

VOLUME 2: CHAPTER 2 – SECTION BY SECTION OVERVIEW

2. SECTION BY SECTION OVERVIEW

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Appendices (Volume 5 of this EIA Report)

There are no appendices associated with this Chapter.

Figures (Volume 3 of this EIA Report)

There are no figures associated with this Chapter.





2. SECTION BY SECTION OVERVIEW

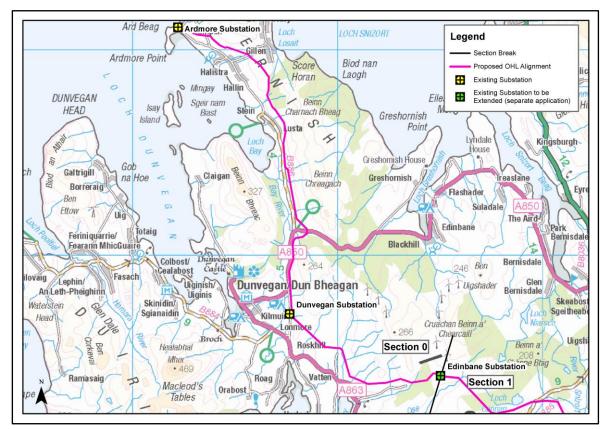
2.1 Introduction

- 2.1.1 This Chapter provides an overview of each of the seven geographically defined 'Sections' referred to in this EIA Report, together with a description of the elements of the Proposed Development, ancillary development and associated works located within each of the Sections. A full description of the Proposed Development is provided in Volume 1, Chapter 3: Project Description, whilst a detailed description of the environmental baseline of relevance to each section is discussed within each of the technical chapters in this volume (i.e. Volume 2, Chapters 3 to 11). A description of the alternatives considered for the Proposed Development is included in Volume 1, Chapter 4: Routeing Process and Alternatives.
- 2.1.2 The Proposed Development described within this Chapter of the EIA Report comprises the Proposed Alignment (see Figures V1-1.1a to 1c: Overview of the Proposed Development). As outlined in Volume 1, Chapter 1 (Part 1.2), the Applicant is also presenting an Alternative Alignment as part of the consent application in Section 3 of the project between Broadford and Kyle Rhea, via Glen Arroch. The Alternative Alignment is discussed and assessed within Volume 6 of this EIA Report.

2.2 Section 0 – Ardmore to Edinbane

Overview

2.2.1 This Section of the project, the most westerly, is located between Ardmore Substation and Edinbane Substation on the Isle of Skye. The Proposed Development within this Section would comprise a new wood pole (H pole) 132 kV OHL, replacing the existing 132 kV wood pole OHL which would be dismantled once the Proposed Development has been constructed and energised. The Proposed Development within Section 0 is shown on Figures V1-3.1A to V1-3.1H. An overview of Section 0 is shown in Plate 2.1.





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- 2.2.2 The northern part of this Section includes the Waternish peninsula. Settlement on the peninsula is typically found to the west within the vicinity of the B886 (e.g. Trumpan, Halstra, Hallin, Stein and Lusta), or to the north east at Gillen and Geary. Single track roads with passing places provide access to these communities, but otherwise road access on the peninsula is limited. Beyond Fairy Bridge, at the southern extent of Waternish peninsula, the Proposed Development follows the route of the A850 and a minor road prior to its connection with Dunvegan Substation. Beyond this point, the area between Dunvegan Substation and Edinbane Substation is sparsely populated and is typically characterised by large areas of open moorland across gently sloping and undulating terrain. Access within this part of the Section is limited to minor single-track roads branching off the A863, with the main areas of settlement located at Upper Feorlig and Balmeanach.
- 2.2.3 A number of properties in the areas noted within this Section are run as crofts and are representative of the use of the land in this area for agriculture and crofting purposes. Forestry in the area is limited to plantations to the northeast of Stein, and to the west of Edinbane Substation.
- 2.2.4 The terrain throughout this Section largely comprises gently undulating open moorland, at an altitude of between sea level and approximately 160 m AOD.

