adverse.
- Field boundary opencut crossing: hawthorn hedgerow with mixed native trees (G169, Class C, includes some ash dieback) part of complete hedgerow of **medium** sensitivity. The loss of up to 89m of hedge would constitute a **medium to low** magnitude leading to a **Moderate / Minor and Not Significant** level of effect. The nature of this effect would also be direct, temporary and adverse.
- Torterston Road - minor road opencut crossing (CRA103 **Volume 3, Appendix 4.1**): hawthorn / mixed species hedge / lapsed hedge and trees (G171, G173, G177, G179 and T171-174, and T176-177, Class B-U, includes some ash dieback) of **medium** sensitivity. The loss of approximately 89m of hedge on either side of the minor road would constitute a **medium** magnitude leading to a **Moderate and Significant** level of effect, due to their greater prominence in the landscape, lining a minor road. The nature of this effect would also be direct, temporary and adverse.
- The trenchless crossings would retain all vegetation within the trenchless crossing area (M-001, M-006); however, some may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access roads (M-063, M-103, M-104, M-108).

27.9.3.9 Collectively the loss of these features would be greater, eroding the landscape pattern of hedgerows in this area, successively visible along the onshore export cable corridor from minor roads (although there is limited visibility from the Formartine and Buchan Way).

27.9.3.10 Visibility of this section of the onshore export cable corridor would be most apparent viewing across the open fields from adjacent minor roads and high ground at Easterton, Westerton of Barnyards and Roundhillock Cottage in the west and south towards Torterston Road. To the north and east visibility would be more restricted by landform and vegetation (including woodland) along the River Ugie and intervening smaller fields. Viewed from elevated roads and properties within approximately 500m the magnitude of change affecting this LCT would range between **high to medium-low** and the level of effect would be **Major to Moderate and Significant**. The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively during phase 1. The nature of this effect would also be direct, temporary and adverse.

27.9.3.11 Areas beyond 500m and including the adjacent LCT 17c: A950 / Longside Airfield would be remote from this part of the onshore export cable corridor. The magnitude of change would be reduced by intervening distance and screening from landform and / or successive layers of vegetation (**low to negligible-zero** magnitude) resulting in **Moderate / Minor to Minor and Not Significant**.

- 27.9.3.12 Beyond this period of more intensive activity the reinstatement of the onshore export cable corridor to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months. The reinstatement of vegetation would be subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** and is likely to include the reinstatement of trees / hedgerows as complete landscape elements (re-planted with no gaps), undertaken in the first available planting season with five to ten years to fully establish (M-006, M-019, M-103, M-108).
- 27.9.3.13 During construction phases 2 to 3 the number of construction compounds would reduce to the secondary construction compound only which would remain for up to nine years along with smaller scale, short-term periods of construction work carried out at a series of joint bays, located at approximately 600m to 1km intervals along the onshore export cable corridor (to pull cables through pre-installed ducts) (M-063). This work would be completed progressively within approximately six to 12 months duration for each construction stage. The magnitude and geographical extent of construction during phases 2 to 3 would affect a much smaller geographical area, and assuming the reinstatement of hedgerows, the magnitude of change would be **medium to low**. The level of effect would reduce to **Moderate and Not Significant** due to the smaller scale and geographical extent. The nature of this effect would be temporary medium-term duration, direct and adverse, changing to neutral post reinstatement.

Magnitude and level of effect during O&M

- 27.9.3.14 There would be **No Effect** during O&M following completion of the construction stage for the onshore export cable corridor.
- 27.9.3.15 The reinstatement of vegetation subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** would lead to **Not Significant and beneficial effects** (M-006, M-019, M-103, M-108).

Landscape effects on LCT 17c: A950 / Longside Airfield

- 27.9.3.16 This section of the of the onshore export cable corridor zone A extends between Torterston Road in the north and the A950, to the north of the onshore substations.
- 27.9.3.17 The LCT 17c: A950 / Longside Airfield is illustrated in **Volume 2, Figure 27.4**. This subdivision has been agreed with Aberdeenshire Council. Key characteristics local to this part of the onshore export cable corridor are described as an area of the Coastal Agricultural Plain where the influences of development / industrial development are more concentrated. A variety of development types are scattered across Longside Airfield and along the A950 to the west of Peterhead, including a biofuels facility, coachworks, water works, golf driving range and rifle range and a number of larger sheds, industrial laydown sites and storage facilities. Perhaps as a consequence of the past use of this area as an airfield the pattern of fields are often large scale with absent or poorly maintained hedgerow / field boundaries. The area of the former airfield has an exposed character, lacking in woodland cover with limited sea views and lower scenic quality.

Sensitivity

- 27.9.3.18 The area is not designated indicating medium value, although there are a number of detracting features indicating a medium to low value as noted previously. The agricultural landscape is of reduced susceptibility (medium) due to the regular cycle of cultivation, albeit these are much smaller scale operations affecting a wider agricultural area. This landscape is also relatively simple and open. The sensitivity of this receptor is therefore assessed as

medium, reducing to **medium to low** in those areas of closer proximity to industrial influences.

Magnitude and level of effect during construction: Segment A1 phase 1

- 27.9.3.19 During construction phase 1 the onshore export cable corridor (Segment A1) would wind through this landscape crossing four minor roads (CRA103-104 and CRA106-107 **Volume 3, Appendix 4.1**) and two trenchless crossings of a watercourse and the A950 (CRA105 and CRA109 **Volume 3, Appendix 4.1**)⁶ (M-027). A primary construction compound is also proposed to the north of the A950 and the onshore substations. The onshore substations and part of the onshore export cable corridor zone B are likely to be visible to the south and west of this area, subject to the screening effects of intervening buildings and vegetation.
- 27.9.3.20 The width of the onshore export cable corridor (up to 89m wide) would entail opencut sections with soil storage, haul roads, and perimeter hoarding up to 2.4m high, characterised by the contrasting colours, sounds and movement of construction traffic, machinery and construction workers leading to a large-scale change to the landscape character directly affecting a 1.5km swath of landscape. The primary and trenchless crossing construction compounds (up to three) would be partly contained by perimeter hoarding up to 2.4m high, with associated construction plant and where required drilling rigs appearing over the top of the fencing. These areas would also be accessed temporary construction access roads (approximately 75m to 100m in length) (M-001, M-063, M-104, M-109). A view from within this LCT is provided in **Volume 3, Appendix 27.2, Figure 5a-d** and **Figure 1a-r**.
- 27.9.3.21 In total eight landscape elements (in three locations) would be removed from the landscape as follows:
- Field boundary opencut crossing: Lapsed hawthorn hedgerow with mixed native trees (H33, Class B) forming part of complete hedgerow / tree line of **medium** sensitivity. The loss of up to 80m would constitute a **medium to low** magnitude leading to a **Moderate / Minor and Not Significant** level of effect, on this complete element which forms part of a wider landscape pattern. The nature of this effect would also be direct, temporary and adverse.
 - Downiehills east – minor through road east of Downiehills Farm subject to opencut crossing (CRA106 **Volume 3, Appendix 4.1**): hawthorn and beech hedge (G194, Class C) of **medium** sensitivity. The loss of up to 89m of this hedge on the north side of the access road would constitute a **medium** magnitude leading to a **Moderate and Significant** level of effect, due to its greater prominence in the landscape, lining an access road. The nature of this effect would also be direct, temporary and adverse. The large Sycamore tree (T188) would be retained.
 - Downiehills south – minor through road south of Downiehills Farm subject to opencut crossing (CRA107 **Volume 3, Appendix 4.1**): hawthorn and beech hedge with four mixed species trees (H37 and T198-199 and T201-202, Class B) and area of woodland comprising Norway Maple, Sycamore (G199, Class B) of **high to medium** sensitivity. Up to 89m would be removed on either side of the road. This landscape element is a notable feature in the local landscape and the partial loss / break in this linear feature would constitute a **high to medium** magnitude leading to a **Major / Moderate and Significant** level of effect, due to its greater prominence in the landscape, visible from the A950 and lining a minor road. The nature of this effect would also be direct, temporary and adverse.

⁶ Note crossing CRA108 is a water pipeline with no influence on landscape character.

- The trenchless crossings would retain all vegetation within the trenchless crossing area (M-001, M-006); however, some may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access roads (M-063, M-103, M-104, M-108).
- 27.9.3.22 Collectively these elements are close to roads, and their loss would be collectively visible eroding the landscape pattern of hedgerows / linear woodland in this area. They would be successively and sequentially visible along the onshore export cable corridor.
- 27.9.3.23 During construction, phase 1 visibility of Segment A1 would be most apparent as it crosses this landscape, viewing north or south along the onshore export cable corridor, or from adjacent minor roads and high ground to the west of Torterston Road and Longside Airfield within approximately 500m. Within this area (up to approximately 500m from the length of the cable corridor) the magnitude of change affecting this LCT would range between **high to medium** and the level of effect would be **Major / Moderate to Moderate and Significant**. The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively during phase 1. The nature of this effect would also be direct, temporary and adverse.
- 27.9.3.24 Areas beyond 500m and including the adjacent LCT 17c: A950 / Longside Airfield would be remote from this part of the onshore export cable corridor. The magnitude of change would be reduced by intervening distance and screening from landform and buildings / vegetation (**low to negligible-zero** magnitude) resulting in **Moderate / Minor to Minor** and **Non-Significant** effects.

Magnitude and level of effect during construction: Segment A2 phase 1

- 27.9.3.25 During construction phase 1 the onshore export cable corridor (Segment A2) would dog-leg to the east of Torterston Road and associated settlement, crossing Torterston Road (CRA202 **Volume 3, Appendix 4.1** further south to re-join Segment A1. This route entails one trenchless crossing (CRA201 **Volume 3, Appendix 4.1**) crossing a minor track and tributary of River Ugie (M-027). It is likely that part of the onshore substations would be visible to the south and west of this area, subject to the screening effects of intervening buildings and vegetation.
- 27.9.3.26 The width of the onshore export cable corridor (up to 89m wide) would entail opencut sections with soil storage, haul roads, and perimeter hoarding up to 2.4m high, characterised by the contrasting colours, sounds and movement of construction traffic, machinery and construction workers leading to a large-scale change to the landscape character directly affecting a 750m swath of landscape in addition to Segment A1 (M-001, M-063, M-104, M-109). This would entail a further two trenchless crossing construction compounds. A view illustrating Segments A1 and A2 is provided in **Volume 3, Appendix 27.2, Figure 5a-d**.
- 27.9.3.27 Two landscape elements (on either side of Torterston Road) would be removed from the landscape as follows:
- Torterston Road – minor road subject to opencut crossing (CRA202 **Volume 3, Appendix 4.1**): hawthorn hedge and mixed native trees forming lapsed hedge (H36 / G196, Class B and C) of **medium** sensitivity. Vegetation would be removed from the full construction width of the onshore export cable corridor. The loss of this vegetation would constitute a **medium** magnitude leading to a **Moderate** and **Significant** level of effect, due to its greater prominence in the landscape, lining Torterston Road. The nature of this effect would also be direct, temporary and adverse.
 - The trenchless crossings would retain all vegetation within the trenchless crossing area (M-001, M-006); however, some may need to be removed / managed to allow for

temporary construction access and associated with construction access roads (M-063, M-103, M-104, M-108).

- 27.9.3.28 During construction, phase 1 visibility of this section of the onshore export cable corridor would be most apparent viewing north or south along the onshore export cable corridor from Torterston Road and from high ground to the east and west of Torterston Road within approximately 500m. Within this area the magnitude of change affecting this LCT would range between **high to medium** and the level of effect would be **Major / Moderate to Moderate** and **Significant**. The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively during phase 1. The nature of this effect would also be direct, temporary and adverse.
- 27.9.3.29 Areas beyond 500m would be remote from this part of the onshore export cable corridor due to intervening distance and screening from landform and buildings / vegetation (**low to negligible-zero** magnitude) resulting in **Moderate / Minor to Minor** and **Non-Significant** effects.

Magnitude and level of effect during construction: Segments A1 and A2 phases 2 to 3

- 27.9.3.30 Beyond this period of more intensive activity the reinstatement of the onshore export cable corridor to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months. The reinstatement of vegetation would be subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** and is likely to include the reinstatement of hedgerows as complete landscape elements (re-planted with no gaps), undertaken in the first available planting season with five to ten years to fully establish (M-006, M-019, M-103, M-108).
- 27.9.3.31 During construction phases 2 to 3 the number of construction compounds would reduce to the primary construction compound only which would remain for up to nine years along with smaller scale, short-term periods of construction work carried out at joint bays, located along the onshore export cable corridor. This work would be completed progressively within approximately six to 12 months duration for each construction stage (M-063). Whilst the close-range magnitude of change related to the construction areas would range between **high to medium-low**, it would affect a much smaller geographical area, reducing the magnitude of change to **medium-low**. The level of effect would reduce to **Moderate / Minor and Not Significant**. The nature of this effect would be temporary, medium-term duration, direct and adverse.

Magnitude and level of effect during O&M

- 27.9.3.32 The loss of the mature trees (G199 and T198-199 and T201-202) would lead to a permanent, **Moderate and Significant** effect during O&M, visible as a notably break in this line of mature trees / shelterbelt visible from the A950 as a notable landscape element. There would however be **No Effect** during O&M on the wider landscape character (LCT 17c) following completion of the construction stage for the onshore export cable corridor.
- 27.9.3.33 The reinstatement of vegetation (subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy**) (M-006, M-019, M-103, M-108) would lead to **Not Significant and beneficial effects**, entailing additional landscape / biodiversity enhancement advantages.

27.9.4 Onshore substation zone

- 27.9.4.1 The onshore substation zone is located to the south of the A950 and south-east of Longside Airfield in an area of LCT 17a: Coastal Agricultural Plain and the associated subdivision LCT 17c: A950 / Longside Airfield which characterises the northern part of this zone.
- 27.9.4.2 A description of the onshore substations' construction is provided in **Chapter 4: Project Description**.
- 27.9.4.3 In summary, there would be significant landscape effects resulting from the three co-located onshore substations (comprising either fully enclosed or partially enclosed options) affecting both LCT 17a: Coastal Agricultural Plain and the LCT 17c: A950 / Longside Airfield sub-area out to a distance of 500m to 1km. The nature of these effects in terms of beneficial landscape and architectural mitigation would be subject to the detailed design and implementation of the **Volume 4: Outline Landscape Architectural Strategy**.

Table 27.15 Summary of landscape effects of onshore substations

Landscape receptor within the onshore substation zone	Sensitivity	Level of effect		
		Phase 1	Phase 2	Phase 3
Construction		Fully enclosed	Fully enclosed	Fully enclosed
LCT 17a: Coastal Agricultural Plain	Medium	Moderate (<400m).	Moderate (<400m).	Major / Moderate to Moderate (<500m).
LCT 17c: A950 / Longside Airfield	Medium to low.	Moderate (<300m to 500m).	Moderate (<300m to 500m).	Moderate (<300m to 500m).
Construction		Partially enclosed	Partially enclosed	Partially enclosed
LCT 17a: Coastal Agricultural Plain	Medium	Moderate (<250m).	Moderate (<250m).	Major / Moderate to Moderate (<500m).
LCT 17c: A950 / Longside Airfield	Medium to low.	Moderate (<300m to 500m).	Moderate (<300m to 500m).	Moderate (<300m to 500m).
O&M		Fully enclosed	Partially enclosed	
LCT 17a: Coastal Agricultural Plain	Medium	Major / Moderate to Moderate (<500m) for both options. The nature of these significant effects could be beneficial subject to the detailed design and implementation of the Volume 4: Outline Landscape Architectural Strategy.		
LCT 17c: A950 / Longside Airfield	Medium to low.	Moderate (<500m) for both options The nature of these significant effects could be beneficial as above.		
Decommissioning		Fully enclosed	Partially enclosed	

Landscape receptor within the onshore substation zone	Sensitivity	Level of effect		
		Phase 1	Phase 2	Phase 3
LCT 17a: Coastal Agricultural Plain	Medium	Significant effects reversed.		
LCT 17c: A950 / Longside Airfield	Medium to low.			

Landscape effects on LCT 17a: Coastal Agricultural Plain

- 27.9.4.4 The LCT 17a: Coastal Agricultural Plain is illustrated in **Volume 2, Figure 27.4** and is described previously in **Section 5** for the landfall options.
- 27.9.4.5 This LCT characterises the southern part of the onshore substation site and the wider, undulating agricultural landscape (ranging between 60m and 43m AOD), further south and west. As noted previously this landscape is more rural and less influenced by development at Longside Airfield and along the A950 corridor including the biofuels plant.

Sensitivity

- 27.9.4.6 The area is not designated indicating medium value and the southern part of the onshore substation zone is less influenced by detracting development at Longside Airfield, although the biofuels plant is visible from the eastern part of this LCT. The susceptibility of this area to the onshore substations is assessed as medium, due to the relatively large scale and open character of relatively flat land that is unsettled and relatively remote from settlement, whilst also capable of being associated with other development along the A950 corridor. Consequently, the sensitivity of this landscape is assessed as **medium**.

Magnitude and level of effect during construction: phase 1

- 27.9.4.7 Phase 1 of the onshore substations would be constructed during years 1 and 3. During the early part of phase 1 (up to year 1) site preparation works would be undertaken, creating site access roads to the north (off the A950) and east (off the minor road alongside the biofuels plant) and establishing the temporary construction compound for the onshore substation (M-063, M-104, M-109). Construction work on the substation would continue in years 2 to 3. The maximum height of the phase 1 onshore substation would be 18.25m above the platform level⁷ (M-185). Landscape works within the onshore substation zone, as described in **Volume 4: Outline Landscape Architectural Strategy**, would also commence in the early part of this phase, subject to planting season (M-111, M-201). During years 1 and 2 the onshore export cable corridor zone A and associated trenchless crossing construction compounds (CRA109 **Volume 3, Appendix 4.1**) would access the north of the onshore substation site area via trenchless construction techniques ensuring that the A950 would remain open and retaining all associated vegetation within the road corridor (M-001, M-027). Similarly, the onshore export cable corridor zone B (onshore grid connection) and associated trenchless crossing construction compounds would access the west of the site also via trenchless construction techniques retaining all associated vegetation within that trenchless crossing (CRB101 **Volume 3, Appendix 4.1**) (M-001, M-027). Existing vegetation overlapping onshore export cable corridors would be removed and other areas

⁷ Includes an allowance for 600mm foundation and 150mm plinth in addition to the 17.5m maximum building height.

of vegetation to be retained would be fenced off (M-001, M-027, M-006, M-103, M-108, M-111).

27.9.4.8 In total four landscape elements (in two groups) would be removed from the landscape as follows:

- Field boundary: Lapsed hawthorn hedge (G226, Class C) forming part of incomplete / gappy hedgerow of **medium** sensitivity. The loss of approximately 25m would constitute a **low** magnitude leading to a **Minor and Non-Significant** level of effect. The nature of this effect would also be direct, temporary and adverse.
- Field boundary: Lapsed hawthorn hedge (G228, G229 and G243, Class B to C) forming part of incomplete / gappy hedgerow of **medium** sensitivity. The loss of approximately 315m would constitute a **medium to low** magnitude leading to a **Moderate / Minor and Non-Significant** level of effect. The nature of this effect would also be direct, temporary and adverse.

27.9.4.9 Collectively these features form a 'loose' or 'course' landscape pattern reflecting relatively large fields, which are less visible and relatively remote from the road network. Although the combined effects would be greater, the associated landscape pattern and elements have a reduced contribution to the wider landscape character.

Effects on landscape character within the onshore substation zone

27.9.4.10 Overall, the magnitude of change within the onshore substation zone would increase from **zero to high** as a result of intensive construction activities entailing earthworks, soil storage, construction compounds, cranes and contrasting colours, sounds and movement of construction traffic, machinery and construction workers (M-063, M-104). Landscape mitigation as described in **Volume 4: Outline Landscape and Architectural Strategy, Figures 4b-d: Architectural strategy** would be 'immature' and insufficient to mitigate these effects in phase 1 (M-108, M-111, M-201). Whilst the creation of new areas of native landscape would be beneficial, the architectural mitigation as described in **Volume 4: Outline Landscape and Architectural Strategy** would allow the development to be seen and subjectively appreciated in architectural terms. The level of landscape effect would be as follows:

- Phase 1 onshore substation (fully or partially enclosed): **Major / Moderate and Significant**. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial.

Effects on landscape character beyond the onshore substation zone

27.9.4.11 Considering the wider landscape character effects on LCT 17a (beyond the onshore substation zone), the trenchless crossing compounds (CRB101 **Volume 3, Appendix 4.1**), onshore substation phase 1 and the temporary construction compound at the onshore substation zone, including mobile cranes, would be the most visible features. Visualisations of the partially enclosed / fully enclosed onshore substations and associated construction areas are illustrated in **Volume 3, Appendix 27.2, Figure 2c and e and Figure 3f and g**.

27.9.4.12 These viewpoints are located within approximately 400m of the onshore substation zone and are located within continuous ZTV coverage (as illustrated in **Volume 2, Figure 27.2a**). In Viewpoint 2 the biofuels plant is visible in blue. The phase 1 onshore substation would consolidate with this development although it is notably taller (breaking the skyline and views to distance hills) and the fully enclosed onshore substations is of notably greater size and scale. In addition to the contrasting colour and movement associated with the phase 1

construction stage, the introduction of the fully enclosed phase 1 onshore substation would lead to a **medium** magnitude of change to the baseline landscape character, introducing larger scale development. The partially enclosed option would be slightly less (**medium to low** magnitude of change). The level of effect on landscape character would be as follows:

- Phase 1 onshore substation (fully enclosed): **Moderate and Significant**.
- Phase 1 onshore substation (partially enclosed): **Moderate / Minor and Not Significant**.

27.9.4.13 In Viewpoint 3, the phase 1 onshore substation is visible between two other large scale farm buildings / shed (with Clubcross farm buildings visible on the right). The phase 1 onshore substation would add to this form of development but appears broadly comparable with the scale and form of other existing development. Although there would be some effect on landscape character, it would not be significant in this example. In addition to the contrasting colour and movement associated with the phase 1 construction stage, the introduction of the fully enclosed phase 1 onshore substation would lead to a **medium to low** magnitude of change to the baseline landscape character. The partially enclosed option would be reduced (**low** magnitude of change). The level of effect on landscape character would be as follows:

- Phase 1 onshore substation (fully enclosed): **Moderate / Minor and Not Significant**.
- Phase 1 onshore substation (partly enclosed): **Minor and Not Significant**.

27.9.4.14 More distant views (with **Not Significant** levels of effect) are illustrated in **Volume 3, Appendix 27.2, Figure 6b, Figure 7 and Figure 11**. In these views the partly enclosed / fully enclosed phase 1 onshore substation and associated construction appear to be set low in the landscape, partially beyond intervening features and appearing reasonably comparable to other existing large buildings (mostly agricultural sheds / farms) within this landscape. There would be contrasting colour and movement associated with construction of the phase 1 onshore substation and this would increase the presence of development in this landscape. However, at these distances the magnitude of change would be **low** and the level of effect on landscape character would be **Minor and Not Significant** for both partly enclosed / fully enclosed options. The nature of this effect would be direct, long-term (reversible) and adverse.

27.9.4.15 Drawing from all of these viewpoints and site survey observations it is considered that significant effects on landscape character (**Moderate and Significant**) would affect the area within approximately 250m of the onshore substation zone for the partially enclosed option and within approximately 400m of the onshore substation zone for the fully enclosed option. Landscape mitigation as described in **Volume 4: Landscape and Architectural Strategy, Figures 4b-d: Architectural strategy** would be 'immature' and insufficient to mitigate these effects in phase 1 (M-108, M-111, M-201). Whilst the creation of new areas of native landscape would be beneficial, the architectural mitigation as described in **Volume 4: Outline Landscape and Architectural Strategy** would allow the development to be seen and subjectively appreciated in architectural terms. Therefore, the nature of this effect would be direct, temporary (medium-term) and adverse.

Magnitude and level of effect during construction: phase 2

27.9.4.16 Construction of the phase 2 onshore substation would occur during phase 2 (Year 4 for site preparation and Years 4 to 5 for construction) along with related works associated with the onshore export cable and the onshore grid connection (Zones A and B). The temporary construction compound for the onshore substations would remain present and the phase 2 site area would appear as a live construction site, alongside the existing phase 1 onshore substation. Landscape works as described in **Volume 4: Outline Landscape Architectural**

Strategy would continue as ongoing works and maintenance, with planting becoming established and beginning to mitigate some views (M-093, M-108, M-111, M-201). The architectural mitigation on outer facing building facades would begin to provide both screening and architectural interest from some views.

Effects on landscape character within the onshore substation zone

27.9.4.17 The magnitude of change within the onshore substation zone would continue to be as follows:

- Phases 1 and 2 onshore substations (fully or partially enclosed): **Major / Moderate and Significant**. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial. Whilst the creation of new areas of native landscape would be beneficial the architectural mitigation would allow the development to be seen and subjectively appreciated in architectural terms.

Effects on landscape character beyond the onshore substation zone

27.9.4.18 The extent of trenchless crossing compound (CRB101 **Volume 3, Appendix 4.1**) would have reduced during phase 2, although the onshore substations phases 1 and 2, and the temporary construction compounds including mobile craneage would remain as the most visible features, capable of affecting the surrounding landscape character.

27.9.4.19 As previously noted, visualisations illustrated in **Volume 3, Appendix 27.2, Figure 2f and g** and **Figure 3h and i** are located within approximately 400m of the onshore substation zone, within continuous ZTV coverage (as illustrated in **Volume 2, Figure 27.2a**).

27.9.4.20 In Viewpoint 2 the phase 1 and 2 onshore substations would further extend the spread and scale of development and remain notably taller than the adjacent biofuels plant. The introduction of either the fully and partially enclosed phase 2 onshore substation would lead to a further **medium** magnitude of change to the baseline landscape character, introducing larger scale development and effectively extending the influence of the LCT 17c A950 / Longside Airfield subdivision further south. The level of effect on landscape character would be as follows:

- Phases 1 and 2 onshore substations (fully or partially enclosed): **Moderate and Significant**.

27.9.4.21 In Viewpoint 3 the phase 1 and 2 onshore substations would further consolidate and increase the visual mass of new development present in the landscape. Whilst the partially enclosed option would remain comparable to the large-scale farm buildings at Clubcross, the fully enclosed option would increase in scale although it would remain close to the horizon in this view. The introduction of the fully enclosed phase 2 onshore substation would lead to a **medium** magnitude of change to the baseline landscape character. The partially enclosed option would be slightly reduced although electrical infrastructure would be visible and the building heights are similar, leading to a **medium** magnitude of change. The level of effect on landscape character would be as follows:

- Phases 1 and 2 onshore substations (fully or partially enclosed): **Moderate and Significant**.

27.9.4.22 As previously noted, more distance, nonsignificant views are illustrated in **Volume 3, Appendix 27.2, Figure 6b, Figure 7 and Figure 11**. The magnitude of change for the onshore substations phases 1 and 2 would remain **low** and the level of effect on landscape character would be as follows:

- Phases 1 and 2 onshore substations (fully or partially enclosed): **Minor and Not Significant**.

27.9.4.23 Drawing from all of these viewpoints and site survey observations it is considered that significant effects on landscape character (**Moderate** and **Significant**) would affect the area within approximately 250m of the onshore substation zone for the partially enclosed option and within approximately 400m of the onshore substation zone for the fully enclosed option. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial. Whilst the creation of new areas of native landscape would be beneficial, the architectural mitigation as described in **Volume 4: Outline Landscape and Architectural Strategy** would allow the development to be seen and subjectively appreciated in architectural terms.

Magnitude and level of effect during construction: phase 3

27.9.4.24 Construction of the phase 3 onshore substation would occur during phase 3 (Years 7-9) along with related works associated with the onshore export cable and the onshore grid connection (Zones A and B). Notably the maximum height of the phase 3 onshore substation would be 30.75m above the platform level⁸ (M-185). The temporary construction compound for the onshore substations would remain present and the phase 3 site area would continue to appear as a live construction site, alongside the existing phase 1 and 2 onshore substations. Landscape works as described in **Volume 4: Outline Landscape Architectural Strategy** would continue to be maintained and managed. Landscaping would be almost complete with most areas well established and beginning to mitigate some views. Two substations would be established and the architectural mitigation on outer facing building facades would provide both screening and architectural interest from some views.

Effects on landscape character within the onshore substation zone

- 27.9.4.25 The magnitude of change within the onshore substation zone would continue to be **high** within the onshore substation zone as a result of intensive construction activities and the level of landscape effect would be as follows:
- Phases 1 to 3 onshore substations (fully or partially enclosed): **Major / Moderate to Moderate** and **Significant**. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial.

Effects on landscape character beyond the onshore substation zone

- 27.9.4.26 The phase 1 to 3 onshore substations, and the temporary construction compounds including mobile craneage would remain as the most visible features, capable of affecting the surrounding landscape character. The phase 1 to 3 onshore substations are illustrated in **Volume 3, Appendix 27.2, Figure 2h and I and Figure 3j and k**. They are all located within approximately 400m of the onshore substation zone, within continuous ZTV coverage (as illustrated in **Volume 2, Figure 27.2a**).
- 27.9.4.27 In Viewpoint 2 the phase 1, 2 and 3 onshore substations would further consolidate and remain notable taller and much more extensive than the adjacent biofuels plant. Both options would break the skyline and block out distance hills and are of a notably greater size and scale (both vertically and horizontally). In addition to the contrasting colour and movement associated with the phase 3 construction stage, the introduction of both the fully

⁸ Includes an allowance for 600mm foundation and 150mm plinth in addition to the 30m maximum building height.

and partly enclosed phase 3 onshore substation would lead to a **high to high-medium** magnitude of change, introducing larger scale development and effectively extending the influence of the LCT 17c A950 / Longside Airfield subdivision further south. The level of effect on landscape character would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Major / Moderate to Moderate** and **Significant**.

27.9.4.28 In Viewpoint 3, the phase 1, 2 and 3 onshore substations would further increase in scale and would cease to be comparable with other large-scale farm buildings in the view at Clubcross for example. The fully enclosed option appears more unified with phases 1, 2 and 3, appearing to 'step down' in height to the north. The partially enclosed option has less 'bulk' although it appears less coordinated and electrical infrastructure is visible. In addition to the contrasting colour and movement associated with the phase 3 construction stage, the introduction of either the fully or partially enclosed phase 3 onshore substation would lead to a high to **high-medium** magnitude of change, introducing larger scale development and effectively extending the influence of the LCT 17c A950 / Longside Airfield subdivision further south to within approximately 500m. The level of effect on landscape character would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Major / Moderate to Moderate to Moderate** and **Significant**.

27.9.4.29 As previously noted, more distance, nonsignificant views are illustrated in **Volume 3, Appendix 27.2, Figure 6b, Figure 7 and Figure 11**. The magnitude of change for onshore substations phases 1, 2 and 3 would increase to **medium to low** and the level of effect on landscape character would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Moderate / Minor** and **Not Significant**.

27.9.4.30 Drawing from all of these viewpoints and site survey observations it is considered that significant effects on landscape character (**Major / Moderate to Moderate and Significant**) would affect an increased area within approximately 500m of the onshore substation zone for both the partially and fully enclosed options. This is due to the location of phase 3 within the southern part of the onshore substation zone. Landscape mitigation as described in **Volume 4: Landscape and Architectural Strategy, Figures 4b-d: Architectural strategy** would be complete and well established (M-093, M-108, M-111, M-201). It would provide screening from some close-range views and lower-level screening of ground-based construction from wider views that would enhance the setting of the substations. The nature of the effect would be direct, temporary (medium-term) and adverse (construction areas), although the creation of new areas of native landscape would be beneficial and the architectural mitigation would allow the development to be seen and subjectively appreciated in architectural terms (M-111, M-185, M-201).

Magnitude and level of effect during O&M

- 27.9.4.31 Localised effects (**Major / Moderate to Moderate and Significant**) on landscape character would continue into the O&M stage. The nature of these effects in terms of beneficial / enhanced landscape and architectural mitigation would be subject to the detailed design and implementation of the **Volume 4: Outline Landscape Architectural Strategy** (M-111, M-201). Embedded landscape mitigation would be well established and provide some screening and an enhanced setting for the substations (M-093). Architectural mitigation would influence building form and the design of outer facing building facades allowing the development to be seen and subjectively appreciated in architectural terms.

Magnitude and level of effect during decommissioning

- 27.9.4.32 Decommissioning of the onshore substations would remove significant effects on landscape character (M-107).

Landscape effects on LCT 17c: A950 / Longside Airfield

- 27.9.4.33 The LCT 17c: A950 / Longside Airfield is illustrated in **Volume 2, Figure 27.4** and is described previously in **Section 27.9.3** for the onshore export cable corridor zone A.
- 27.9.4.34 This LCT characterises the northern part of the onshore substation site and the wider, landscape that is influenced by development associated with Longside Airfield and along the A950 corridor including the biofuels plant to the immediate east of the onshore substation zone.

Sensitivity

- 27.9.4.35 The area is not designated indicating medium value, although there are a number of detracting features at Longside Airfield and along the A950 indicating a medium to low value as noted previously. The susceptibility of this area to the onshore substations is assessed as **medium to low**, due to the relatively large scale and open character of relatively flat land that is unsettled and relatively remote from settlement, whilst also capable of being associated with other development along the A950 corridor. Consequently, the sensitivity of this landscape is assessed as **medium to low**.

Magnitude and level of effect during construction: phase 1

- 27.9.4.36 A description of phase 1 construction is provided previously in **Section 27.9.4.10**, under the landscape effects on the LCT 17a: Coastal Agricultural Plain.

Effects on landscape character within the onshore substation zone

- 27.9.4.37 Overall, the magnitude of change within the onshore substation zone would increase from **zero to high** as a result of intensive construction activities entailing earthworks, soil storage, construction compounds, cranes and contrasting colours, sounds and movement of construction traffic, machinery and construction workers. The level of landscape effect would be as follows:
- phase 1 onshore substation (fully or partially enclosed): **Moderate and Significant**. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial.

Effects on landscape character beyond the onshore substation zone

- 27.9.4.38 Considering the wider landscape character effects on LCT 17c (beyond the onshore substation zone), the trenchless crossing compounds (CRB102 and CRA109 **Volume 3, Appendix 4.1**), onshore substation phase 1 and the temporary construction compound at the onshore substation zone, including mobile craneage, would be the most visible features. Visualisations of the partly enclosed / fully enclosed onshore substations and associated construction areas are illustrated in **Volume 3, Appendix 27.2, Figure 1e / f and i/j, Figure 4c and e and Figure 5**.
- 27.9.4.39 These viewpoints are located within approximately 750m of the onshore substation zone and are located within continuous ZTV coverage (as illustrated in **Volume 2, Figure 27.2a**).
- 27.9.4.40 In Viewpoint 1 the biofuels plant is visible in blue, partially screened by earth mounding. The phase 1 onshore substation would be partly visible beyond perimeter landscaping (including close boarded screen fencing) and the trenchless crossing construction compound study area (CRA109 **Volume 3, Appendix 4.1**). Where visible both the partially and the fully enclosed onshore substations' options would appear as large-scale development in the foreground of the view and the magnitude of change for the fully enclosed option would be **high**. The partially enclosed option would be slightly less (**high to high-medium** magnitude of change) due to the reduced number of buildings, although the electrical infrastructure would be visible. The level of effect on landscape character would be as follows:
- Phase 1 onshore substation (fully or partially enclosed): **Moderate and Significant**.
- 27.9.4.41 In Viewpoint 4 (approximately 750m from the onshore substation zone) the phase 1 onshore substation (fully enclosed) would just be visible above existing hedgerows along the A950, and the magnitude of change would be **low**. The level of effect on landscape character would be as follows:
- Phase 1 onshore substation (fully enclosed): **Minor / Negligible and Not Significant**.
 - Phase 1 onshore substation (partially enclosed): **No View**.
- 27.9.4.42 In Viewpoint 5 (approximately 500m from the onshore substation zone) the phase 1 onshore substation would be partly visible beyond the trenchless crossing construction compound study area (CRA109 **Volume 3, Appendix 4.1**). This area is less influenced by Longside Airfield, and the sensitivity is higher (**medium**). The phase 1 onshore substation (both fully and partially enclosed options) would stretch across the southern horizon and introduce the appearance of large-scale development leading to a **medium** magnitude of change. The level of effect on landscape character would be as follows:
- Phase 1 onshore substation (fully or partially enclosed): **Moderate and Significant**.
- 27.9.4.43 More distance views are illustrated in **Volume 3, Appendix 27.2, Figure 8a and Figure 10**. There would be **no view** of the phase 1 onshore substation (both fully and partially enclosed options) from these locations.
- 27.9.4.44 Drawing from all of these viewpoints and site survey observations it is considered that significant effects on landscape character (**Moderate and Significant**) would affect the area within approximately 500m of the onshore substation zone, extending north into the Tortorston Road and the Downiehills area and north-west towards Eastfield and Longside Airfield within approximately 300m for both fully and partially enclosed options. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial. Whilst the creation of new areas of native landscape would be beneficial, the architectural mitigation would allow the development to be seen and subjectively appreciated in architectural terms.

Magnitude and level of effect during construction: phase 2

- 27.9.4.45 A description of phase 2 construction is provided previously in **Section 27.9.4.16**, under the landscape effects on the LCT 17a: Coastal Agricultural Plain.

Effects on landscape character within the onshore substation zone

- 27.9.4.46 The magnitude of change within the onshore substation zone would continue to be as follows:
- Phase 1 and 2 onshore substations (fully or partially enclosed): **Moderate and Significant**. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial.

Effects on landscape character beyond the onshore substation zone

- 27.9.4.47 During phases 1 and 2, the extent of the trenchless crossing compounds (CRB102 and CRA109 **Volume 3, Appendix 4.1**) would reduce and the onshore substations phases 1 and 2, temporary construction compounds and mobile craneage would remain as the most visible features, capable of affecting the surrounding landscape character.
- 27.9.4.48 As previously noted, visualisations illustrated in **Volume 3, Appendix 27.2, Figure 1k, 1l, 1n, and 1o, Figure 4f and 4g, and Figure 5a-d**.
- 27.9.4.49 In Viewpoint 1 both the fully enclosed and partially enclosed options would extend across the southern views from the road, and the magnitude of change would be **high** (slightly reduced for the partially enclosed option). The level of effect on landscape character would be as follows:
- Phases 1 and 2 onshore substations (fully or partially enclosed): **Moderate and Significant**.
- 27.9.4.50 In Viewpoint 4 (approximately 750m from the onshore substation zone), phases 1 and 2 onshore substations (both fully and partially enclosed options) would just be visible above existing hedgerows along the A950, and the magnitude of change would be **low**. The level of effect on landscape character would be as follows:
- Phases 1 and 2 onshore substations (fully or partially enclosed): **Minor / Negligible and Not Significant**.
- 27.9.4.51 In Viewpoint 5 (approximately 500m from the onshore substation zone), phases 1 and 2 onshore substations would be partly visible as described previously for phase 1, resulting in the following level of effect:
- Phases 1 and 2 onshore substations (fully or partially enclosed): **Moderate and Significant**.
- 27.9.4.52 More distance views are illustrated in **Volume 3, Appendix 27.2, Figure 8a and Figure 10**. There would be **no view** of the phase 1 and 2 onshore substations (both fully and partially enclosed options) from these locations.
- 27.9.4.53 Drawing from all of these viewpoints and site survey observations it is considered that significant effects on landscape character (**Moderate and Significant**) would affect the area within approximately 500m of the onshore substation zone, extending north into the Tortonston Road and the Downiehills area and north-west towards Eastfield and Longside Airfield within approximately 300m for both fully and partially enclosed options. The nature of this effect would be direct, temporary (medium-term) and adverse, although completed

landscaping and outer facing building facades could be viewed as beneficial with the architectural mitigation subjectively appreciated in architectural terms.

Magnitude and level of effect during construction: phase 3

27.9.4.54 A description of phase 3 construction is provided previously in **Section 27.9.2.24**, under the landscape effects on the LCT 17a: Coastal Agricultural Plain.

Effects on landscape character within the onshore substation zone

27.9.4.55 The magnitude of change within the onshore substation zone would continue to be **high** within the onshore substation zone as a result of intensive construction activities and the level of landscape effect would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Moderate** and **Significant**. The nature of this effect would be direct, temporary (medium-term) and adverse, although some areas of the site (larger areas of established landscaping and completed outer facing building facades) could be viewed as beneficial.

Effects on landscape character beyond the onshore substation zone

27.9.4.56 Phases 1 to 3 onshore substations, and the associated temporary construction compound, including mobile craneage, would remain as the most visible features, capable of affecting the surrounding landscape character.

27.9.4.57 Phases 1 to 3 onshore substations are illustrated in **Volume 3, Appendix 27.2, Figure 1o/p and 1q/r, Figure 4h and 4i and Figure 5a-d**. They are all located within approximately 750m of the onshore substation zone and are located within continuous ZTV coverage (as illustrated in **Volume 2, Figure 27.2a**).

27.9.4.58 In Viewpoint 1 both the fully enclosed and partially enclosed options for phases 1, 2, and 3 would extend across the southern views from the road and the magnitude of change would remain **high** (slightly reduced for the partially enclosed option). The level of effect on landscape character would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Moderate** and **Significant**.

27.9.4.59 In Viewpoint 4 (approximately 750m from the onshore substation zone) the phase 1, 2 and 3 onshore substations (both fully and partially enclosed options) would be visible above existing hedgerows along the A950, and the magnitude of change would be **medium to low**. The level of effect on landscape character would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Minor** and **Not Significant**.

27.9.4.60 In Viewpoint 5 (approximately 500m from the onshore substation zone) the phase 1, 2 and 3 onshore substations would be partly visible, with phase 3 mostly screened by phases 1 and 2. The level of effect on landscape character would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Moderate** and **Significant**.