Description of the Proposed Development Relative to Section 0

- 2.2.5 The Proposed Development within Section 0 is shown on Figures V1-3.1A to V1-3.1H and would comprise a new 132 kV H Pole OHL for the entirety of this Section from Ardmore Substation to Edinbane Substation. The new H Pole OHL would have a nominal height of approximately 13 m (this could range between 10 m and 16 m in height above ground level (including insulators and support), depending on local terrain and ground conditions). The spacing between individual poles would vary depending on topography and altitude and would be determined after a detailed line survey but would be approximately 80 m to 100 m apart.
- 2.2.6 **Figure V1-3.1A** shows the connection between Ardmore Substation and Hallistra / Hallin. Here, the new OHL heads in a south-east direction from Ardmore Substation and passes just to the east of Halistra Loch before heading east, crossing Cnoc a' Chatha and the minor road to Trumpan. The Proposed Development is then routed east and then south-east, following the route of the existing OHL (prior to it being dismantled) for approximately 1 km, before crossing the existing OHL and heading to the east of Beinn na Mointich.
- 2.2.7 The route of the Proposed Development between Hallin and Stein is shown on Figure V1-3.1B. The Proposed Development is routed to the east of Beinn na Mointich in order to move the OHL further away from properties at Hallin, in comparison to the existing OHL. After passing Beinn na Mointich, the Proposed Development follows the western extent of the forest plantation on its descent toward Stein. As noted within Table V1-3.1 of Volume 1, Chapter 3 of this EIA Report, the LoD is widened on the eastern side of the OHL alignment at this location to ensure sufficient flexibility in the micro-siting of poles to avoid interference with Beinn na Mointeich radio station. This would be discussed in consultation with BT during the detailed line survey.
- 2.2.8 Figure V1-3.1C shows the Proposed Development close to the existing OHL once more, which it follows on its eastern side past Stein and Lusta, and south towards Bay. At Bay, the Proposed Development deviates approximately 35 m from the existing OHL to account for localised topography, and gradually narrows to the existing OHL north of Fairy Bridge, as shown on Figure V1-3.1D. At Fairy Bridge, the Proposed Development again takes a slight deviation from the existing OHL as it crosses the A850 and Allt a' Ghille. The Proposed Development is then routed adjacent to the existing OHL on its eastern side following the A850 toward Horneval, and then onto Dunvegan Substation (see Figure V1-3.1E).
- 2.2.9 From Dunvegan Substation, the Proposed Development is routed adjacent to the existing OHL towards Glen Heysdal, at which point a slight deviation to the east is made to avoid nearby properties (see Figure V1-3.1F). From here, the Proposed Development is routed adjacent and to the east, then north of the existing OHL as it



traverses open moorland toward Balmeanach (see **Figure V1-3.1G**) and through plantation forestry to its connection with Edinbane Substation (see **Figure V1-3.1H**).

Construction of the Proposed Development within Section 0

- 2.2.10 Construction of a new OHL within this Section would likely be undertaken utilising tracked excavators and rock breaking equipment. It is anticipated that helicopters would be used for the delivery (or recovery) of materials to pole locations within Section 0. The key benefit of helicopter use is that 'traditional' repeated vehicular access methods in and out of structure installation locations, hauling the various components that make up a pole structure, are removed. As a result, no new temporary or permanent stone tracks are proposed within Section 0.
- 2.2.11 Further information on the construction process and foundation requirements for wood pole OHL construction is provided in **Volume 1, Chapter 3: Project Description**.
- 2.2.12 The existing OHL within Section 0 would be dismantled upon completion of the Proposed Development.

2.3 Section 1 – Edinbane to North of Sligachan

Overview

2.3.1 This Section of the project commences from Edinbane Substation to a point north of Sligachan and west of Meall Odhar Mor. The Proposed Development, a steel lattice tower 132 kV OHL within this Section, is a replacement to the existing 132 kV wood pole OHL, and broadly follows a similar alignment to the existing OHL, with some localised deviations (as described in paragraphs 2.3.5 to 2.3.7 below). The existing OHL would be dismantled once the Proposed Development has been constructed and energised. The Proposed Development within Section 1 is shown on Figure V1-3.1H to 3.1M. An overview of Section 1 is shown in Plate 2.2.