27.9.4.61 More distance views are illustrated in **Volume 3, Appendix 27.2, Figure 8a and Figure 10**. A partial view of the phase 3 onshore substation (**low** magnitude) would be visible from Viewpoint 8. The level of effect on landscape character would be as follows:

- Phases 1 to 3 onshore substations (fully or partially enclosed): **Minor / Negligible and Not Significant**.

- 27.9.4.62 There would be **no view** of the phase 1, 2 and 3 onshore substations (both fully and partially enclosed options) from Viewpoint 10.
- 27.9.4.63 Drawing from all of these viewpoints and site survey observations, significant effects on landscape character (**Moderate and Significant**) would affect the area within approximately 500m of the onshore substation zone, extending north into the Tortorston Road and the Downiehills area and north-west towards Eastfield and Longside Airfield within approximately 300m for both fully and partially enclosed options. The nature of this effect would be direct, temporary (medium-term) and adverse, although completed landscaping and outer facing building facades could be viewed as beneficial with the architectural mitigation subjectively appreciated in architectural terms.

Magnitude and level of effect during O&M

- 27.9.4.64 Localised effects (**Moderate and Significant**) on landscape character would continue into the O&M stage. The nature of these effects in terms of beneficial / enhanced landscape and architectural mitigation would be subject to the detailed design and implementation of the **Volume 4: Outline Landscape Architectural Strategy** (M-111, M-201). Embedded landscape mitigation would be complete and well established (M-093). It would provide screening from some close-range views and lower-level screening of ground-based construction from wider views that would enhance the setting of the substations.

Magnitude and Level of effect during decommissioning

- 27.9.4.65 Decommissioning of the onshore substations would remove significant adverse effects on landscape character (M-107).

27.9.5 Onshore export cable corridor zone B

- 27.9.5.1 The onshore export cable corridor zone B (grid connection cable) is routed to the south of the A950 an area of LCT 17a: Coastal Agricultural Plain and the associated subdivision LCT 17c: A950 / Longside Airfield which skirts the A950 road corridor to the south of the airfield.
- 27.9.5.2 In summary, there would be significant landscape effects resulting from the onshore export cable corridor zone B (grid connection cable) affecting both LCT 17a: Coastal Agricultural Plain and the LCT 17c A950 / Longside Airfield sub-area. Most of the effects would occur in phase 1 and overlap with the construction of the consented Netherton Hub SSEN substation and its continued operation.

Landscape effects on LCT 17a: Coastal Agricultural Plain

- 27.9.5.3 The LCT 17a: Coastal Agricultural Plain is illustrated in **Volume 2, Figure 27.4** and is described previously in **Section 27.9.2** for the landfall options.
- 27.9.5.4 Within this part of the LVIA study area this LCT comprises an undulating agricultural landscape (ranging between 50m and 35m AOD), to the south of the A950 and including the farmland of East and West Thunderton and Parkhill. The woodland at Faichfield House are located to the north and the Burn of Faichfield, along with two minor roads which are routed through this area.

Sensitivity

- 27.9.5.5 The area is not designated indicating medium value and, with the exception of the A950, the landscape is less influenced by detracting development at Longside Airfield. The agricultural landscape is of reduced susceptibility (medium) as assessed previously and the sensitivity of this LCT is therefore assessed as **medium**.

Magnitude and level of effect during construction

- 27.9.5.6 During construction phase 1 the onshore export cable corridor would cross this landscape from the eastern edge of the onshore substation zone to the proposed onshore grid connection at SSEN Netherton Hub. There are two trenchless crossings (CRB101 and CRB103 **Volume 3, Appendix 4.1**) crossing a minor road, the Burn of Faichfield and underground gas and water utilities; and an open-cut crossing of a minor road (CRB102 **Volume 3, Appendix 4.1**) (M-027). Two secondary construction compounds are also proposed to the north-east of East Thunderton (near CRB102 **Volume 3, Appendix 4.1**) and east of Parkhill (near CRB103 **Volume 3, Appendix 4.1**). Due to intervening landform, vegetation and the construction of the onshore substations it is unlikely that other parts of the onshore export cable corridor zone A would be widely visible. It is however likely that the construction activity associated with the onshore substations would be clearly visible to the east.
- 27.9.5.7 The width of the onshore export cable zone B (grid connection cable) construction corridor (up to 99m wide) would entail open-cut sections with soil storage, haul roads, and perimeter hoarding up to 2.4m high, characterised by the contrasting colours, sounds and movement of construction traffic, machinery and construction workers leading to a large-scale change to the landscape character directly affecting a 1.6km swath of landscape (excluding trenchless sections). The secondary and trenchless crossing construction compounds would be partly contained by perimeter hoarding up to 2.4m high, with associated construction plant and where required drilling rigs appearing over the top of the fencing. The secondary construction compounds would also be accessed by a short section of temporary construction access road (approximately 100m in length) (M-001, M-063, M-104, M-109). A view from within this LCT is provided in **Volume 3, Appendix 27.2, Figure 3a-k**, and **Figure 4a-i**. More distant views are illustrated in **Volume 3, Appendix 27.2, Figure 6a-b** and **Figure 10**.
- 27.9.5.8 In total seven landscape elements would be removed from the landscape as follows:
- East Thunderton - minor road open-cut crossing (CRB102 **Volume 3, Appendix 4.1**): hawthorn hedge (H39, Class C) of **medium** sensitivity would be removed from approximately 99m on one side of the minor road. The loss of these hedges would constitute a **medium** magnitude leading to a **Moderate** and **Significant** level of effect, due to their greater prominence in the landscape, along a minor road. The nature of this effect would also be direct, temporary and adverse.
 - Field boundary open-cut crossing: hawthorn hedge (H42, Class C) forming part of complete hedgerow of **medium** sensitivity. The loss of approximately 99m would constitute a **medium to low** magnitude leading to a **Moderate / Minor** and **Non-Significant** level of effect, although it forms part of a wider landscape pattern. The nature of this effect would also be direct, temporary and adverse.
 - Field boundary open-cut crossing: hawthorn hedge (H44, Class C) forming end of complete hedgerow of **medium** sensitivity. The loss of approximately 20m would constitute a **medium to low** magnitude leading to a **Moderate / Minor** and **Non-Significant** level of effect, although it forms part of a wider landscape pattern. The nature of this effect would also be direct, temporary and adverse.

- Field boundary opencut crossing: hawthorn hedge (G234, Class B) forming partially complete hedgerow of **medium** sensitivity. The loss of approximately 99m would constitute a **low** magnitude leading to a **Minor** and **Non-Significant** level of effect, although it forms part of a wider landscape pattern. The nature of this effect would also be direct, temporary and adverse.
 - Field boundary opencut crossing: lapsed hawthorn hedge (G239, Class B) forming complete hedgerow of **medium** sensitivity. The loss of approximately 99m would constitute a **medium to low** magnitude leading to a **Moderate / Minor** and **Non-Significant** level of effect, although it forms part of a wider landscape pattern. The nature of this effect would also be direct, temporary and adverse.
 - Field boundary opencut crossing: lapsed hawthorn hedge with trees (G249, Class C) in water-logged ground with some trees suffering from ash dieback. Assessed as of **medium to low**. Also mature, multi-stemmed Rowan tree (T224, Class B) of **medium** sensitivity. The loss of approximately 50m forming a complete hedgerow and individual tree would constitute a **medium to low** magnitude leading to a **Moderate / Minor** and **Non-Significant** level of effect, although it forms part of a wider landscape pattern. The nature of this effect would also be direct, temporary and adverse.
 - The trenchless crossings would retain all vegetation within the trenchless crossing area (M-001, M-006); however, some may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access roads (M-063, M-103, M-104, M-108).
- 27.9.5.9 Collectively the loss of these features would be greater, eroding the landscape pattern of hedgerows in this area, successively visible from along the A950, although there would be limited visibility from the Parkhill area.
- 27.9.5.10 Visibility of this section of the onshore export cable corridor would be most apparent viewing from the A950 and higher ground to the north and from high ground to the south at Brownhill and Toddlehill, and between East and West Dens (visibility to the east and west would be restricted by the onshore substations and SSEN Netherton Hub). Viewed from these areas within approximately 500m the magnitude of change affecting this LCT would range between **high to medium** and the level of effect would be **Major to Moderate** and **Significant**. The duration of this effect would be short-term with the construction works for the onshore export cable corridor carried out progressively during phase 1. The nature of this effect would also be direct, temporary and adverse.
- 27.9.5.11 Areas beyond 500m and including the adjacent LCT 17c: A950 / Longside Airfield would be remote from this part of the onshore export cable corridor, and the effects would be reduced by intervening distance and screening from landform and / or successive layers of vegetation (**low to negligible-zero** magnitude) resulting in **Moderate / Minor to Minor** and **Non-Significant**. Significant effects arising from the onshore substations, however, overlap within this area as reported previously in **Section 27.9.3**.
- 27.9.5.12 Beyond this period of more intensive activity the reinstatement to agriculture of land along the onshore export cable corridor would take up to approximately 12 months and the reinstatement of hedgerows as complete landscape elements would be undertaken in the first available planting season and would take five to ten years to fully establish (M-006, M-019, M-103, M-108). The number of construction compounds would reduce to two secondary construction compounds which would remain for up to nine years along with smaller scale, short-term periods of construction work carried out at a series of joint bays, during construction phases 2 and 3. This work would be completed progressively within approximately six to 12 months duration for each construction stage. Whilst the close-range magnitude of change related to the construction areas would range between **high to medium-low**, it would affect a much smaller geographical area, reducing the magnitude of

change to **medium-low**. The level of effect would reduce to **Moderate / Minor** and **Not Significant**. The nature of this effect would be medium-term duration, direct and adverse, changing to neutral post reinstatement.

Magnitude and level of effect during O&M

- 27.9.5.13 There would be **No Effect** during O&M following completion of the construction stage for the onshore export cable corridor.
- 27.9.5.14 The reinstatement of vegetation subject to the detailed Landscape Management Plan as set out in **Volume 4: Outline Landscape Architectural Strategy** would lead to **Not Significant and beneficial effects** (M-006, M-019, M-103, M-108).

Landscape effects on LCT 17c: A950 / Longside Airfield

- 27.9.5.15 The LCT 17c: A950 / Longside Airfield is illustrated in **Volume 2, Figure 27.4** and is described previously in **Section 27.9.3** for the onshore export cable corridor zone A.

Sensitivity

- 27.9.5.16 The area is not designated indicating medium value, although there are a number of detracting features indicating a medium to low value as noted previously. The agricultural landscape is of reduced susceptibility (medium) due to the regular cycle of cultivation, albeit these are much smaller scale operations affecting a wider agricultural area. This landscape is also relatively simple and open. The sensitivity of this receptor is therefore assessed as **medium**, reducing to **medium to low** in those areas of closer proximity to industrial influences.

Magnitude and level of effect during construction

- 27.9.5.17 During construction phase 1 the onshore export cable corridor (grid connection cable) would cross to the south of this area, with only the secondary construction compound partly located within this LCT subdivision. The effects on the LCT 17c: A950 / Longside Airfield landscape character would be indirect and overlap with those assessed for the main LCT 17a: Coastal Agricultural Plain which has a higher (**medium**) sensitivity. In comparison the magnitude of change affecting this LCT within approximately 500m would range between **high to medium** and the level of effect would be reduced to **Moderate and Significant** (viewed from the A950) and reduced to **Moderate / Minor and Not Significant** (viewed from within Longside Airfield). Significant effects arising from the onshore substations, however, overlap within this area as reported previously in **Section 27.9.4**.
- 27.9.5.18 During phases 2 to 3 views of the construction works would reduce further with the primary (C) and secondary (D) construction compounds remaining most visible. Whilst the close-range magnitude of change would range between **high to medium-low**, it would affect a much smaller geographical area, reducing the magnitude of change to **medium-low**. The level of effect would reduce to **Minor** and **Not Significant**. The nature of this effect would be medium-term duration, direct and adverse, changing to neutral post reinstatement.

Magnitude and level of effect during O&M

- 27.9.5.19 There would be **No effect** on LCT 17c during O&M following completion of the construction stage for the onshore export cable corridor.

27.10 Visual effects

27.10.1 Introduction

- 27.10.1.1 This Section provides an assessment of the effects on visual receptors resulting from the construction, O&M and decommissioning of the indicative onshore Project infrastructure.
- 27.10.1.2 The assessment follows the methodology set out in **Section 27.8** and described in more detail in **Volume 3, Appendix 27.1**.
- 27.10.1.3 These effects are assessed by considering the visual sensitivity of the receptor (value and susceptibility) against the magnitude of change. The type of effect may also be described as short, medium or long-term, direct or indirect, cumulative and beneficial, neutral, or adverse.

Scope of visual assessment

- 27.10.1.4 The visual assessment for the Project's onshore infrastructure, located landward of MLWS has taken account of both static, successive and sequential visual effects, reflecting how people may travel around and experience the landscape sequentially. This part of the assessment therefore is receptor led and considers the visual effects of the Project on settlements, transport and recreational routes and recreational / visitor locations.
- 27.10.1.5 The visual assessment of the indicative onshore Project infrastructure, located landward of MLWS is set out as follows:
- **Landfall(s)** including offshore export cable corridor from MLWS to the landfall transition joint bays (including associated construction areas), and the onshore export cable corridor from the landfall transition joint bays to the River Ugie. The landfall options that are assessed in this EIA Report include:
 - ▶ **option 1: Lunderton** - all export cable circuits would make landfall at Lunderton, based on the following scenarios:
 - all export cable circuits make landfall at Lunderton North (Option 1a), including onshore export cable Segments L2 and L3; or
 - all export cable circuits would make landfall at a combination of Lunderton North and Lunderton South (Option 1b) including onshore export cable Segments L2, L3 and L4;
 - ▶ **option 2: Scotstown and Lunderton** - export cable circuits would make landfall at a combination of Lunderton (North and / or South) and Scotstown including onshore export cable Segments L1, L2, L3 and L4.
 - ▶ **Table 27.12** provides a summary of the assessment of the landfall options.
 - **onshore export cable corridor zone A** (onshore export cable corridor from the River Ugie south to the onshore substations);
 - **onshore substation zone** including the onshore substations; and
 - **onshore export cable corridor zone B** (onshore export cable corridor from onshore substations to the point connection at the SSEN Netherton Hub).
- 27.10.1.6 The Project's onshore infrastructure and related zones are illustrated in **Volume 2, Figure 27.1b**.

Mitigation, residual effects and offsite mitigation

- 27.10.1.7 Embedded mitigation forms part of the Project and residual, visual effects assessed here, are those remaining after all of the embedded environmental measures have been taken into account. Embedded environmental measures relevant to all of the visual assessments below include M-002, M-011, M-024, and M-103 as reflected in **Table 27.8**. Further embedded environmental measures relevant to specific receptors are indicated in each assessment.
- 27.10.1.8 The visual assessment has taken account of embedded mitigation, described in **Table 27.8** and in **Volume 4: Outline Landscape Architectural Strategy**. Although significant effects have been assessed, the nature of these effects would be beneficial as a result of landscape and architectural mitigation, subject to the detailed design and implementation of the **Volume 4: Outline Landscape Architectural Strategy**.
- 27.10.1.9 Potential further mitigation (as described in **Volume 4: Outline Landscape Architectural Strategy, Section 2.2.5: Design Principle 4: potential further mitigation for onshore substations**) is not part of the embedded mitigation and has not been included in the assessment.

ZTV and viewpoint analysis

- 27.10.1.10 The landscape assessment is supported by ZTV and viewpoint analysis. The ZTV's indicate the extent of theoretical visibility of the onshore infrastructure during construction and operation, as illustrated **Volume 2, Figures 27.2a-b and 27.3a-g**.
- 27.10.1.11 The viewpoint analysis is reported in **Volume 3, Appendix 27.2**. This analysis indicates that significant visual effects arising from the construction and operation of the onshore substations would extend to within approximately 1.5km distance from the onshore substation zone and within approximately 475m to 930m distance from the onshore export cable corridor and associated landfall(s) and temporary construction compounds.
- 27.10.1.12 Importantly this analysis is indicative of the likely range of significant visual effects, but it is not definitive and should only be used as a guide to assist in focusing the LVIA.

27.10.2 Visual effects on settlements and residential properties

- 27.10.2.1 The visual assessment of views from settlements has considered the residential areas, as well as the public realm and public open spaces that would be frequented by people.
- 27.10.2.2 The settlements included in the assessment are listed in **Section 27.6.1** and shown in **Volume 2, Figure 27.5a** and **Volume 2, Figure 27.5b**.
- 27.10.2.3 In summary, there would be no significant visual effects on the views from settlements defined in the Aberdeenshire LDP, including St Fergus, Peterhead, or Longside. There would be no view of the Project from the settlement of Inverugie.

Visual effects on St Fergus

- 27.10.2.4 St Fergus is a commuter settlement to Peterhead, located on the west side of the A90, approximately 1.3km west of the coastline and 1km south of the St Fergus Gas Terminal in the northern part of the LVIA study area. The settlement includes the residential area of Kirktown and is located on rising ground which affords sea views from the northern edge of the settlement. Maintaining separation from the St Fergus Gas Terminal and associated development is noted as a strategic aim in the LDP.

Magnitude and level of effect during construction

- 27.10.2.5 The settlement is located outwith the 5km onshore substations' study area but is located within the 2km Onshore Red Line Boundary study area for the landfall(s) and onshore export cable corridor. The ZTV in **Volume 2, Figure 27.3b** (Segment L4) indicates very limited ZTV overlap with the settlement, indicating little or no view of the Project. Theoretical visibility is indicated from Kirkton Road and the parish church, which is one of the highest points in the village. Further viewpoint analysis confirms views of the Scotstown landfall (Option 2), associated onshore export cable corridor and temporary construction compounds would be screened by intervening buildings and vegetation not accounted for in the ZTV. The Scotstown landfall construction compound (Option 2), adjacent trenchless crossing construction compound and associated onshore export cable corridor would be more widely visible from the A90 and properties along this road, including Links View and the upper part of Hall Road and St Fergus Community Hall, facing east at approximately 800m distance (**medium to low** magnitude). The top of the primary construction compound further south would also be partially visible from the A90 / Links Road as it passes the southern part of the settlement at approximately 600m distance (**negligible** magnitude).
- 27.10.2.6 The level of effect from properties along the A90, Links View and the upper part of Hall Road and St Fergus Community Hall would be **Moderate and Not Significant** due to the interruption of other intervening buildings and passing traffic on the A90. There would be **no view** from most areas of this settlement. The nature of these effects would be medium-term and temporary (due to the intermittent and changing nature of the construction works through phases 1, 2 and 3), and indirect and adverse.

Magnitude and level of effect during O&M

- 27.10.2.7 There would be no visible above ground infrastructure associated with the landfall(s) and onshore export cable corridor. Occasional visibility of O&M activities at the landfall(s) and landfall transition joint bays (**negligible to zero** magnitude) (M-066) would lead to a **Minor to no view** and **Not Significant** level of effect.

Visual effects on Inverugie

- 27.10.2.8 Inverugie is located in the well wooded River Ugie valley within approximately 500m of the onshore export cable corridor zone A. There are a number of residential properties in this settlement, focused on an old bridge crossing of the river and a ruined castle. Another castle, Ravenscraig Castle is located to the north of the settlement. It is not overlapped by the ZTVs and would have no view of the Project.

Magnitude and level of effect during construction

- 27.10.2.9 The ZTV's in **Volume 2, Figure 27.3a** (Lunderton North landfall), **Volume 2, Figure 27.3b** (Lunderton South landfall), **Figure 27.3d** (onshore export cable corridor zone A), **Figure 27.3f** (primary construction compound B) and **Figure 27.3g** (secondary construction compound D) all partly overlap with Inverugie indicating theoretical visibility of construction works. In reality, this is unlikely due to the high levels of intervening vegetation screening (**negligible to zero** magnitude). The ZTV shown in **Volume 2, Figure 27.2b** indicates theoretical visibility of the top of a crane during construction of the onshore substations, although this is also unlikely due to the high levels of intervening vegetation screening (**negligible to zero** magnitude).
- 27.10.2.10 The settlement is not overlapped by the O&M phase ZTV for the onshore substations in **Volume 2, Figure 27.2a** and would therefore have **no view** of the onshore substations during O&M.

Magnitude and level of effect during O&M

- 27.10.2.11 There would be **no view** from this settlement of the onshore substations. Additionally, there would be no visible O&M activities or from reinstated landscape elements.

Visual effects on Peterhead

- 27.10.2.12 Peterhead is located on a rocky coastline in the east of the LVIA study area. It is the largest town in Aberdeenshire, a main service and employment centre and a Regeneration Priority Area. It represents one of Aberdeenshire's strategic locations in terms of the energy and oil and gas sectors.