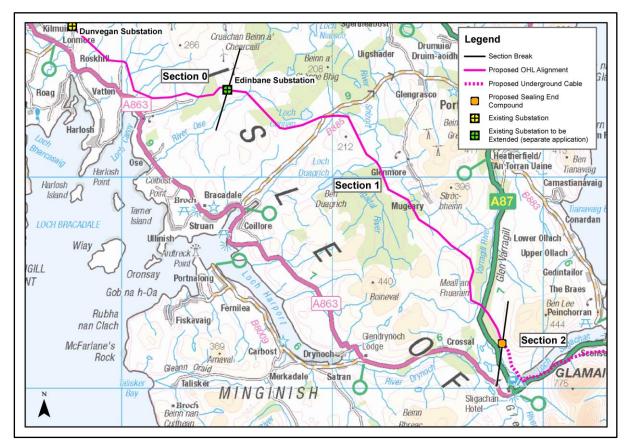


Plate 2.2: Overview of Section 1

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- 2.3.2 The area typically comprises open moorland and commercial forestry with coastal views to the west over Loch Harport. Within the western part of this Section, the landscape is characterised by small and very distinctive, flat-topped rocky knolls which are scattered throughout. Wind turbines further to the north-west also influence this part of the Section. To the east, the landform becomes characterised by more pronounced rounded hills and sweeping valleys, with linear croft lands strung along the valley of Glenmore.
- 2.3.3 Settlement is found at Glenmore and Mugeary, within the central part of this Section, and at Glen Vic Askill, near Edinbane Substation. Sligachan is located to the south-east, and Bracadale and Glen Drynoch on the west coast. Portree is also a short distance to the north-east. Access within the vicinity of this Section comprises the A863 to the west, the A87 to the east, the B885 and minor single-track roads. Within the vicinity of the Proposed Development, access by road is generally limited, although the Proposed Development does cross the B885 and A87.
- 2.3.4 The terrain throughout this section within the vicinity of the Proposed Development comprises low lying topography, at an altitude of between approximately 50 m and 150 m AOD, although there are localised high points up to circa 200 m to 300 m AOD.

Description of the Proposed Development Relative to Section 1

- 2.3.5 **Figure V1-3.1H** shows the OHL leaving Edinbane Substation and routing south-east. The OHL follows the existing OHL on its north side but deviates further east of the existing OHL, cutting through forestry in order to maintain sufficient clearance distance from the consented Glen Ullinish Wind Farm. The OHL then turns east, continuing to follow the existing OHL but deviating slightly north near Benn a Mhadadh to account for localised topography.
- 2.3.6 Figure V1-3.1I shows that, north of Am Maol, the OHL routes south south-east, crossing the existing OHL (at approximate OS Grid Reference 140792, 842765 and following a south-east course across open moorland at Achaleathan. The OHL then continues south-east, closely skirting Tungadal Forest to the west of Glenmore before cutting through the forest west of Mugeary (Figure V1-3.1J).
- 2.3.7 After exiting the forestry, the OHL routes back towards the existing OHL and crosses to its eastern side (Figure V1-3.1K), after which it continues to follow the existing OHL until the eastern extent of Section 1, north of Sligachan. The new OHL skirts to the west side of Glen Varragill Forest, prior to crossing the A87, before crossing through the forest briefly, then skirting the east side of the forest and terminating at a Cable Sealing End (CSE) compound (Figure V1-3.1M). The CSE compound is required to facilitate the transition to underground cable in part of Section 2 of the project.