Magnitude and level of effect during construction

- 27.10.2.13 The northern half of this settlement is within the 2km Onshore Red Line Boundary study area and located approximately 600m of the Lunderton South landfall. The ZTV in **Volume 2, Figure 27.3b** (Segment L4) indicates very limited ZTV overlap. Theoretical visibility of the primary construction compound (20m concrete batching plant) is indicated along the A982 and southern banks of the River Ugie and the rocky coastline, including Buchanhaven Harbour as well as open space near the former hospital and Balmoor Stadium. Further analysis confirms that views of primary construction compound would be screened by intervening buildings and vegetation not accounted for in the ZTV and there would be **no view** from this settlement.
- 27.10.2.14 Most of the settlement is within the 5km study area for the onshore substations and located approximately 2km from the onshore substation zone. Theoretical visibility of the onshore substations is indicated along the A90 on the western edge of the settlement and from open space at Coplandhill, Meethill, and Balmoor Stadium. In addition, the ZTV in **Volume 2, Figure 27.2b** indicates there may be some partial views of the top of a crane from similar areas and a small, western part of Peterhead Bay near the Fish Market. Further viewpoint analysis confirms that views of the onshore substations would be screened by intervening buildings and vegetation not accounted for in the ZTV and views of the top of a crane would be unlikely (**negligible to zero** magnitude).
- 27.10.2.15 As a precaution the level of effect from very limited areas would be **Minor and Not Significant** with potential glimpsed views of the top of a crane appearing intermittently, subject to the need for craneage through phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and adverse. Otherwise, there would be **no view** from the majority of this settlement.

Magnitude and level of effect during O&M and decommissioning

- 27.10.2.16 The ZTV in **Volume 2, Figure 27.2a** indicates very limited ZTV overlap. There would be **negligible to no view** from this settlement of the onshore substations. Additionally, there would be no visible O&M activities or above ground infrastructure associated with the landfall(s) and onshore export cable corridor.
- 27.10.2.17 There would be no significant effects from decommissioning of the onshore substations.

Visual effects on Longside

- 27.10.2.18 Longside is a small settlement located on the A950 in the west of the LVIA study area. Open space buffers the northern and eastern sides of the settlement with a Golf Course and the South Ugie Water to the north and blocks of woodland to the east.

Magnitude and level of effect during construction

- 27.10.2.19 Although the settlement is outwith the 2km Onshore Red Line Boundary study area for the onshore export cable corridor, it is within the western edge of the 5km study area for the onshore substations and located approximately 4.5km from the onshore substation zone. In addition, the ZTV in **Volume 2, Figure 27.2b** indicates there may be some partial views of the top of a crane from near the school on Inn Brae. Further viewpoint analysis confirms that views of the onshore substations would be screened by intervening vegetation not accounted for in the ZTV and views of the top of a crane would be unlikely (**negligible to zero** magnitude).
- 27.10.2.20 As a precaution the level of effect from near the school on Inn Brae would be **Minor** and **Not Significant** with potential glimpsed views of the top of a crane appearing intermittently, subject to the need for craneage through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and adverse.

Magnitude and level of effect during O&M and decommissioning

- 27.10.2.21 The ZTV in **Volume 2, Figure 27.2a** indicates very limited ZTV overlap with theoretical visibility of the onshore substations at 30.75m height occurring near the school on Inn Brae. There would be **negligible to no view** from this settlement of the onshore substations during O&M. Additionally, there would be no visible O&M activities or above ground infrastructure associated with the onshore export cable corridor.
- 27.10.2.22 There would be no significant effects from decommissioning of the onshore substations.

Residential visual amenity assessment

- 27.10.2.23 A RVAA has been undertaken to assess the effects on residential visual amenity likely to arise as a result of the Project. The RVAA is reported in **Volume 3, Appendix 27.3** and assesses properties indicated in **Volume 2, Figures 27.6a-f**.
- 27.10.2.24 In summary, none of the residential properties would incur a breach of the Residential Visual Amenity Threshold where the visual effects (although significant) would be so severe as to be considered as “*overwhelming views in all directions*”; “*unpleasantly encroaching*” or being “*inescapably dominant from the property*” as exemplified in the RVAA guidance (Landscape Institute, 2019a). This is due largely to embedded environmental measures within the Project and combinations of partial screening, and use / orientation of the property. As a result, the living standards would not be affected, and the residential property would not be adversely affected to the extent that it would become an unattractive place to live when judged objectively and in the public interest.

27.10.3 Visual effects on transport routes

- 27.10.3.1 The visual assessment of views from transport routes has considered the sequential effect likely to be experienced by people travelling along the route. These road users (mainly drivers / passengers and where appropriate, cyclists) would experience views of the Project as part of a changing sequence of views from along the route. The visual assessment has involved desk-based analysis of sequential wirelines and ZTV maps and driving the routes in both directions to assess the potential effects of the Project. The transport routes included in the assessment are listed in **Section 27.6.1** and shown in **Volume 2, Figure 27.5a** and **Figure 27.5b**.
- 27.10.3.2 In summary, there would be significant visual effects on the following transport routes:

- A90 (also the route of the North East 250 and The Coastal Trail tourist routes and core path 215.02): significant visual effects up to 2.5km of the A90 during the construction stage and associated with the landfall zone.
- A950: There would be significant visual effects on up to 3.25km during the construction stage of the onshore substations and associated onshore export cable corridor, reducing to 1km during O&M.
- In addition, there would be significant visual effects on the views from 14 minor roads during the construction stage of the onshore substations and associated onshore export cable corridor, reducing to six during O&M and reducing to **zero** on completion of decommissioning.

Table 27.16 Summary of visual effects on transport routes

Visual receptor: transport route	Sensitivity	Level of effect			
		Landfall Option 1a: Lunderton North	Landfall Option 1b: Lunderton North and South	Landfall Option 2: Lunderton North and / or South and Scotstown	Onshore substations
		and associated onshore export cable corridors			
Construction – temporary short - medium term adverse effects					
A90	High	Major (1.25km).	Major (1.25km).	Major (2.5km).	No view.
A950	Medium	No view.	No view.	No view.	Major / Moderate (3.25km).
O&M – long-term (reversible) neutral / beneficial effects					
A90	High	Minor to no view.	Minor to no view.	Minor to no view.	No view.
A950	Medium	No view.	No view.	No view.	Major / Moderate (1km).

Visual effects on the A90

- 27.10.3.3 The A90 (also the route of the North East 250 and The Coastal Trail tourist routes and core path 215.02) is routed through the LVIA study area between the St Fergus Gas Terminal in the north, the settlement of St Fergus and skirts the western boundary of Peterhead in the south. Due to the use of this route by tourists and its recognition as a scenic route the sensitivity of the A90 is assessed as **high**. In summary, during the construction stage the A90 would cross up to four Segments of onshore export cable corridor associated with the landfall(s). All options would result in significant effects during construction, although Options 1a and 1b would both result in fewer crossings and compounds than Option 2. The A90 would have **no view** of the onshore substations during construction, O&M or decommissioning due to intervening vegetation, landform and built form and has therefore not been assessed below.

Landfall Option 1a: Lunderton North

Magnitude and level of effect during construction

- 27.10.3.4 During phase 1 of the construction stage the Landfall Option 1a: Lunderton North and associated onshore export cable corridor would cross the A90 via trenchless crossings (CRL201 and CRL301 **Volume 3, Appendix 4.1**) at up to two locations, to the north (Segment L2) and south (Segment L3) of Lunderton Cottages (M-006, M-019, M-103, M-108). Assuming both Segments are required the two onshore export cable corridors would then join together west of the A90 near Lunderton and continue through the landscape to the south-west towards the River Ugie. Road users on the A90 would view up to six construction compounds and the onshore export cable corridor between existing woodland, along the Cuttie Burn in the north, and the bend in the road at Hallmoss to the south. This would affect approximately 1.25km of the route, experienced by north and south bound road users for approximately one minute (assuming 40 miles per hour (mph) to 60mph of continuous travel with no stops). Up to five construction compounds would appear adjacent to the road with the landfall(s) construction compound appearing further east at approximately 300m distance. The compounds would comprise the landfall(s) construction compound, up to two trenchless crossing compounds along the A90 (CRL201 and CRL301 **Volume 3, Appendix 4.1**) and the primary and secondary construction compounds to the south and north respectively. The compounds would be contained by perimeter hoarding up to 2.4m high and accessed from the A90 by short sections of temporary construction access road (approximately 100m to 200m in length). The trenchless crossings of the A90 (CRL201 and CRL301 **Volume 3, Appendix 4.1**) would retain all roadside vegetation within the trenchless crossing area (M-006, M-063). However, some additional vegetation may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access roads in the landfall zone (M-063, M-103, M-104, M-108).
- 27.10.3.5 The magnitude of change would be **high**, and the level of effect would be **Major** and **Significant** almost continuously affecting a short 1.25km section of the road for a short but sustained travel time duration. Road users travelling from the north or south would have limited notice of the construction works before exiting the existing woodland or rounding the bend at Hallmoss. The programme for these construction works would be short term, with the work carried out progressively and it is likely this section of the onshore export cable corridor could be completed within approximately 12 months. The reinstatement of the land to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months (M-006, M-019, M-103, M-108). The nature of this effect would also be direct, temporary (medium-term) and adverse, noting that the landfall(s) construction compound and the primary and secondary construction compounds would remain in the landscape for the whole nine-year onshore construction stage.
- 27.10.3.6 Assuming construction of the onshore export cable corridor Segments L2 / L3 is completed in phase 1, then during phases 2 and 3 the onshore export cable corridor and associated trenchless crossing compounds would have been reinstated / removed as noted previously. Periodic smaller scale and short-term periods of construction work would occur at joint bays and the landfall(s) construction compound (to pull cables through pre-installed ducts). Whilst there would remain large scale change associated with the two construction compounds and a medium scale of change associated with the landfall(s) construction compound, extent and intensity of construction activity would be reduced. The magnitude of change would range between **high to medium** (with the high magnitude resulting from the primary and secondary construction compounds located adjacent to the road. The level of effect would be **Major to Major / Moderate** and **significant** affecting a short 1.25km section of the road for approximately 1 minute of travel time. The nature of this effect would be medium-term duration, direct and adverse.

- 27.10.3.7 In the event that the onshore export cable corridor Segments L2 / L3 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during O&M

- 27.10.3.8 During O&M, any landscape mitigation to reinstate lost vegetation would be well established (M-006, M-019, M-103, M-108). Periodic maintenance activities may be visible (M-066), but these are unlikely to have a visual effect greater than periodic agricultural activities resulting in a **negligible to zero** magnitude and a **Minor and Not Significant** visual effects.

Landfall Option 1b: Lunderton North and South

Magnitude and level of effect during construction

- 27.10.3.9 During phase 1 of the construction stage the Landfall Option 1b: Lunderton North and South and associated onshore export cable corridor would cross the A90 via trenchless crossings (CRL201, CRL301 and CRL401 **Volume 3, Appendix 4.1**) at up to three locations, (Segments L2, L3 and L4) (M-027). The three onshore export cable corridors would then join together west of the A90 near Lunderton and continue through the landscape to the south-west towards the River Ugie. Road users on the A90 would view up to seven construction compounds and three onshore export cable corridors between existing woodland, along the Cuttie Burn in the north, and the bend in the road at Hallmoss to the south. This would affect approximately 1.25km of the route, experienced by north and south bound road users for approximately one minute (assuming 40mph to 60mph of continuous travel with no stops). The maximum of seven compounds would comprise the two landfall construction compounds, up to three trenchless crossing compounds along the A90 (CRL201, CRL301 and CRL401 **Volume 3, Appendix 4.1**) and the primary and secondary construction compounds to the south and north respectively. The compounds would be contained by perimeter hoarding up to 2.4m high and accessed from the A90 by a short temporary construction road as described previously. The trenchless crossings of the A90 would retain all associated roadside vegetation unless otherwise removed for temporary construction access or sightlines (M-001, M-063, M-104, M-109).
- 27.10.3.10 The magnitude of change would be **high**, and the level of effect would be **Major** and **significant** almost continuously affecting a short 1.25km section of the road for a short but sustained travel time duration as described previously for Option 1a.
- 27.10.3.11 Assuming construction of the onshore export cable corridor Segments L2 / L3 / L4 is completed in phase 1, then during phases 2 and 3 the level of effect would be **Major to Major / Moderate** and **Significant** affecting a short 1.25km section of the road for approximately 1 minute of travel time as described previously for Option 1a. The nature of this effect would be medium-term duration, direct and adverse.
- 27.10.3.12 In the event that the onshore export cable corridor Segments L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during O&M

- 27.10.3.13 The effects would be as reported previously for Option 1a.

Landfall Option 2: Scotstown

Magnitude and level of effect during construction

- 27.10.3.14 During phase 1 of the construction stage the Landfall Option 2: Scotstown (which includes all three landfall(s)) and associated onshore export cable corridors would cross the A90 via trenchless crossing (CRL101 **Volume 3, Appendix 4.1**) a further time in addition to the three locations (CRL201, CRL301 and CRL401 **Volume 3, Appendix 4.1**) associated with the Landfall Options 1a/b and assessed previously. The additional onshore export cable corridor (Segment L1) would then join the other onshore export cable corridors to the west of the A90 near Lunderton and continue through the landscape to the south-west towards the River Ugie. Road users on the A90 would view up to a maximum of ten construction compounds and four onshore export cable corridors (Segments L1-L4) between St Fergus and the bend in the road at Hallmoss to the south, subject to intervening screening from vegetation. This would affect approximately 2.5km of the route, experienced by north and south bound road users for approximately two minutes (assuming 40mph to 60mph of continuous travel with no stops). The maximum of ten construction compounds would comprise the three landfall construction compounds, up to four trenchless crossing compounds along the A90 (CRL201, CRL301 and CRL40, **Volume 3, Appendix 4.1**) and up to two primary and two secondary construction compounds. Each of the compounds would be contained by perimeter wooden hoarding up to 2.4m high and accessed from the A90 by short sections of temporary construction access road (approximately 100m to 200m in length) (M-001, M-063, M-104, M-109). The trenchless crossings of the A90 (CRL201 and CRL301 **Volume 3, Appendix 4.1**) would retain all roadside vegetation within the trenchless crossing area (M-001, M-006). However, some additional vegetation may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access roads in the landfall zone (M-063, M-103, M-104, M-108).
- 27.10.3.15 The magnitude of change would be **high** and the level of effect would be **Major** and **Significant** almost continuously affecting 2.5km of the road for a sustained travel time duration as described previously for Option 1a.
- 27.10.3.16 Assuming construction of the onshore export cable corridor Segments L1 / L2 / L3 / L4 is completed in phase 1, then during phase 2 and 3 construction activities would be as described previously for Option 1a. The level of effect would be **Major to Major / Moderate** and **Significant** affecting 2.5km of the road for approximately 2 minutes of travel time. The nature of this effect would be medium-term duration, direct and adverse.
- 27.10.3.17 In the event that the onshore export cable corridor Segments L1 / L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.

Magnitude and level of effect during O&M and decommissioning

- 27.10.3.18 The effects would be as reported previously for Option 1a.

Visual effects on the A950

- 27.10.3.19 The A950 is routed through the LVIA study area between Peterhead and Longside, passing to the north of the onshore substation zone and to the south of Longside Airfield. This route is not a recognised scenic / tourist route (medium value / susceptibility), and the sensitivity is therefore assessed as **medium**.

Magnitude and level of effect during construction

- 27.10.3.20 During the construction stage the A950 would cross the onshore export cable corridor zone A once, at the onshore substations, to the south-east of Longfield Airfield. The A950 is located within the 5km study area for the onshore substations. It is remote from and visually disconnected from the landfall(s). Consequently, the A950 would have **no view** of the landfall(s).
- 27.10.3.21 During phase 1 of the construction stage the views from up to 3.25km of the A950 would be significantly affected by construction of the onshore export cable zones A and B and the onshore substations. This would affect west bound road users from between the coachworks / bus depot on the A95, to just past Bridgend of Faichfield; and east bound road users from between milestone 32, west of Faichfield House and the eastern edge of the onshore substation zone and primary construction compound (C)⁹. This would affect approximately five minutes of travel time (assuming 40mph to 60mph of continuous travel with no stops).
- 27.10.3.22 During phase 1 road users on the A950 would see opencut sections of the onshore export cable corridors, mainly to the south (onshore export cable zone B) with less visibility of the onshore export cable corridor zone A to the north of the A950, due to the intervening screening of other construction compounds. The onshore export cable corridor zone B would be visible between the onshore substations, north of East and West Thunderton and south of Bridgend of Faichfield, before connecting into SSEN Netherton Hub. The edge of the onshore export cable corridor zone B would be visible in the landscape at approximate distances of between 50m and 700m from the A950. Up to seven construction compounds would appear sequentially along the road comprising one primary (compound C) and two secondary construction compounds (compounds E and F) up to three trenchless crossing compounds (CRA109, CRB101 and CRB 103 **Volume 3, Appendix 4.1**) and the onshore substation temporary construction compound. The compounds would be contained by perimeter wooden hoarding up to 2.4m high and accessed from the A950 by short sections of temporary construction access road (approximately 100m to 200m in length) (M-001, M-063, M-104, M-109). The trenchless crossings (CRA109, CRB101 and CRB 103 **Volume 3, Appendix 4.1**) would retain all vegetation within the trenchless crossing area (M-001, M-006, M-027). However, some vegetation may need to be removed / managed to allow for temporary construction access and sightlines associated with construction access roads to each of the seven compounds (M-063, M-103, M-104, M-108). In addition, phase 1 of the onshore substation site construction would be visible along with craneage.
- 27.10.3.23 The magnitude of change would be **high**, and the level of effect would be **Major / Moderate and Significant** almost continuously affecting up to 3.25km of the A950 for a sustained five minutes of travel time. The programme for these construction works would be short-term, with the work carried out progressively along the onshore export cable corridors zones A and B. The reinstatement of the land to an agriculture appearance would be relatively quick with soils cultivated and grass areas recovered within approximately 12 months. The nature of this effect would be direct, temporary and adverse, noting that construction activity at the onshore substations and the primary and secondary construction compounds would be ongoing for the nine-year onshore construction stage.
- 27.10.3.24 During phase 2 the onshore export cable corridor and associated trenchless crossing compounds would have been reinstated / removed as noted previously. Periodic smaller scale and short-term periods of construction work would occur at joint bays (to pull cables through pre-installed ducts). There would, however, remain large scale change associated with the primary (C)¹⁰ and secondary (E and F) construction compounds and ongoing construction work at phase 2 of the onshore substation site, affecting a reduced section of

⁹ Reference IDs for primary and secondary construction compounds are shown on **Volume 2, Figure 27.2/1b**.

¹⁰ Reference IDs for primary and secondary construction compounds are shown on **Volume 2, Figure 27.1c and 3f/3g**.

the route (approximately 2km). The magnitude of change would range between **high to medium** and the level of effect would be **Major / Moderate** and **Significant** affecting approximately 2km of the A950 route for almost three minutes of travel time (assuming 40mph to 60mph of continuous travel with no stops). The nature of this effect would be medium-term duration, direct and adverse, increasingly changing to neutral / beneficial on account of the landscape and architectural mitigation described in **Volume 4: Outline Landscape and Architectural Strategy**.

- 27.10.3.25 During phase 3 large scale change associated with the primary (C) and secondary (E and F) construction compounds would continue, although construction of the phase 3 onshore substation and associated construction compound would be partly screened by phase 1 and 2 of the onshore substations and landscape mitigation which would be well established. The magnitude of change would range between **high to medium** and the level of effect would be **Major / Moderate** and **significant** affecting approximately 2km of the A950 route for almost three minutes of travel time (assuming 40mph to 60mph of continuous travel with no stops). The nature of this effect would be medium-term duration, direct and adverse, changing to neutral / beneficial on account of the landscape and architectural mitigation described in **Volume 4: Outline Landscape and Architectural Strategy**.

Magnitude and level of effect during O&M and decommissioning

- 27.10.3.26 During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor (M-066), but these are unlikely to have a visual effect greater than **negligible to zero** magnitude and a **Minor / Negligible** and **Not Significant** visual effect. The onshore substations and associated landscape and architectural mitigation described in **Volume 4: Outline Landscape and Architectural Strategy** would be visible as a new and significant feature in the landscape (M-093, M-111, M-185, M-201). The magnitude of change would remain **high**, and the level of effect would be **Major / Moderate** and **Significant** affecting approximately 1km of the A950 route for one to two minutes of travel time (assuming 40mph to 60mph of continuous travel with no stops). The nature of this effect would be long-term (reversible) and direct; however, the visual appearance would be neutral / beneficial subject to the implementation of the landscape and architectural mitigation described in **Volume 4: Outline Landscape and Architectural Strategy**.
- 27.10.3.27 Decommissioning works associated with the onshore substations would be largely screened by mature landscape mitigation (to be retained) (M-093, M-107, M-185, M-201) and is unlikely to be significant.

Visual effects on views from minor roads

- 27.10.3.28 There are 14 minor roads crossing the onshore export cable corridor or routed within close proximity to the onshore infrastructure. To be proportionate, a reduced assessment of the visual effects on views from minor roads is presented in **Table 27.17**. This part of the assessment has drawn from the viewpoint analysis and preceding landscape and visual assessment (notably the transport route assessments of the A90 and A950) which provides an indication of the likely level and nature of the visual effect.
- 27.10.3.29 In addition, scattered individual and groups of residential properties are located along these minor roads. Those most likely to be significantly affected are considered further in **Volume 3, Appendix 27.3**.
- 27.10.3.30 In summary there would be significant visual effects from all 14 of these minor roads during the construction stage with most of these effects limited to phase 1. During the O&M stage significant visual effects would affect six of the minor roads due to the visual effects of the onshore substations. Decommissioning of the onshore substations would result in significant effects from six of the minor roads.

- 27.10.3.31 Potential further mitigation (beyond the onshore substation zone) could reduce and contain these effects as described in **Volume 4: Outline Landscape and Architectural Strategy**.

Sensitivity

- 27.10.3.32 People travelling along the minor road network will experience the landscape and views at a lower speed and an appreciation of the landscape is a likely factor of that activity. Most of these routes, however, are not recognised scenic / tourist routes (medium value / susceptibility) and the sensitivity is therefore assessed as **medium**.
- 27.10.3.33 Two of the minor roads (Nos. 1, 3 and 4) are overlapped by core paths 217.01 and L30R, and the Rora Moss Circular local cycle route and have been assessed as **high** sensitivity due to their recognition as recreational / scenic routes.

Table 27.17 Visual effects on views from minor roads

Visual receptor: minor road	High-level assessment
Construction – temporary short - medium term adverse effects	
1. Road to Scotstown Beach (also core path 217.01 and L30R)	<p>As this route is also overlapped by core paths 217.01 and L30R and a local cycle route the sensitivity of this receptor has been assessed as high.</p> <p>There would be significant visual effects on the views from this route to Scotstown Beach within approximately 500m of the Scotstown landfall (Option 2) affecting views from up to approximately 1km of the road (see Volume 3, Appendix 27.2, Figure 21a-b). The magnitude would be high to medium and the level of effect Major to Major / Moderate and Significant, reducing to Not Significant levels of effect beyond approximately 500m of the Scotstown landfall (Option 2). The nature of this effect would be medium-term duration (affecting phases 1 to 3), direct and adverse.</p>
2. Road between Kinloch / North Kirkton / St Fergus Church	<p>There would be significant visual effects on the views from this route within approximately 500m of the opencut crossing (CRL102 Volume 3, Appendix 4.1) and related to views of the primary (A)¹¹ and secondary (A) construction compounds affecting views from up to approximately 1km of the road (see Volume 3, Appendix 27.2, Figure 19a-c). The magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant, reducing to Not Significant levels of effect beyond approximately 500m of the opencut crossing. The nature of this effect would be medium-term duration (affecting phases 1 to 3 due to the construction compounds), direct and adverse.</p>
3. Rora Moss Circular / Road between Kinloch / Bearhill / Hallmoss Cottage	<p>This minor road is also overlapped by the Rora Moss Circular, local cycle route indicating high sensitivity.</p> <p>There would be significant visual effects on the views from approximately 1km this route viewing east from Bearhill across the wider landfall zone and viewing multiple construction activity related to the landfall(s) at Lunderton North and South (Option 1a, 1b and 2). The magnitude would be high to medium and the level of effect Major to Major / Moderate and Significant, reducing to Not Significant levels of effect beyond this section of the road due to increased levels of screening. The nature of this effect would be short-term duration (affecting phase 1), direct and adverse.</p>

¹¹ Reference IDs for primary and secondary construction compounds are shown on **Volume 2, Figure 27.2/1b**.

Visual receptor: minor road	High-level assessment
	<p>Assuming construction of the onshore export cable corridor Segments L1 / L2 / L3 / L4 is completed in phase 1, then during phases 2 to 3 the likelihood of significant effects would be reduced as the onshore export cable corridor (within the landfall zone) would be backfilled and activity at the construction compounds / joint bays reduced.</p> <p>In the event that the onshore export cable corridor Segments L1 / L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.</p>
<p>4. Rora Moss Circular / Road between Ednie / Kincairn / Hallmoss A90</p>	<p>This minor road is also overlapped by the Rora Moss Circular, local cycle route indicating high sensitivity.</p> <p>There would be significant visual effects on the views from approximately 1.5km of this route (including a group of residential properties at Hallmoss) related to the opencut crossing (CRL203 Volume 3, Appendix 4.1) and views across the wider landfall zone views of primary (B)¹² and secondary (C) construction compounds (see Volume 3, Appendix 27.2, Figure 13a-c). The magnitude would be high to medium and the level of effect Major to Major / Moderate and Significant and Significant, reducing to Not Significant levels of effect beyond approximately 1.5km of this route due to increased levels of screening. The nature of this effect would be medium-term duration (affecting phases 1 to 3), direct and adverse.</p> <p>Assuming construction of the onshore export cable corridor Segments L1 / L2 / L3 / L4 is completed in phase 1, then during phases 2 to 3 the likelihood of significant effects would be reduced as the onshore export cable corridor (within the landfall zone) would be backfilled and activity at the construction compounds / joint bays reduced.</p> <p>In the event that the onshore export cable corridor Segments L1 / L2 / L3 / L4 are constructed in either phase 2 or phase 3 then the associated landscape effects would occur in either phase 2 or phase 3 and not phase 1.</p>
<p>5. Road between Torterston Road / Easterton / Inverurgie / Hallmoss</p>	<p>There would be significant visual effects on the views within approximately 500m distance from the opencut crossing (CRA101 Volume 3, Appendix 4.1) and secondary (D) construction compound near Easterton, affecting approximately 1km of the route (see Volume 3, Appendix 27.2, Figure 8a-b and also within approximately 500m of the trenchless crossing compound on the hill near Hallmoss (see Volume 3, Appendix 27.2, Figure 12a-c). The magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant, affecting approximately 1.25km of this route reducing to Not Significant levels of effect beyond. The nature of this effect would be medium-term duration (affecting phases 1 to 3), direct and adverse.</p>
<p>6. Road between Torterston / Torterston Road / Inverurgie</p>	<p>There would be significant visual effects on the views within approximately 2m-400m distance from the opencut crossing (CRA101 Volume 3, Appendix 4.1) viewing along the onshore export cable corridor, during phase 1, although it is likely this road will be temporarily closed for part of this stage. Otherwise views from along this road are likely to be screened by intervening landform and roadside vegetation. The magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant, affecting approximately 100m of this route reducing to Not Significant levels of effect beyond. The nature</p>

¹² Reference IDs for primary and secondary construction compounds are shown on **Volume 2, Figure 27.2/1b**.

Visual receptor: minor road	High-level assessment
	<p>of this effect would be short-term duration (phase 1 only), direct and adverse. During phases 2 to 3 the likelihood of significant effects would be reduced and limited to activity at joint bays.</p>
<p>7. Torterston Road / A950</p>	<p>There would be significant visual effects on the views from the whole length of this road (1.2km distance) with much of the route within approximately 500m from the onshore export cable corridor (Segments A1 and A2) routed to the east and west of this road and in part parallel to it). (See Volume 3, Appendix 27.2, Figure 1 and Figure 5). Torterston Road provides access to a number of residential properties and may be crossed twice (CRA104 and CRA202 Volume 3, Appendix 4.1) if both Segments A1 and A2 are required although it is likely that these crossings would be undertaken consecutively, during phase 1. In addition, primary construction compound C and construction of the onshore substations and the associated temporary construction compound would be visible to the south affecting up to approximately 500m of the southern part of the route.</p> <p>There is limited or no roadside screening vegetation and the magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant, affecting the full 1.2km of this route. The nature of this effect would be short-term duration in the northern part of this route and medium-term in the southern part of the route as well as direct and adverse.</p> <p>Depending on the phasing scenario or order in which the substations are constructed the southern block (maximum design scenario) would be screened by the northern block although the visual effects would continue to be apparent as a result of the northern block. During phases 2 to 3 the likelihood of significant effects would be reduced to approximately 500m of the southern part of the route as the onshore export cable corridor would be backfilled and significant visual effects would result from viewing the primary construction compound C and phases 2 to 3 of the onshore substations. The nature of these effects would be of medium-term duration as well as direct and adverse. These views are also likely to affect the views from groups of residential properties along this road.</p> <p>Elsewhere, visible construction would be limited to activity at joint bays.</p>
<p>8. Downiehills Farm Road</p>	<p>Similar to Torterston Road, the views from Downiehills Farm Road would also be significantly affected by views of the onshore export cable corridor zone A and zone B, and the onshore substations at two locations, subject to the retention / loss of intervening screening. (Note woodland and other vegetation G194, G199, H37, T198-199 and T201-202 would be removed, leading to a permanent and adverse effect, see Section 27.9.3). The magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant, affecting approximately 600m of this route. The nature of these effects would be, however, medium-term duration and permanent in terms of woodland loss (see Volume 3, Appendix 27.2, Figure 1 and Volume 3, Appendix 27.2, Figure 5).</p>
<p>9. Minor road east of the onshore substations</p>	<p>There would be significant visual effects on the views from the whole length of this road (800m distance) as it bounds the eastern boundary of the onshore substation zone. During phases 1 to 3 there would be views of on-going construction activity involving the temporary construction compound and phases 1 to 3 of the onshore substation site. During phases 1-2 magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant. The nature of this effect would be short to medium-term duration, direct and adverse.</p>

Visual receptor: minor road	High-level assessment
	<p>During phases 1 to 3 the landscape and architectural mitigation described in Volume 4: Outline Landscape and Architectural Strategy would become increasingly visible as a new and significant feature in the landscape, with landscape screening likely to completely screen out views of the onshore substations by phase 3 resulting in a neutral / beneficial effect subject to the implementation of the landscape and architectural mitigation.</p>
<p>10. Minor road south of the onshore substations between Stockbridge and Lochside</p>	<p>As above, there would be significant visual effects on the views from most of this road (1.25km distance), as it bounds the southern boundary of the onshore substation zone. In addition, there would be views of the onshore export cable corridor and associated trenchless crossing compounds and secondary construction compound E.</p> <p>During phase 1 magnitude resulting from the onshore export cable corridor and associated trenchless crossing compounds and secondary construction compound E would be medium and the level of effect Moderate and Significant. This would reduce to low and Minor and Not Significant during phases 2 to 3. The nature of this effect would be short to medium-term duration, direct and adverse.</p> <p>During phases 1 to 3 magnitude resulting from the onshore substations would be high to medium and the level of effect Major / Moderate to Moderate and Significant. The nature of this effect would be short to medium-term duration, direct and adverse. (See Volume 3, Appendix 27.2, Figure 2 and Figure 3).</p> <p>During phases 1 to 3 the landscape and architectural mitigation described in Volume 4: Outline Landscape and Architectural Strategy would become increasingly visible as a new and significant feature in the landscape, with landscape screening likely to completely screen out views of the onshore substations from the eastern most 800m of the route by phase 3 resulting in a neutral / beneficial effect subject to the implementation of the landscape and architectural mitigation.</p> <p>Significant residual effects would remain for the 450m of the western part of this route, due to the visibility of the onshore substations. The nature of this effect would be medium-term duration, direct and adverse.</p>
<p>11. Minor road south of the onshore substations to Hillhead of Cocklaw</p>	<p>There would be significant visual effects on the views from most of this road (1km distance) as it climbs the hill to the south of the onshore substation zone. During phases 1 to 3 there would be views of on-going construction activity involving the temporary construction compound and phases 1 to 3 of the onshore substations. Due to the increasing elevation, landscape mitigation within the onshore substation zone (M-201) would not screen the onshore substations, although it would enclose them. (see Volume 3, Appendix 27.2, Figure 11 which is similar, although more distant).</p>
<p>12. Minor road west of the onshore substations between A950 and West Toddlehills</p>	<p>There would be significant visual effects on the views from most of this road (1.7km distance) involving and open cut crossing (CRB102 Volume 3, Appendix 4.1) of the onshore export cable corridor zone B and associated trenchless crossing compounds and secondary construction compounds E and F. There would also be eastward views of the onshore substations during construction (phases 1 to 3) and the associated temporary construction compound (see Volume 3, Appendix 27.2, Figure 3). The magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant. The nature of this effect would be medium-term duration, direct and adverse. Due to</p>

Visual receptor: minor road	High-level assessment
	the height of the onshore substations' landscape mitigation within the onshore substation zone would not be able to provide screening.
13. Minor road between A950 and Toddlehills	There would be significant visual effects on the views from most of this road (1.5km distance) despite the trenchless crossing (CRB103 Volume 3, Appendix 4.1). Significant visibility would result from views of the trenchless crossing compounds and secondary construction compound F and eastward views of the onshore substations' construction involving phases 1 to 3. (See Volume 3, Appendix 27.2, Figure 6). The magnitude would be high to medium and the level of effect Major / Moderate to Moderate and Significant . The nature of this effect would be medium-term duration, direct and adverse. Due to the height of the onshore substations' landscape mitigation within the onshore substation zone would not be able to provide screening.
14. Minor road between Toddlehill Cottage and Netherton	<p>There would be very limited significant visual effects on the views from this road, affecting 50m at the northernmost corner, viewing north towards the secondary construction compound (F)¹³ at approximately 500m distance. The magnitude would be medium and the level of effect Moderate and Significant. The nature of this effect would be medium-term duration, direct and adverse.</p> <p>Elsewhere along this route, views east towards the onshore substations would be mostly screened by intervening mature trees at Parkhill and Stockbridge and views further west of the northernmost corner would be screened by mature and well-maintained hedgerows. The magnitude would be low to negligible and the level of effect Minor to Minor / Negligible and Not Significant. The nature of this effect would be medium-term duration, direct and neutral.</p>
O&M – long-term (reversible) neutral / beneficial effects	
1. Road to Scotstown Beach	During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor (within the landfall zone), but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
2. Road between Kinloch / North Kirkton / St Fergus Church	As above.
3. Rora Moss Circular / Road / between Kinloch / Bearhill / Hallmoss Cottage	As above.
4. Rora Moss Circular / Road / between Ednie / Kincairn / Hallmoss A90	As above.

¹³ Reference IDs for primary and secondary construction compounds are shown on **Volume 2, Figure 27.2/1b**.

Visual receptor: minor road	High-level assessment
5. Road between Torterston Road / Easterton / Inverurgie / Hallmoss	As above.
6. Road between Torterston / Torterston Road / Inverurgie	As above.
7. Torterston Road / A950	There would be no significant visual effects resulting from the O&M of the onshore export cable corridor. Views of the onshore substations would be of medium magnitude and the level of effect would be Moderate and Significant affecting approximately 500m of this road. The nature of this effect would be long-term (reversible), direct and adverse. Due to the maximum height of the onshore substations, landscape planting within the onshore substation zone would not be able to provide mitigation.
8. Downiehill Farm Road	Similar to Torterston Road, the views from part of Downiehill Farm Road would continue to be significantly affected (Major / Moderate to Moderate and Significant , affecting approximately 600m of this route) by the onshore substations and the permanent loss of woodland vegetation occurring during construction. Due to the maximum height of the onshore substations, landscape planting within the onshore substation zone would not be able to provide mitigation.
9. Minor road east of the onshore substations	During O&M significant views of the onshore substations would be mitigated by Volume 4: Outline Landscape and Architectural Strategy .
10. Minor road south of the onshore substations between Stockbridge and Lochside	<p>During O&M significant views of the onshore substations from approximately 800m of this road would be mitigated by landscape and architectural mitigation described in Volume 4: Outline Landscape and Architectural Strategy.</p> <p>Significant visual effects of the onshore substations from approximately 450m of this road however would remain during O&M (See Volume 3, Appendix 27.2 Figure 3). The magnitude would be medium and the level of effect Moderate and Significant. The nature of this effect would be long-term (reversible), direct and adverse. Due to the maximum height of the onshore substations, landscape planting within the onshore substation zone would not be able to provide mitigation.</p>
11. Minor road south of the onshore substations to Hillhead of Cocklaw	During O&M there would be significant views of the onshore substations for 1km of this route (See Volume 3, Appendix 27.2, Figure 11). The magnitude would be medium and the level of effect Moderate and Significant . The nature of this effect would be long-term (reversible), direct and adverse. Due to the increased elevation landscape mitigation would not be able to provide screening.
12. Minor road west of the onshore substations between A950 and West Toddlehill	During O&M there would be significant views of the onshore substations from most of this road (see Volume 3, Appendix 27.2, Figure 3). The magnitude would be medium and the level of effect Moderate and Significant . The nature of this effect would be long-term (reversible), direct and adverse. Due to the height of the onshore substations landscape mitigation within the onshore substation zone would not be able to provide screening.

Visual receptor: minor road	High-level assessment
13. Minor road between A950 and Toddlehill	<p>During O&M there would be significant views of the onshore substations (see Volume 3, Appendix 27.2, Figure 6). The magnitude would be medium and the level of effect Moderate and Significant. The nature of this effect would be long-term (reversible), direct and adverse.</p> <p>Due to the height of the onshore substations, landscape mitigation within the onshore substation zone would not be able to provide screening.</p>
14. Minor road between Toddlehill Cottage and Netherton	<p>During O&M there would be no visible above ground infrastructure associated with the onshore export cable corridor zone B and visible activity would be limited to periodic small scale maintenance activities which would not be significant.</p> <p>Views of the onshore substations would be mostly screened by intervening mature trees at Parkhill and Stockbridge. Overall, the magnitude of change would be negligible and the level of effect Minor / Negligible and Not Significant. The nature of this effect would be of long-term duration (reversible), direct and neutral.</p>
Decommissioning (onshore substations) – long-term (reversible) neutral / beneficial effects	
Minor roads 1 to 6	There would be Minor / Negligible and Not Significant to no view of decommissioning activity of the onshore substations.
7. Torterston Road / A950	Decommissioning works would reduce significant visual effects from Moderate and Significant affecting approximately 500m of this road to zero or no view . The nature of this effect would be permanent, direct and adverse to neutral.
8. Downiehills Farm Road	Decommissioning works would reduce significant visual effects from Major / Moderate to Moderate and Significant affecting approximately 600m of this road to zero or no view . The nature of this effect would be permanent, direct and adverse to neutral.
9. Minor road east of the onshore substations	During decommissioning significant views of the onshore substations would be mitigated by landscape and architectural mitigation described in Volume 4: Outline Landscape and Architectural Strategy .
10. Minor road south of the onshore substations between Stockbridge and Lochside	Decommissioning works would reduce significant visual effects from Moderate and Significant affecting approximately 450m of this road to zero or no view . The nature of this effect would be permanent, direct and adverse to neutral.
11. Minor road south of the onshore substations to Hillhead of Cocklaw	Decommissioning works would reduce significant visual effects from Moderate and Significant affecting approximately 1km of this road to zero or no view . The nature of this effect would be permanent, direct and adverse to neutral.
12. Minor road west of the onshore substations between A950 and West Toddlehills	Decommissioning works would reduce significant visual effects from Moderate and Significant affecting most of this road to zero or no view . The nature of this effect would be permanent, direct and adverse to neutral.

Visual receptor: minor road	High-level assessment
13. Minor road between A950 and Toddlehills	Decommissioning works would reduce significant visual effects from Moderate and Significant affecting most of this road to zero or no view . The nature of this effect would be permanent, direct and adverse to neutral.
14. Minor road between Toddlehill Cottage and Netherton	Decommissioning works would reduce visual effects from Minor / Negligible and Not Significant to zero or no view . The nature of this effect would be permanent, direct and adverse to neutral.

27.10.4 Visual effects on recreational routes

- 27.10.4.1 The visual assessment has considered the potential sequential visual effects likely to be experienced by people (walkers / cyclists / horse riders / and others) on recreational routes within the LVIA study area as illustrated in **Volume 2, Figure 27.5a** and **Volume 2, Figure 27.5b**.
- 27.10.4.2 The visual assessment has involved desk-based analysis of sequential wirelines and ZTV maps and walking part of these routes to assess the potential effects of the Project. The recreational routes included in the assessment are listed in **Section 27.6.1**.
- 27.10.4.3 In summary, there would be significant visual effects on the views from the following recreational routes, some of which overlap with transport routes:
- The Formartine and Buchan Way – approximately 100m to 200m of the route (overlapped with the Rora Moss Circular) would be significantly affected during phase 1 of the construction stage as a result of the onshore export cable corridor zone A;
 - A90 / North East 250, The Coastal Trail and core path 215.02 – approximately 500m of the route would be significantly affected during the construction stage as assessed previously under transport routes in **Section 27.10.3**.
 - core path 7LD.01.18 / Kirktown Beach Footpath – approximately 2km of the coastal route would be significantly affected at two locations within the landfall zone during the construction stage;
 - core path 217.01 and L30R, overlapping with the minor road accessing Scotstown Beach - approximately 500m of the route would be significantly affected as a result of the Scotstown landfall during the construction stage; and
 - Rora Moss Circular, overlapping with minor roads - approximately 2km of the route would be significantly affected during phase 1 of the construction stage as a result of the onshore export cable corridor zone A and within the landfall zone.
- 27.10.4.4 There would be no significant effects during O&M or decommissioning from any of the onshore Project infrastructure.

Visual effects on The Formartine and Buchan Way

- 27.10.4.5 The Formartine and Buchan Way is one of Scotland's Great Trails and a long-distance route following former railway lines between Dyce, Maud, Peterhead and Fraserburgh. The eastern section of this route between Longside and Peterhead is located within the 5km onshore substations study area and is also overlapped by the 7LD.03MP.05 core path and the Rora Moss Circular, local cycle route.

Sensitivity

- 27.10.4.6 This route is of national importance as one of Scotland's Great Trails, indicating high value. People on this route will be viewing the landscape and the susceptibility of walkers, cyclists and horse riders on this route is **high**. The sensitivity of this route is therefore assessed as **high**.

Magnitude and level of effect during construction

- 27.10.4.7 During the construction stage The Formartine and Buchan Way would be crossed by an open cut trench (CRA102) and it is likely the route would be subject to a temporary closer and short diversion during this construction work (M-026, M-110). The duration of this work is likely to be completed within a matter of weeks and would be carried out progressively as part of the onshore export cable construction during phase 1. During this period walkers, cyclists and horse riders using the short temporary diversion would experience a **high** magnitude of change affecting approximately 100m to 200m of the diversion route, viewing along and across the onshore export cable corridor, before re-joining the route which is in a section of former railway cutting approximately 2m to 3m deep.
- 27.10.4.8 The level of effect would be **Major and Significant** affecting a short section of the route, experienced for several minutes while crossing the diversion. The nature of this effect would also be direct, temporary (short-term) and adverse.
- 27.10.4.9 Once completed, The Formartine and Buchan Way would be re-opened and due to the deep cutting, walkers, cyclists and horse riders would be unable to view further construction activities from the route. It is unlikely that even the top of the 70m crane at the onshore substation site would be visible (see **Volume 2, Figure 27.2b**) due to intervening landform on each side of the route and there would be **no view** of the construction works associated with the onshore infrastructure of the Project during the remainder of phase 1 or during phases 2 to 3.

Magnitude and level of effect during O&M and decommissioning

- 27.10.4.10 During O&M there would be no visible above ground infrastructure associated with onshore export cable corridor zone A or onshore substations, and it is unlikely that any periodic maintenance activities would be visible. Therefore, there would continue to be **no view** of O&M activities during this stage.
- 27.10.4.11 As during construction, there would be limited or no views of decommissioning activity of the onshore substations.

Visual effects on views from local recreational routes

- 27.10.4.12 There are five core paths, and a further four local paths from the Buthlaw River Ugie Path Network, and the Kirktown Beach Footpath (which are not part of the core path network); and the Rora Moss Circular - local cycle route within the LVIA study area. An assessment of the visual effects on views from these routes is presented in Table 27.18. This part of the assessment has drawn from the viewpoint analysis and preceding landscape and visual assessment which provides an indication of the likely level and nature of the visual effect.
- 27.10.4.13 In summary there would be significant visual effects on the views from the core path 7LD.01.18 / Kirktown Beach Footpath at two locations of this coastal path along the dunes. As noted previously, the views from two other core paths (core paths 215.02 and 217.01 / L30R) would be significantly affected, although these overlap with the A90 / North East 250 and The Coastal Trail tourist routes and the minor road accessing Scotstown Beach, all of which have been assessed previously in **Section 27.10.3**. The view from part of the Rora

Moss Circular local cycle route which overlaps with The Formartine and Buchan Way and the local road network would also be significantly affected and an assessment accounting for all of these receptors which overlap each other is provided in **Table 27.17**.

- 27.10.4.14 There would be no significant effects during O&M of any onshore infrastructure elements and no significant effects as a result of decommissioning of the onshore substations.

Sensitivity

- 27.10.4.15 People travelling along these recreational routes would experience the landscape and views at a lower speed and an appreciation of the landscape is likely to be a strong factor of that activity. Each of these routes has been assessed as of **high** sensitivity due to their **high to medium** local value and the **high** susceptibility of walkers, cyclists and where applicable horse riders using these routes.

Table 27.18 Visual effects on views from local recreational routes

Visual receptor	Assessment of local recreational routes
Construction – temporary short - medium term adverse effects	
Core path network	
Core path 208.01	<p>Core path 208.01 at Longside is routed to the west of the settlement along a track, joining Inn Brae to the north of the cemetery with a with proposed link to school on Inn Brae.</p> <p>The whole of this route is outwith the 2km study area for the onshore export cable corridor, although it is partly within the western edge of the 5km study area for the onshore substations. The ZTV in Volume 2, Figure 27.2b indicates there may be some partial views of the top of a crane from the same areas. Further viewpoint analysis confirms that views of the onshore substations would be screened by intervening vegetation not accounted for in the ZTV and views of the top of a crane would be unlikely (negligible to zero magnitude). As a precaution the level of effect from near the school on Inn Brae would be Minor and Not Significant with potential glimpsed views of the top of a crane appearing intermittently, subject to the need for craneage through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.</p>
Core path 215.11	<p>Core path 215.11 is located to the immediate west of Peterhead, following a minor road / track, approximately 1.8km east of the Onshore Red Line Boundary and approximately 2km from the onshore substation zone at its closest point.</p> <p>The ZTV in Volume 2, Figure 27.2b indicates views of the top of a crane may be more widely visible. Further viewpoint analysis confirms that views of the onshore substations would be screened by intervening vegetation not accounted for in the ZTV, although views of the top of a crane would be possible and most likely during the Winter months (negligible to zero magnitude). The level of effect would be Minor and Not Significant with potential glimpsed views of the top of a crane appearing intermittently, subject to the need for craneage through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.</p>
Core path 215.02	See assessment of the A90 (overlapped with the North East 250 and The Coastal Trail tourist routes) in Section 27.10.3 .

Visual receptor	Assessment of local recreational routes
	In summary there would be Significant visual effects viewed from approximately 500m of the route during the construction stage and related to construction within the landfall zone. The nature of this effect would be medium-term duration direct and adverse.
Core path 7LD.01.18 / Kirktown Beach Footpath	<p>Core path 7LD.01.18 appears to overlap with the Kirktown Beach Footpath, which also provides access to the St Fergus Church and churchyard.</p> <p>Visualisations from along this coastal route are illustrated in Volume 3, Appendix 27.2, Figure 15a, Figure 16a, Figure 20b and Figure 22a-b.</p> <p>Viewpoint analysis indicates that significant visual effects would be likely within approximately 765m (Viewpoint 15) and 600m (Viewpoint 16) of the landfall Options 1a/b and 2, viewing intermittently from the tops of the dunes, subject to forestry screening. Drawing from this analysis and site visits the magnitude of change would range between medium and low from approximately 1km of this path in the south viewing towards the landfall construction compounds at Lunderton North (partly screened by forestry), Lunderton South and Scotstown.</p> <p>Within these areas the level of effect would be range between Major / Moderate and Moderate and Significant through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and adverse.</p>
Core path 217.01 and L30R	<p>Core path 217.01 and L30R are routed along the minor road accessing Scotstown Beach, off the A90. An assessment accounting for both the minor road and the core path which overlap each other is provided in Table 27.17.</p> <p>In summary there would be Significant visual effects viewed from approximately 500m of the route during construction. The nature of this effect would be medium-term duration direct and adverse.</p>
Buthlaw River Ugie path network	
JC Buthlaw Ugie Walk	<p>The JC Buthlaw Ugie Walk is routed to the north of The Formartine and Buchan Way at approximately 1.8km distance from the Onshore Red Line Boundary and the onshore substation zone as well as being located beyond Longside Airfield. Much of the route along the River Ugie is outwith the LVIA study area.</p> <p>The ZTV in Volume 2, Figure 27.2b indicates views of the top of a crane, associated with construction of the onshore substations may be more widely visible. Further viewpoint analysis confirms that views of the onshore substations would be screened by intervening landform and vegetation not accounted for in the ZTV. Although views of the top of a crane would be possible (negligible to zero magnitude). The level of effect would be Minor and Not Significant with potential glimpsed views of the top of a crane appearing intermittently, subject to the need for crange through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.</p>
JC Faichfield Buthlaw Walk	<p>The JC Faichfield Buthlaw Walk is routed to the north and west of Longside Airfield, approximately 500m distance from the Onshore Red Line Boundary and approximately 1.5km distance from the onshore substations.</p> <p>The ZTV in Volume 2, Figure 27.2b indicates views of the top of a crane may be more widely visible. Further viewpoint analysis confirms that views of the onshore substations would be screened by intervening development at Longside Airfield although views of the top of a crane would be possible (negligible to zero magnitude). The level of effect would be Minor and Not Significant with potential</p>

Visual receptor	Assessment of local recreational routes
	glimpsed views of the top of a crane appearing intermittently, subject to the need for cramage through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.
JC Longside Innerfummary Loop	The JC Longside Innerfummary Loop partly overlaps with core path 208.01 at Longside near the cemetery but then continues further south along the western edge of the 5km study area for the onshore substations. The western part of the path is outwith the LVIA study area. The ZTV in Volume 2, Figure 27.2b indicates views of the top of a crane would be unlikely (negligible to zero magnitude). As a precaution the level of effect would be Minor and Not Significant with potential glimpsed views of the top of a crane appearing intermittently, subject to the need for cramage through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.
JC The Grave	The JC The Grave is routed along Inn Brae and partly overlaps with core path 208.01, before entering Longside settlement along Laburnun Lane. As noted in the previous assessment, views of the onshore substations would be screened, although the top of a crane may be visible during construction. As a precaution the level of effect would be Minor and Not Significant during phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.
Other local routes	
Rora Moss Circular	<p>The Rora Moss Circular is a local cycle route and within the LVIA study area it is routed along minor roads between St Fergus, Kinloch, Bearhill, Hallmoss, Inverugie and The Formartine and Buchan Way.</p> <p>An assessment accounting for both the minor road (Nos. 3 and 4) and the Rora Moss Circular which overlap each other is provided in Table 27.17 and The Formartine and Buchan Way assessment at the beginning of this Section.</p> <p>In summary Significant visual effects would result from the onshore export cable corridor zone A and associated temporary construction compounds, viewed from approximately 2km of the route during construction phase 1. These effects would overlap with the assessment for minor roads (Nos. 3 and 4) and approximately 100m to 200m of The Formartine and Buchan Way, assessed previously. The nature of this effect would be short-term duration, direct and adverse.</p>
O&M – long-term (reversible) neutral / beneficial effects	
Core path network	
Core path 208.01	The ZTV in Volume 2, Figure 27.2a indicates limited ZTV overlap of approximately 500m of the route near the school, cemetery and area of track close to the LVIA study area boundary. During O&M views of the onshore substations are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Core path 215.11	The ZTV in Volume 2, Figure 27.2a indicates limited ZTV overlap of approximately 100m of the route. During O&M views of the onshore substations are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Core path 215.02	See assessment of the A90 (overlapped with the North East 250 and The Coastal Trail tourist routes) in Section 27.10.3 .

Visual receptor	Assessment of local recreational routes
	During O&M there would be no view of the onshore substations from this route. Small scale periodic maintenance activities may be visible along the onshore export cable corridor, but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Core path 7LD.01.18 / Kirktown Beach Footpath	During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor, but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Core path 217.01 and L30R	Core path 217.01 and L30R are routed along the minor road accessing Scotstown Beach, off the A90. An assessment accounting for both the minor road and the core path which overlap each other is provided in . In summary there would be no significant effects during O&M.
Buthlaw River Ugie path network	
JC Buthlaw Ugie Walk	The ZTV in Volume 2, Figure 27.2a indicates very limited sections of the route would overlap the ZTV, however mature intervening vegetation and built form would mostly screen the development in all seasons. During O&M there would be negligible to no view of the onshore substations or associated maintenance activities along the onshore export cable corridor zone B from this route.
JC Faichfield Buthlaw Walk	The ZTV in Volume 2, Figure 27.2a indicates very limited sections of the route would overlap the ZTV, however mature intervening vegetation and built form would screen the development in all seasons. During O&M there would be no view of the onshore substations or associated maintenance activities along the onshore export cable corridor zone B from this route.
JC Longside Innerfummery Loop	During O&M there would be no view of the onshore substations or associated maintenance activities along the onshore export cable corridor zone B from this route.
JC The Grave	During O&M there would be no view of the onshore substations or associated maintenance activities along the onshore export cable corridor zone B from this route.
Other local routes	
Rora Moss Circular	During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor, but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Decommissioning (onshore substations) – long-term (reversible) neutral / beneficial effects	
Core path network	
Core path 208.01	Allowing for the onsite mitigation (mature woodland) with the exception of the top of a crane, there would be no view of decommissioning activity of the onshore substations.

Visual receptor	Assessment of local recreational routes
Core path 215.11	Allowing for the onsite mitigation (mature woodland) with the exception of the top of a crane, there would be no view of decommissioning activity of the onshore substations.
Core path 215.02	There would be no view of decommissioning activity of the onshore substations.
Core path 7LD.01.18 / Kirktown Beach Footpath	There would be no view of decommissioning activity of the onshore substations.
Core path 217.01 and L30R	There would be no view of decommissioning activity of the onshore substations.
Buthlaw River Ugie Path Network	
JC Buthlaw Ugie Walk	Allowing for the onsite mitigation (mature woodland) with the exception of the top of a crane, there would be no view of decommissioning activity of the onshore substations.
JC Faichfield Buthlaw Walk	Allowing for the onsite mitigation (mature woodland) with the exception of the top of a crane, there would be no view of decommissioning activity of the onshore substations.
JC Longside Innerfummary Loop	Allowing for the onsite mitigation (mature woodland) with the exception of the top of a crane, there would be no view of decommissioning activity of the onshore substations.
JC The Grave	Allowing for the onsite mitigation (mature woodland) with the exception of the top of a crane, there would be no view of decommissioning activity of the onshore substations.
Other local routes	
Rora Moss Circular	There would be no view of decommissioning activity of the onshore substations.

27.10.5 Visual effects on recreational and visitor attractions

- 27.10.5.1 The visual assessment has considered the visual effects likely to be experienced by people at recreational / visitor or tourist attractions which are overlapped by the ZTV, within the LVIA study area as illustrated in **Volume 2, Figure 27.5a** and **Volume 2, Figure 27.5b**.
- 27.10.5.2 The visual assessment has involved desk-based analysis of wirelines, ZTV maps and site visits to these locations. The tourist / visitor attraction receptors have been assessed as of **high** sensitivity on account of their **high to medium** value as recreational and tourist destinations and the **high** susceptibility of the people visiting these destinations, whose attention would be focused on the landscape around them.
- 27.10.5.3 The recreational receptor locations are focused on golfing activities, and these have been assessed as of **medium** sensitivity considering that landscape would be a secondary concern of the activity.
- 27.10.5.4 An assessment of the visual effects on views from these locations is presented in **Table 27.19**. This part of the assessment has drawn from the viewpoint analysis and preceding

landscape and visual assessment which provides an indication of the likely level and nature of the visual effect.

27.10.5.5 In summary, there would be significant visual effects on the views from the following recreational and tourist / visitor attractions:

- Scotstown Beach, St Fergus – viewing approximately 300m distance from the carpark and picnic area towards the Scotstown landfall construction compound (Landfall Option 2); and
- the northern part of Peterhead Golf Course – viewing approximately 300m distance from the course towards the Lunderton South landfall construction compound (Landfall Option 1b and 2).

27.10.5.6 There would be no significant effects during O&M and decommissioning.

Table 27.19 Visual effects on views from recreational and visitor attractions

Visual receptor	Assessment of local recreational routes
Construction – temporary short - medium term adverse effects	
Tourist / visitor attractions	
Reform Tower, Peterhead	<p>The Reform Tower is located in public open space at Meet Hill in Peterhead, it was built in 1832, on a prehistoric site to commemorate The 1832 Reform Act.</p> <p>The views from the base of the Reform Tower are illustrated in Volume 3, Appendix 27.2, Figure 14. An assessment of this viewpoint is provided in Volume 3, Appendix 27.2.</p> <p>In summary there would be no significant visual effects. As a precaution a Minor and Not Significant effect has been noted due to the potential glimpsed views of the top of a crane during the construction stage for the onshore substations (phases 1, 2 and 3). The nature of these effects would be medium-term, temporary, indirect and neutral.</p>
St Fergus Churchyard	<p>St Fergus Church is a ruined building and churchyard with several interesting gravestones and wide-open views across the sea, coastal dunes and surrounding coastal grassland. The closest visualisation from this location is illustrated in Volume 3, Appendix 27.2, Figure 22a-b at approximately 600m further north.</p> <p>The attraction is located approximately 1.25km south of the Scotstown landfall construction compound (Landfall Option 2) and the magnitude of change visible from this location would be low to negligible, viewing from beyond the churchyard walls and away from the churchyard. The level of effect would be Minor and Not Significant through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and adverse to neutral.</p>
Scotstown Beach, St Fergus	<p>Views of the Scotstown landfall construction compound (Landfall Option 2) and any other onshore Project infrastructure from the beach would be screened by the existing dunes. A small carpark and picnic area is located within the edge of the dunes on approach to the beach, and the closest visualisation from this location is illustrated in Volume 3, Appendix 27.2, Figure 22a-b at approximately 900m south of the car park.</p> <p>The carpark and picnic area are located approximately 300m to the north-east of the Scotstown landfall construction compound (Landfall Option 2). The magnitude</p>

Visual receptor	Assessment of local recreational routes
	of change visible from this location would be medium and the level of effect would be Major / Moderate and Significant through construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and adverse.
Recreational attractions	
Peterhead Golf Course	<p>Peterhead Golf Course is located along the coast to the north of the River Ugie. The closest visualisation from this location is illustrated in Volume 3, Appendix 27.2, Figure 15a at approximately 765m south of the Lunderton South landfall construction compound (Landfall Option 1b or Landfall Option 2).</p> <p>The northern part of the golf course extends to the eastern side of the Lunderton South landfall construction compound search area and the magnitude of change visible from this location would be high, reducing to zero in the southern parts of the course and around the club house. Additionally, the ZTV and Volume 2, Figure 27.2b indicates the top of a crane (used for construction of the onshore substations) may also be visible from part of the course at approximately 3.5km distance, subject to intervening screening.</p> <p>Allowing for medium sensitivity, the level of effect resulting from the Lunderton South landfall construction compound (within approximately 700m to 800m) would be Major / Moderate to Moderate and Significant during any associated construction phase(s). The nature of these effects would be medium-term, temporary, indirect and adverse.</p>
Longside Golf Course	<p>Longside Golf Course is located close to the boundary of the 5km study area for the onshore substations and outwith the 2km study area for the onshore export cable corridor. The ZTV in Volume 2, Figure 27.2b indicates views of the top of a crane may be visible from elevated areas of the course, subject to intervening screening.</p> <p>In summary there would be no significant visual effects. As a precaution a Minor / Negligible and Not Significant effect has been noted due to the potential glimpsed views of the top of a crane, for the onshore substations, during construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.</p>
Golf Driving Range at Longside Airfield	<p>The Golf Driving Range at Longside Airfield is located approximately 750m from the Onshore Red Line Boundary and approximately 1km from the onshore substation zone, beyond a belt of mature woodland and trees. The ZTV in Volume 2, Figure 27.2b indicates views of the top of a crane, for the onshore substations, may be visible from elevated areas of the course, subject to intervening screening.</p> <p>In summary there would be no significant visual effects. As a precaution a Minor / Negligible and Not Significant effect has been noted due to the potential glimpsed views of the top of a crane, for the onshore substations, during construction phases 1, 2 and 3. The nature of these effects would be medium-term, temporary, indirect and neutral.</p>
O&M – long-term (reversible) neutral / beneficial effects	
Tourist / visitor attractions	
Reform Tower, Peterhead	During O&M the onshore substations and associated embedded mitigation would be visible (negligible to zero magnitude) and the level of effect would Minor and Non-Significant . The nature of this effect would be long-term (reversible), direct and neutral.

Visual receptor	Assessment of local recreational routes
St Fergus Churchyard	During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor, but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Scotstown Beach, St Fergus	During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor, but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Recreational attractions	
Peterhead Golf Course	The ZTV in Volume 2, Figure 27.2a indicates there would be limited visibility of the onshore substations. During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor, but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Longside Golf Course	The ZTV in Volume 2, Figure 27.2a indicates there would be limited visibility of the onshore substations. During O&M small scale periodic maintenance activities may be visible along the onshore export cable corridor, but these are unlikely to have a visual effect greater than negligible to zero magnitude and a Minor and Non-Significant visual effect. The nature of this effect would be long-term (reversible), direct and neutral.
Golf Driving Range at Longside Airfield	The ZTV in Volume 2, Figure 27.2a indicates there would be limited visibility of the onshore substations. During O&M there would be no view of the onshore Project infrastructure including the onshore substations due to intervening vegetation.
Decommissioning (onshore substations) – long-term (reversible) neutral / beneficial effects	
Tourist / visitor attractions	
Reform Tower, Peterhead	Allowing for the onsite mitigation (mature woodland) with the exception of the top of a crane, there would be no view of decommissioning activity of the onshore substations.
St Fergus Churchyard	St Fergus Churchyard is outwith the onshore substations 5km study area and there would be no view of decommissioning activity of the onshore substations.
Scotstown Beach, St Fergus	Outwith the onshore substations 5km study area and there would be no view of decommissioning activity of the onshore substations.
Recreational attractions	
Peterhead Golf Course	There would be no view of decommissioning activity of the onshore substations.
Longside Golf Course	There would be no view of decommissioning activity of the onshore substations.
Golf Driving Range at Longside Airfield	There would be no view of decommissioning activity of the onshore substations.

27.11 Summary of effects

- 27.11.1.1 A summary of the effects arising from the construction, O&M and decommissioning stage of the Project are provided in **Table 27.20** in relation to landscape effects and **Table 27.21** in relation to visual effects. Column four embedded environmental measures list the codes for these measures which are explained in **Table 27.8**. Boxes with green shading, indicate significant effects.

Table 27.20 Summary of landscape effects during the construction, O&M and decommissioning

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
Construction					
CCT 3: Deposition Coastline, Open Views	High	Construction activities associated with the landfall(s) at Scotstown, Lunderton North and Lunderton South and associated landfall construction compounds and landfall transition joint bays.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	Medium to low.	Not Significant (Due to Landfall Option 1a).
		Potential effects on landscape character, characteristics and landscape elements.			Significant (Due to Landfall Options 1b and 2).
LCT 12: Beaches, Dunes and Links	High to medium.	Construction activities associated with the landfall(s) at Scotstown, Lunderton North and Lunderton South and associated landfall construction compounds and landfall transition joint bays. Connecting onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on landscape character, characteristics and landscape elements.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High to medium.	Significant (Due to Landfall Options 1a, 1b and 2 and associated onshore export cable corridors).
LCT 17a: Coastal Agricultural Plain	Varies: High to medium-medium.	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on landscape character, characteristics and landscape elements.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium.	Significant (Due to Landfall Options 1a, 1b and 2, onshore export cable corridors and onshore substations).

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
LCT 17b: River Ugie	High to medium.	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, and the primary and secondary construction compounds. Potential effects on landscape character, characteristics and landscape elements.	M-001, M-002, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	Low	Not Significant.
LCT 17c: A950 / Longside Airfield	Varies: Medium to medium-low.	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on landscape character, characteristics and landscape elements.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium-low.	Significant (Due to onshore export cable corridors and onshore substations).
North East Aberdeenshire Coast SLA	High to medium.	Construction activities associated with the landfall(s) at Scotstown, Lunderton North and Lunderton South and associated landfall construction compounds and landfall transition joint bays. Connecting onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on SLA and SLQs.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium.	Significant (Due to Landfall Options 1a, 1b and 2 and associated onshore export cable corridors).
O&M					
CCT 3: Deposition Coastline, Open Views	High	O&M of the landfall(s) and landfall transition joint bays. Potential effects on landscape character, characteristics and landscape elements.	-	Zero	No Effect.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
LCT 12: Beaches, Dunes and Links	High to medium.	O&M of the landfall(s) and landfall transition joint bays, onshore export cable corridors and joint bays. Potential effects on landscape character, characteristics and landscape elements.	-	Zero	No Effect.
LCT 17a: Coastal Agricultural Plain	Varies: High-medium to Medium.	O&M of the landfall(s) and landfall transition joint bays, onshore export cable corridors and joint bays, and the onshore substations (fully enclosed / partially enclosed). Potential effects on landscape character, characteristics and landscape elements.	M-066	High to medium.	Significant (Due to onshore substations).
LCT 17b: River Ugie	High-medium	O&M of the onshore export cable corridors and joint bays. Potential effects on landscape character, characteristics and landscape elements.	-	Zero	No Effect.
LCT 17c: A950 / Longside Airfield	Varies: Medium to medium-low.	O&M of the onshore export cable corridors, joint bays, and the onshore substations (fully enclosed / partially enclosed). Potential effects on landscape character, characteristics and landscape elements.	M-066	High to medium.	Significant (Due to onshore substations).
North East Aberdeenshire Coast SLA	High to medium.	O&M of the landfall(s) and landfall transition joint bays, onshore export cable corridors and joint bays. Potential effects on SLA and SLQs.	-	Zero	No Effect.
Decommissioning					

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
CCT 3: Deposition Coastline, Open Views	High	Decommissioning has been scoped out of the assessment as the onshore export cables would be left <i>in-situ</i> .			
LCT 12: Beaches, Dunes and Links	High to medium.	Decommissioning has been scoped out of the assessment as the onshore export cables would be left <i>in-situ</i> .			
LCT 17a: Coastal Agricultural Plain	Medium	Decommissioning activities associated with the onshore substations. Potential effects on landscape character, characteristics and landscape elements. Significant effects reversed – and nature of effect changing to beneficial landscape legacy of mature woodland, trees and hedgerows.	M-107	High to medium reducing to zero.	Significant (Due to onshore substations)
LCT 17b: River Ugie		Decommissioning has been scoped out of the assessment as the onshore export cables would be left <i>in-situ</i> .			
LCT 17c: A950 / Longside Airfield	Varies: Medium to medium-low.	Decommissioning activities associated with the onshore substations. Potential effects on landscape character, characteristics and landscape elements. Significant effects reversed – and nature of effect changing to beneficial landscape legacy of mature woodland, trees and hedgerows.	M-107	High to medium reducing to zero.	Significant (Due to onshore substations).
North East Aberdeenshire Coast SLA	High to medium.	Decommissioning has been scoped out of the assessment as the onshore export cables would be left <i>in-situ</i> .			

Table 27.21 Summary of visual effects during the construction, O&M and decommissioning

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
Construction					
Settlements					
St Fergus	High	Construction activities associated with the landfall(s) at Scotstown and associated landfall construction compounds, landfall transition joint bays and primary construction compound. Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	Medium to low.	Not Significant.
Inverugie	High	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Zero	No Effect.
Peterhead	High	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
Longside	High	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds,	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-	Negligible to zero.	Not Significant.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
		and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	108, M-109, M-110, M-111, M-185, and M-201.		
Transport Routes					
A90 / North East 250 / The Coastal Trail and 215.02 core path	High	Construction activities associated with the landfall(s) at Scotstown, Lunderton North and Lunderton South and associated landfall construction compounds and landfall transition joint bays. Connecting onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High	Significant (Due to Landfall Options 1a, 1b and 2 and associated onshore export cable corridors).
A950	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High	Significant (Due to onshore export cable corridors and onshore substations).
Transport Routes: Minor roads					
1. Road to Scotstown Beach (also core path 217.01 and L30R)	High	Construction activities associated with the landfall(s) at Scotstown, and landfall transition joint bays. Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High to medium.	Significant (Due to Landfall Option 2).

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
2. Road between Kinloch / North Kirkton / St Fergus Church	Medium	Construction activities associated with onshore export cable corridors, joint bays, and primary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High to medium.	Significant (Due to the onshore export cable corridor).
3. Rora Moss Circular / Road between Kinloch / Bearhill / Hallmoss Cottage	High	Construction activities associated with the landfall(s) at Scotstown, Lunderton North and Lunderton South and associated landfall construction compounds and landfall transition joint bays. Connecting onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High to medium.	Significant (Due to the landfall Options, 1a, 1b and 2 and onshore export cable corridor).
4. Rora Moss Circular / Road between Ednie / Kincairn / Hallmoss A90	High	Construction activities associated with the landfall(s) at Scotstown, Lunderton North and Lunderton South and associated landfall construction compounds and landfall transition joint bays. Connecting onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High to medium.	Significant (Due to the landfall Options, 1a, 1b and 2 and onshore export cable corridor).
5. Road between Torterston Road / Easterton / Inverurgie / Hallmoss	Medium	Construction activities associated with the onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High to medium.	Significant (Due to the onshore export cable corridor).

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
6. Road between Torterston / Torterston Road / Inverurgie	Medium	Construction activities associated with the onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High to medium.	Significant (Due to the onshore export cable corridor).
7. Torterston Road / A950	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium.	Significant (Due to the onshore export cable corridor and onshore substations).
8. Downiehills Farm Road	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium.	Significant (Due to the onshore export cable corridor and onshore substations).
9. Minor road east of the onshore substations	Medium	Construction activities associated with the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-063, M-070, M-103, M-104, M-108, M-109, M-111, M-185, and M-201.	High to medium.	Significant (Due to the onshore substations).
10. Minor road south of the onshore substations	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds,	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-	High to medium.	Significant (Due to the onshore export cable

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
between Stockbridge and Lochside		and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	108, M-109, M-110, M-111, M-185, and M-201.		corridor and onshore substations).
11. Minor road south of the onshore substations to Hillhead of Cocklaw	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium.	Significant (Due to the onshore export cable corridor and onshore substations).
12. Minor road west of the onshore substations between A950 and West Toddlehills	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium.	Significant (Due to the onshore export cable corridor and onshore substations).
13. Minor road between A950 and Toddlehills	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High to medium.	Significant (Due to the onshore export cable corridor and onshore substations).
14. Minor road between Toddlehill	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds,	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-	Medium	Significant (Due to the onshore export cable corridor and secondary

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
Cottage and Netherton		and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	108, M-109, M-110, M-111, M-185, and M-201.		construction compound (F).
Recreational routes					
Scotland's Great Trails: The Formartine and Buchan Way	High	Construction activities associated with the onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High	Significant (Due to the onshore export cable corridor).
208.01 core path at Longside	High	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
215.11 core path west of Peterhead	High	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
7LD.01.18 core path / Kirktown Beach Footpath	High	Construction activities associated with the landfall(s) at Scotstown, Lunderton North and Lunderton South and associated landfall construction compounds and landfall transition joint	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-	Medium to Low	Significant (Due to Landfall Options 1a, 1b and 2 and associated

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
		bays. Connecting onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	070, M-103, M-104, M-108, M-109, and M-110.		onshore export cable corridors).
JC Buthlaw Ugie Walk	High	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
JC Faichfield Buthlaw Walk	High	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
JC Longside Innerfummary Loop	High	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
JC The Grave	High	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-103, M-104, M-108, M-	Negligible to zero.	Not Significant.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
			109, M-110, M-111, M-185, and M-201.		
Rora Moss Circular - local cycle route	High	Construction activities associated with the onshore export cable corridors and associated trenchless crossing construction components, joint bays and primary and secondary construction compounds. Potential effects on views and visual amenity.	M-001, M-002, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	High	Significant (Due to the onshore export cable corridor).
Recreational and tourist / visitor attractions					
Reform Tower, Peterhead	High	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
St Fergus Churchyard	High	Construction activities associated with the landfall(s) at Scotstown, and landfall transition joint bays. Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	Low to negligible.	Not Significant.
Scotstown Beach, St Fergus	High	Construction activities associated with the landfall(s) at Scotstown, and landfall transition joint bays. Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, and M-110.	Medium	Significant (Due to Landfall Option 2).

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
Peterhead Golf Course	Medium	Construction activities associated with the landfall(s) and landfall transition joint bays, onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-005, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	High	Significant (Due to Landfall Options 1b and associated onshore export cable corridors).
Longside Golf Course	Medium	Construction activities associated with onshore export cable corridors and associated trenchless crossing construction components, joint bays, primary and secondary construction compounds, and the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
Golf Driving Range at Longside Airfield	Medium	Construction activities associated with onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-001, M-002, M-006, M-011, M-019, M-024, M-026, M-027, M-063, M-070, M-103, M-104, M-108, M-109, M-110, M-111, M-185, and M-201.	Negligible to zero.	Not Significant.
O&M					
St Fergus	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
Inverugie	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed /	-	Zero	No Effect.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
		partially enclosed).Potential effects on views and visual amenity.			
Peterhead	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.
Longside	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.
Transport routes					
A90 / North East 250 / The Coastal Trail and 215.02 core path	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
A950	Medium	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed).Potential effects on views and visual amenity.	M-066	High	Significant (Due to onshore substations).
Transport routes: minor roads					
1. Road to Scotstown Beach (also core path 217.01 and L30R)	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
2. Road between Kinloch / North Kirkton / St Fergus Church	Medium	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
3. Rora Moss Circular / Road between Kinloch / Bearhill / Hallmoss Cottage	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
4. Rora Moss Circular / Road between Ednie / Kincairn / Hallmoss A90	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
5. Road between Torterston Road / Easterton / Inverurgie / Hallmoss	Medium	O&M of the onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
6. Road between Torterston / Torterston Road / Inverurgie	Medium	O&M of the onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
7. Torterston Road / A950	Medium	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Medium	Significant (Due to the onshore substations).

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
8. Downiehills Farm Road	Medium	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	High to medium.	Significant (Due to the onshore substations).
9. Minor road east of the onshore substations	Medium	O&M of the onshore substations (fully enclosed / partially enclosed). These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy . Potential effects on views and visual amenity.	M-066	Low to negligible-zero.	Not Significant.
10. Minor road south of the onshore substations between Stockbridge and Lochside	Medium	O&M of the onshore substations (fully enclosed / partially enclosed). These views would be partly mitigated by Volume 4: Outline Landscape and Architectural Strategy . Potential effects on views and visual amenity.	M-066	Medium	Significant (Due to the onshore substations).
11. Minor road south of the onshore substations to Hillhead of Cocklaw	Medium	O&M of the onshore substations (fully enclosed / partially enclosed). These views would not be mitigated by Volume 4: Outline Landscape and Architectural Strategy . Potential effects on views and visual amenity.	M-066	Medium	Significant (Due to the onshore substations).
12. Minor road west of the onshore substations between A950 and West Toddlehills	Medium	O&M of the onshore substations (fully enclosed / partially enclosed). These views would not be mitigated by Volume 4: Outline Landscape and Architectural Strategy . Potential effects on views and visual amenity.	M-066	Medium	Significant (Due to the onshore substations).

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
13. Minor road between A950 and Toddlehills	Medium	O&M of the onshore substations (fully enclosed / partially enclosed). These views would not be mitigated by Volume 4: Outline Landscape and Architectural Strategy . Potential effects on views and visual amenity.	M-066	Medium	Significant (Due to the onshore substations).
14. Minor road between Toddlehill Cottage and Netherton	Medium	O&M of the onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Negligible to zero.	Not Significant.
Recreational routes					
Scotland's Great Trails: The Formartine and Buchan Way	High	O&M of the onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Zero	No Effect.
208.01 core path at Longside	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Negligible to zero.	Not Significant.
215.11 core path west of Peterhead	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Negligible to zero.	Not Significant.
7LD.01.18 core path / Kirktown Beach Footpath	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
JC Buthlaw Ugie Walk	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Negligible to zero.	Not Significant.
JC Faichfield Buthlaw Walk	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.
JC Longside Innerfummary Loop	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.
JC The Grave	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.
Rora Moss Circular - local cycle route	High	O&M of the onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
Recreational and tourist / visitor attractions					
Reform Tower, Peterhead	High	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
St Fergus Churchyard	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Zero	No Effect.
Scotstown Beach, St Fergus	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
Peterhead Golf Course	High	O&M of the landfall(s) and landfall transition joint bays and onshore export cable corridor joint bays. Potential effects on views and visual amenity.	-	Negligible to zero.	Not Significant.
Longside Golf Course	Medium	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.
Golf Driving Range at Longside Airfield	Medium	O&M of the onshore export cable corridor, joint bays and onshore substations (fully enclosed / partially enclosed). Potential effects on views and visual amenity.	M-066	Zero	No Effect.
Decommissioning					
St Fergus	Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				
Inverugie	Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				
Peterhead	High	Decommissioning activities associated with the onshore substations.	M-107	Negligible to zero.	Not Significant.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
		Potential effects on views and visual amenity.			
Longside	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
Transport routes					
A90 / North East 250 / The Coastal Trail and 215.02 core path		Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).			
A950	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Low to negligible-zero.	Not Significant.
Transport routes: minor roads					
Minor roads 1 to 6		Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).			
7. Torterston Road / A950	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Medium to zero.	Not Significant.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
8. Downiehills Farm Road	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Medium to zero.	Not Significant.
9. Minor road east of the onshore substations	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Low to negligible-zero.	Not Significant.
10. Minor road south of the onshore substations between Stockbridge and Lochside	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Medium to zero.	Not Significant.
11. Minor road south of the onshore substations to Hillhead of Cocklaw	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Medium to zero.	Not Significant.
12. Minor road west of the onshore substations between A950 and West Toddlehills	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Medium to zero.	Not Significant.

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
13. Minor road between A950 and Toddlehills	Medium	Decommissioning activities associated with the onshore substations. These views would be mitigated by Volume 4: Outline Landscape and Architectural Strategy and mature landscaping. Potential effects on views and visual amenity.	M-107	Medium to zero.	Not Significant.
14. Minor road between Toddlehill Cottage and Netherton	Medium	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Negligible to zero.	Not Significant.
Recreational routes					
Scotland's Great Trails: The Formartine and Buchan Way	Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				
208.01 core path at Longside	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
215.11 core path west of Peterhead	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
7LD.01.18 core path / Kirktown Beach Footpath	Decommissioning of Onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
JC Buthlaw Ugie Walk	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
JC Faichfield Buthlaw Walk	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
JC Longside Innerfummary Loop	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
JC The Grave	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
Rora Moss Circular - local cycle route	Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				
Recreational and tourist / visitor attractions					
Reform Tower, Peterhead	High	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
St Fergus Churchyard	Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				
Scotstown Beach, St Fergus	Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				

Receptor	Sensitivity	Activity and potential effect	Embedded environmental measure	Magnitude of effect	Significance of effects
Peterhead Golf Course	Decommissioning of onshore export cables has been scoped out of the LVIA (onshore export cables would be left <i>in-situ</i>).				
Longside Golf Course	Medium	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.
Golf Driving Range at Longside Airfield	Medium	Decommissioning activities associated with the onshore substations. Potential effects on views and visual amenity.	M-107	Zero	No Effect.

27.12 Transboundary effects

- 27.12.1.1 Transboundary effects arise when impacts from a development with one European Economic Area (EEA) State affects the environment of another EEA State(s). A screening of transboundary effects has been carried out and is presented in Appendix 4B of the Scoping Report (MarramWind Ltd., 2023).
- 27.12.1.2 Based on the knowledge of the baseline environment, the nature of planned works and the wealth of evidence on the potential for impact from such projects more widely, there are not considered to be any transboundary effects on landscape and visual receptors from the Project.

27.13 Inter-related effects

- 27.13.1.1 A description and assessment of the likely inter-related effects arising from the Project on landscape and visual is provided in **Chapter 32: Inter-Related Effects**.

27.14 Assessment of cumulative effects

- 27.14.1.1 A description and assessment of the cumulative effects arising from the Project on landscape and visual is provided in **Chapter 33: Cumulative Effects Assessment**.

27.15 Summary of significant residual effects

- 27.15.1.1 A summary of the significant residual effects arising from the construction, O&M and decommissioning stage of the Project are provided in **Table 27.22** in relation to landscape effects and **Table 27.23** in relation to visual effects. Boxes with green shading indicate significant effects. Where the significant effects are neutral / beneficial, the boxes have been left unshaded.

27.15.2 Residual significant effects: landfall(s) and onshore export cable corridor

- 27.15.2.1 Significant landscape and visual effects resulting from the construction stage are unavoidable, although they would tend to be temporary and reversible. This is because the work to install the onshore export cables, backfill open trenches and undertake agreed landscape planting would be progressed at the earliest opportunity to ensure rapid reinstatement of the landscape during phase 1 of the construction stage.
- 27.15.2.2 A reduced number of temporary (short- to medium-term) significant effects would continue into phases 2 to 3 due to the continued presence of various construction compounds (landfall(s), trenchless crossing, primary and secondary construction compounds) and smaller scale works at joint bays along the onshore export cable corridor and at landfall transition joint bays.
- 27.15.2.3 During construction, landscapes along the coast and inland, and the North East Aberdeenshire Coast SLA would be significantly affected. Views from St Fergus, the A90 (overlapped by the North East 250, The Coastal Trail and core path 215.02), up to 14 minor roads (partly overlapped by local cycle routes / core paths / other footpaths), part of The Formartine and Buchan Way, three core paths, part of Peterhead Golf Course and part of Scotstown Beach would be significantly affected.

- 27.15.2.4 All of these effects on landscape elements would be mitigated and reduced to **Not Significant** levels of effect during the O&M stage.

27.15.3 Residual significant effects: onshore substations

- 27.15.3.1 Significant effects resulting from the onshore substations are unavoidable and would persist through the construction and O&M stages due to their height and scale. This would adversely affect the landscape character of existing undesignated agricultural landscape and the views from minor roads crossing this landscape and associated residential properties (assessed further in **Volume 3, Appendix 27.3**). Landscape and architectural mitigation as described in **Volume 4: Outline Landscape and Architectural Strategy** is proposed to reduce these effects; subject to the detailed design and implementation it would introduce beneficial effects and provide additional landscape and architectural enhancement with attendant biodiversity and nature conservation improvements.
- 27.15.3.2 Additionally, as outlined in **Volume 4: Outline Landscape and Architectural Strategy**, opportunities for potential further mitigation could be undertaken to strengthen the existing landscape pattern of trees, woodland and hedges in the area surrounding the onshore substations and provide increased screening and an enhanced landscape setting to better integrate the development within its landscape context.
- 27.15.3.3 Decommissioning of the onshore substations would remove significant effects on landscape character whilst leaving a beneficial, landscape legacy of mature woodland, trees and hedgerows.

Table 27.22 Summary of significant residual landscape effects during the construction, O&M and decommissioning

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
Landfall Option 1a: (includes Lunderton North landfall and onshore export cable corridors L2 and L3)						
LCT 12: Beaches, Dunes and Links	High to medium.	Major to Major / Moderate.	Moderate	Moderate	No Effect.	Scoped out of assessment.
LCT 17a: Coastal Agricultural Plain	Medium	Major to Major / Moderate.	Not Significant.	Not Significant.	Not significant beneficial effects.	
Landfall Option 1b (includes Lunderton North and South landfall(s) and onshore export cable corridors L2, L3 and L4)						
CCT 3: Deposition Coastline, Open Views	High	Moderate	Moderate	Moderate	No Effect.	Scoped out of assessment.
LCT 12: Beaches, Dunes and Links	High to medium.	Major to Major / Moderate.	Moderate	Moderate	No Effect.	
LCT 17a: Coastal Agricultural Plain	Medium	Major to Major / Moderate.	Not Significant.	Not Significant.	No Effect.	
North East Aberdeenshire Coast SLA	High to medium.	Moderate	Moderate	Moderate	No Effect.	

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
Landfall Option 2: (includes Scotstown, Lunderton North and Lunderton South landfall(s) and onshore export cable corridors L1, L2, L3 and L4)						
CCT 3: Deposition Coastline, Open Views	High	Major to Moderate.	Moderate	Moderate	No Effect.	Scoped out of assessment.
LCT 12: Beaches, Dunes and Links	High to medium.	Major to Moderate.	Major to Moderate.	Major to Moderate.	No Effect.	
LCT 17a: Coastal Agricultural Plain	Medium	Major to Moderate.	Not Significant.	Not Significant.	No Effect.	
North East Aberdeenshire Coast SLA	High to medium.	Major to Moderate.	Major to Moderate.	Major to Moderate.	No Effect.	
Onshore export cable corridor zone A – Segment A1						
LCT 17a: Coastal Agricultural Plain	High to medium.	Major to Moderate.	Not Significant.	Not Significant.	Not Significant beneficial effects.	Scoped out of assessment.
LCT 17c: A950 / Longside Airfield	Medium to medium-low.	Major / Moderate to Moderate.	Not Significant.	Not Significant.	Major / Moderate.	
Onshore export cable corridor zone A – Segment A2						
LCT 17c: A950 / Longside Airfield	Medium	Major / Moderate to Moderate.	Not Significant.	Not Significant.	Not Significant beneficial effects.	Scoped out of assessment.

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
Onshore substations – Fully enclosed option						
LCT 17a: Coastal Agricultural Plain	Medium	Moderate	Moderate	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Significant effects reversed – leaving beneficial landscape legacy.
LCT 17c: A950 / Longside Airfield	Medium to low.	Moderate	Moderate	Moderate.	Moderate	
Onshore substations – Partially enclosed option						
LCT 17a: Coastal Agricultural Plain	Medium	Moderate	Moderate	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Significant effects reversed – leaving beneficial landscape legacy.
LCT 17c: A950 / Longside Airfield	Medium to low.	Moderate	Moderate	Moderate	Moderate	
Onshore export cable corridor zone B						
LCT 17a: Coastal Agricultural Plain	Medium	Major / Moderate.	Not Significant	Not Significant	Not Significant beneficial effects.	Scoped out of assessment.
LCT 17c: A950 / Longside Airfield	Medium to low.	Moderate	Not Significant	Not Significant	No Effect.	

Table 27.23 Summary of significant residual visual effects during the construction, O&M and decommissioning

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
Landfall Option 1a (includes Lunderton North landfall and onshore export cable corridors L2 and L3)						
A90 / North East 250, The Coastal Trail and core path 215.02	High	Major	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
2. Road between Kinloch / North Kirkton / St Fergus Church	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
3. Rora Moss Circular / Road between Kinloch / Bearhill / Hallmoss Cottage	High	Major to Major / Moderate.	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
4. Rora Moss Circular / Road / Rora Moss Circular between Ednie / Kincairn / Hallmoss A90	High	Major to Major / Moderate.	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
Core path 7LD.01.18 / Kirktown Beach Footpath	High	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
Landfall Option 1b: (includes Lunderton North and South landfall(s) and onshore export cable corridors L2, L3 and L4)						
A90 / North East 250, The Coastal Trail and Core path 215.02	High	Major	Major to Major / Moderate.	Major to Major / Moderate.	Minor	Scoped out of assessment.
2. Road between Kinloch / North Kirkton / St Fergus Church	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
3. Rora Moss Circular / Road / between Kinloch / Bearhill / Hallmoss Cottage	High	Major to Major / Moderate.	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
4. Rora Moss Circular / Road / between Ednie / Kincairn / Hallmoss A90	High	Major to Major / Moderate.	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
Core path 7LD.01.18 / Kirktown Beach Footpath	High	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
Peterhead Golf Course	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
Landfall Option 2: (includes Scotstown, Lunderton North and Lunderton South landfall(s) and onshore export cable corridors L1, L2, L3 and L4)						
A90 / North East 250, The Coastal Trail and Core path 215.02	High	Major	Major to Major / Moderate.	Major to Major / Moderate.	Minor	Scoped out of assessment.
1. Road to Scotstown Beach (also core path 217.01 and L30R)	High	Major to Major / Moderate.	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
2. Road between Kinloch / North Kirkton / St Fergus Church	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
3. Rora Moss Circular / Road / between Kinloch / Bearhill / Hallmoss Cottage	High	Major to Major / Moderate.	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
4. Rora Moss Circular / Road / between Ednie / Kincairn / Hallmoss A90	High	Major to Major / Moderate.	Major to Major / Moderate.	Major to Major / Moderate.	Minor	
Core path 7LD.01.18 / Kirktown Beach Footpath	High	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
Scotstown Beach, St Fergus	High	Major / Moderate.	Major / Moderate.	Major / Moderate.	Minor	
Peterhead Golf Course	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
Onshore export cable corridor zone A						
5. Road between Torterston Road / Easterton / Inverurgie / Hallmoss	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	Scoped out of assessment.
6. Road between Torterston / Torterston Road / Inverurgie	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
7. Torterston Road / A950	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
8. Downiehills Farm Road	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor	
The Formartine and Buchan Way	High	Major	No Effect.	No Effect.	No Effect.	
Onshore substations						
A950	Medium	Major / Moderate.	Major / Moderate.	Major / Moderate .	Major / Moderate (changing to neutral / beneficial).	Not Significant.

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
7. Torterston Road / A950	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Moderate.	Not Significant.
8. Downiehills Farm Road	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Moderate.	Not Significant.
9. Minor road east of the onshore substations	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate (changing to neutral / beneficial).	Not Significant.
10. Minor road south of the onshore substations between Stockbridge and Lochside	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Moderate	Not Significant.
11. Minor road south of the onshore substations to Hillhead of Cocklaw	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Moderate	Not Significant.
12. Minor road west of the onshore substations between A950 and West Toddlehills	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Moderate	Not Significant.

Receptor	Sensitivity	Level of effect during construction			Level of effect during O&M	Level of effect during decommissioning
		Phase 1	Phase 2	Phase 3		
13. Minor road between A950 and Toddlehills	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Moderate	Not Significant.
Onshore export cable corridor zone B						
10. Minor road south of the onshore substations between Stockbridge and Lochside	Medium	Major / Moderate to Moderate.	Moderate / Minor.	Moderate / Minor.	Minor / Negligible.	Scoped out of assessment.
12. Minor road west of the onshore substations between A950 and West Toddlehills	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor / Negligible.	
13. Minor road between A950 and Toddlehills	Medium	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Major / Moderate to Moderate.	Minor / Negligible.	
14. Minor road between Toddlehill Cottage and Netherton	Medium	Moderate	Moderate	Moderate	Minor / Negligible.	

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27.17 Glossary of terms and abbreviations

27.17.1 Abbreviations

Acronym	Definition
AOD	Above Ordnance Datum
CCT	Coastal Character Type
EEA	European Economic Area
EIA	Environmental Impact Assessment
GDL	Garden and Designed Landscape
GLVIA 3	Guidelines for Landscape and Visual Impact Assessment, Third Edition
HDD	Horizontal Directional Drilling
Ha	Hectares
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IEMA	Institute of Environmental Management and Assessment
Km	Kilometres
LAS	Landscape and Architectural Strategy
LCA*	Landscape Character Area
LCT*	Landscape Character Type
LDP	Local Development Plan
LVIA	Landscape and Visual Impact Assessment
M	Metres
MLWS	Mean Low Water Springs
Mph	Miles per hour
NSA	National Scenic Area
OLAS	Outline Landscape and Architectural Strategy
O&M	Operation and maintenance
OS	Ordnance Survey
PPiP	Planning Permission in Principle
RVAA	Residential Visual Amenity Assessment

Acronym	Definition
SLA	Special Landscape Area – local landscape designation
SLQ	Special Landscape Qualities
SMP	Soil Management Plan
SNH	Scottish Natural Heritage now known as NatureScot.
SSEN	Scottish and Southern Electricity Network
WTG	Wind Turbine Generator
ZTV*	Zone of Theoretical Visibility
*Note: Those definitions marked with an asterisk are repeated from GLVIA 3.	

27.17.2 Glossary of terms

Term	Definition
Advance planting	Planting / landscaping works carried out during the planting season in advance of construction works or early within the construction stage (phase 1) to ensure plants can become established and grow to mitigate landscape and visual effects early.
Beneficial or Adverse Types of Landscape Effect	<p>The landscape effects may be beneficial, neutral, or adverse.</p> <p>In landscape terms – a beneficial effect would require development to add to the landscape quality and character of an area. Neutral landscape effects would include low or negligible changes that may be considered as part of the ‘normal’ landscape processes such as maintenance or harvesting activities. An adverse effect may include the loss of landscape elements such as mature trees and hedgerows as part of construction leading to a reduction in the landscape quality and character of an area.</p>
Beneficial or Adverse Types of Visual Effect	<p>The visual effects may be beneficial, neutral, or adverse.</p> <p>In visual terms – beneficial or adverse effects are less easy to define or quantify and require a subjective consideration of several factors affecting the view, which may be beneficial, neutral, or adverse. This assessment has considered factors such as the visual composition of the landscape in the view together with the design and composition, which may or may not be reasonably, accommodated within the scale and character of the landscape as perceived from the receptor location.</p>

Term	Definition
Cumulative effects	Additional changes caused by a Project in conjunction with other similar developments or as a combined effect of a set of developments, taken together' (Scottish Natural Heritage, 2012).
Cumulative visual effects: In combination In succession Sequentially	<p>Effects that can be caused by combined visibility, which <i>'occurs where the observer is able to see two or more developments from one viewpoint' and/or sequential effects which 'occur when the observer must move to another viewpoint to see different developments'</i> (Scottish Natural Heritage 2012).</p> <p>In combination: Where two or more developments are or would be within the observer's arc of vision at the same time without moving his/her head (GLVIA 3, 2013 Table 7.1).</p> <p>In succession: Where the observer must turn his/her head to see the various developments – actual and visualised (GLVIA 3, 2013 Table 7.1).</p> <p>Sequential cumulative effect. Occurs where the observer must move to another viewpoint to see the same or different developments. Sequential effects may be assessed for travel along regularly used routes such as major roads or popular paths (GLVIA 3, 2013 Table 7.1).</p>
Development*	Any proposal that results in change to the landscape and/or visual environment.
Degree of change	A combination of the scale, extent and duration of an effect also defined as 'magnitude'.
Designated Landscape*	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.
Elements*	Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.
Embedded mitigation	Mitigation that is 'embedded' into the Project or forms part of the Project.
Enhancement*	Proposals that seek to improve the landscape resource of the site and its wider setting beyond its baseline condition.

Term	Definition
Environmental fit	The relationship of a development to identified environmental opportunities and constraints in its setting.
Feature*	Particularly prominent or eye-catching elements in the landscape such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.
Geographical Information System	A system that captures, stores, analyses, manages and presents data linked to location. It links spatial information to a digital database.
GLVIA 3	Guidelines for Landscape and Visual Impact Assessment, Third Edition, published jointly by the Landscape Institute and Institute of Environmental Management and Assessment, 2013.
Heritage	The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.
Historic Landscape Characterisation / Historic Land-use Assessment	Historic characterisation is the identification and interpretation of the historic dimension of the present-day landscape or townscape within a given area. Historic Landscape Characterisation is the term used in England and Wales; Historic Land-use Assessment is the term used in Scotland.
Indirect effects*	Direct effects relate to the host landscape and concern both physical and perceptual effects on the receptor. Indirect effects relate to those landscapes and receptors which separated by distance or remote from the development and therefore are only affected in terms of visual or perceptual effects. The Landscape Institute also defines indirect effects as those which are not a direct result of the development but are often produced away from it or because of a complex pathway.
Iterative design process	The process by which project design is amended and improved by successive stages of refinement which respond to growing understanding of environmental issues.
Key characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
Land cover	The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.

Term	Definition
Landscape Character Area*	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Types*	Distinct types of landscape which are relatively homogenous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement patterns, and perceptual and aesthetic attributes.
Landscape character*	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape classification	A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape.
Landscape constraints	Components of the landscape resource such as views or mature trees recognised as constraints to development. Often associated with landscape opportunities.
Landscape effects*	Effects on the landscape as a resource. An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern here is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. (GLVIA 3 2013, Para 5.1).
Landscape fit	The relationship of a development to identified landscape opportunities and constraints in its setting.
Landscape patterns	Spatial distributions of landscape elements combining to form patterns, which may be distinctive, recognisable and describable for example, hedgerows and stream patterns.

Term	Definition
Landscape quality (condition)*	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
Landscape qualities	A term used to describe the aesthetic or perceptual and intangible characteristics of the landscape such as scenic quality, tranquillity, sense of wildness or remoteness. Cultural and artistic references may also be described here.
Landscape receptors *	Defined aspects of the landscape resource that have the potential to be affected by a proposal
Landscape resource	The combination of elements that contribute to landscape context, character, and value.
Landscape sensitivity	The sensitivity of the landscape to a particular development considers the susceptibility of the landscape and its value.
Landscape strategy	The overall vision and objectives for what the landscape should be like in the future, and what is thought to be desirable for a particular landscape type or area, usually expressed in formally adopted plans and programmes or related documents.
Landscape value*	<p>The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.</p> <p>The value of the Landscape Character Types or Areas that may be affected, based on review of any designations at both national and local levels, and, where there are no designations, judgements based on criteria that can be used to establish landscape value.</p>
Level of effect	Determined through the combination of sensitivity of the receptor and the proposed magnitude of change brought about by the development.
Landscape and Visual Impact Assessment	LVIA - A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource and on people's views and visual amenity.
Magnitude (of change)*	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or

Term	Definition
	irreversible and whether it is short-term or long-term in duration.
NatureScot / Scottish Natural Heritage	NatureScot, previously known as Scottish Natural Heritage (SNH).
Onsite mitigation planting	Landscape mitigation planting within the Onshore Red Line Boundary and onshore substation zone to provide mitigation of significant landscape and visual effects resulting from the onshore substations.
Perception	Combines the sensory (that we receive through our senses) with the cognitive (our knowledge and understanding gained from many sources and experiences).
Perceptual Aspects	A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity (GLVIA 3, 2013 Box 5.1).
Photomontage*	A visualisation which superimposes an image of the Project upon a photograph or series of photographs.
Potential further mitigation	Landscape planting outwith the onshore substation zone, undertaken as part of voluntary agreement with landowners to provide potential further mitigation of significant adverse landscape and visual effects resulting from the onshore substations.
Probability of effect	<p>The probability of a landscape and visual effect occurring because of this Project should be regarded as certain, subject to the stated project design and the continuance of the existing, baseline landscape resource, including known changes such as other permitted development.</p> <p>The probability of cumulative effects however is variable. Whereas those effects related to existing / under construction development are considered as certain, effects related to development with planning consent are only considered as likely. Other development sites for which there is a submitted planning application are considered as uncertain as the level of uncertainty would be greater.</p>
Rarity	The presence of rare elements or features in the landscape or the presence of a rare Landscape Character Type. (GLVIA 3 2013, Box 5.1)

Term	Definition
Receptor	Physical landscape resource, special interest, or viewer group that will experience an effect.
Recreation Value*	Evidence that the landscape is valued for recreational activity where experience of the landscape is important. (GLVIA 3 2013, Box 5.1)
Reinstatement planting	Reinstatement planting within the Onshore Red Line Boundary to replace landscape elements (trees, woodland or hedges) removed during the construction phase in accordance with the detailed Landscape Management Plan.
Representativeness*	Whether the landscape contains a particular character and/or features or elements which are considered particularly important examples.
Residual effects	Likely environmental effects, remaining after mitigation.
Scale Indicators	Landscape elements and features of a known or recognisable scale such as houses, trees, and vehicles that may be compared to other objects, where the scale of height is less familiar, to indicate their true scale.
Scenic quality	Depends upon perception and reflects the combination and pattern of elements in the landscape, its aesthetic qualities, its more intangible sense of place or 'genius loci' and other more intangible qualities. (GLVIA 3 2013, Box 5.1)
Seascape	Landscapes with views of the coast or seas, and coasts and adjacent marine environments with cultural, historical and archaeological links with each other.
Sense of Place (genius loci)	The essential character and spirit of an area: 'genius loci' literally means 'spirit of the place'.
Sensitivity*	A term applied to specific receptors, combining judgements on the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor.
Significance	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.
Significant effects	It is a requirement of the EIA Regulations to determine the likely significant effects of the development on the environment which should relate to the level of an effect and the type of effect.

Term	Definition
	<p>The significance of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and the sensitivity of the receptor) that should be attached to the impact described.</p> <p>Whether or not an effect should be considered significant is not absolute and requires the application of professional judgement.</p> <p>Significant – ‘noteworthy, of considerable amount or effect or importance, not insignificant or negligible’. The Concise Oxford Dictionary.</p> <p>Those levels and types of landscape and visual effect likely to have a major or important / noteworthy or special effect of which a decision maker should take note.</p>
Special Landscape Quality	SLQs encapsulate what is valued and provide the reasons for the designation as described in the NatureScot and Historic Environment Scotland, Guidance on Designating Local Landscape Areas, October 2020.
Susceptibility*	The ability of a defined landscape or visual receptor to accommodate the specific Project without undue negative consequences.
Sustainability*	The principle that the environment should be protected in such a condition and to such a degree that ensures new development meets the needs of the present without compromising the ability of future generations to meet their own needs.
Temporary or permanent effects	Effects may be considered as temporary or permanent. The 35-year operational stage for each phase of the Project has been assessed as ‘permanent’, although the effects would also be reversible.
Time depth	Historical layering – the idea of landscape as a ‘palimpsest’, a much written-over asset of landscape.
Townscape	The character and composition of the built environment including the buildings and the relationships between them, the different types of urban open space, including green spaces, and the relationship between buildings and open spaces.

Term	Definition
Type or Nature of effect	Whether an effect is direct or indirect, temporary or permanent, beneficial (positive), neutral or adverse (negative) solus or cumulative.
Utility corridors	Distance between utilities and vegetation (trees / shrubs) to be maintained clear of particular plant species that might otherwise adversely affect the utility function.
Viewpoints	<p>Selected for illustration of the visual effects fall broadly into three groups:</p> <ul style="list-style-type: none"> representative viewpoints: selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ – for example certain points may be chosen to represent the views experienced by people on public footpaths and bridleways; specific viewpoints: chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, such as landscapes with statutory landscape designations or viewpoints with cultural landscape associations; and illustrative viewpoints: chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations. (GLVIA 3 2013, Para 6.19).
Visibility splay	Area at road junctions to be maintained clear of vegetation for safety reasons in order that drivers and other road users can maintain a clear sightline or line of sight to see oncoming traffic prior to making a turn.
Visual amenity	The overall views and surroundings, which provide a visual setting or backdrop to the activities of people living, working, participating in recreational activities, visiting or travelling through an area.
Visual dominance	A visual effect often referred to in respect of residential properties that in relation to development would be subject to blocking of views, or reduction of light / shadowing, and high levels of visual intrusion.
Visual effect*	Effects on specific views and on the general visual amenity experienced by people.

Term	Definition
Visual Receptors*	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visual sensitivity	The sensitivity of visual receptors such as residents, relative to their location and context, to visual change proposed by development.
Visualisation	Computer visualisation, photomontage, or other technique to illustrate the appearance of the development from a known location.
Wireline / Wireframe	A computer-generated line drawing of the digital terrain model and the Project from a known location.
Zone of Theoretical Visibility (ZTV)*	A map, usually digitally produced, showing areas of land within which, a development is theoretical visible.
*Note: Those definitions marked with an asterisk are repeated from GLVIA 3.	

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