- 2.3.8 Within this Section, it is proposed that the existing 132 kV wood pole OHL would be replaced with a new double circuit steel lattice 132 kV OHL. At the transition of this Section with Section 2, a new CSE compound will be required to the south-east of Glen Varragill Forest (at approximate OS Grid Reference 148064, 832119).
- 2.3.9 Construction access through this Section would require new temporary stone access tracks along the majority of the length of the new OHL. Existing forestry tracks, upgraded as required, would be utilised by construction vehicles at Glen Vic Askill, Mugeary, Tungadal and Glen Varragill. Short sections of permanent track are proposed to facilitate operational maintenance activities off the B885 through forestry at Lon Dubh, and through forestry at Mugeary and Glen Varragill, extending existing forestry track infrastructure. Temporary trackway is not likely to be feasible for use across large areas in this Section due to ground conditions, weight of construction vehicles and length of time trackway would need to be in place, all of which could potentially damage local habitats. Temporary trackway may be used however in localised areas. Floating stone tracks are likely to be required in some areas of Section 1 to traverse sensitive habitats and areas of deeper peat.

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- 2.3.10 It is anticipated that access from the local road network to facilitate construction of the Proposed Development within Section 1 would be taken from the minor public road at Balmeanach, the A863 at Inver Meadale and the A87 at Glen Varragill, all of which comprise existing access points / junctions. Access would also be taken via new and existing access points / junctions on the B885 (Struan Road). It is anticipated that access here would be localised, and use of the B885 to access the wider road network would be restricted to light goods and emergency use only.
- 2.3.11 The use of helicopters is not currently being considered for this Section of the project given the good access opportunities that exist from the local road network and existing forestry tracks for the delivery of materials to site.
- 2.3.12 Further information on the construction process for elements of the project of relevance to Section 1 is provided in **Volume 1, Chapter 3: Project Description**.
- 2.4 Section 2 North of Sligachan to Broadford Overview
- 2.4.1 This Section of the project is located between a proposed CSE compound to the North of Sligachan, at the south-east corner of Glen Varragill Forest, and Broadford Substation. The Proposed Development, a combination of underground cabling for approximately 15 km and steel lattice 132 kV OHL for approximately 8 km through this Section, is a replacement to the existing 132 kV wood pole OHL, which would be dismantled once the Proposed Development has been constructed and energised. Underground cabling is proposed as part of the design solution in Section 2 to mitigate likely significant landscape and visual effects of a steel lattice OHL within this sensitive landscape.
- 2.4.2 The Proposed Development within Section 2 is shown on Figure V1-3.1M to 3.1R. An overview of Section 2 is shown in Plate 2.3.

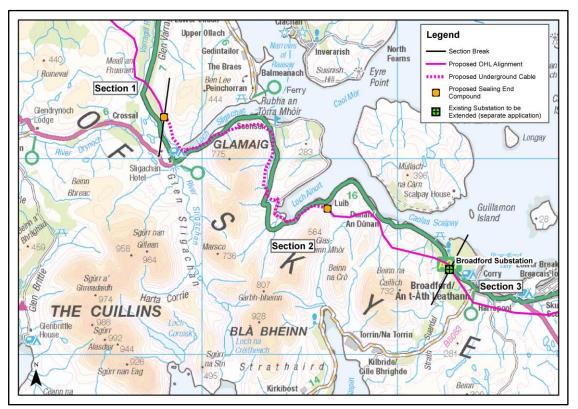


Plate 2.3: Overview of Section 2

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- 2.4.3 This Section transitions from the open moorland and relatively gently sloping nature of Sections 0 and 1, into the mountainous and steep hillsides of the Cuillin Hills, before flattening out again upon reaching Broadford Substation. The landscape context of Section 2 is characterised by the mountains of the Black and Red Cuillin ranges with their high summits and well-recognised silhouettes forming a prominent landscape and visual focus within the wider surrounding area. The long, fjord-like sea-lochs of Loch Sligachan and Loch Ainort cut inshore to the feet of the mountains and form a strong composition of land and sea which emphasises the height and contrast of the mountains.
- 2.4.4 Settlement is concentrated along the A87 and includes Sligachan, Sconser, Luib, Dunan, Strollamus and Broadford. This is a sensitive and dramatic landscape and the accessibility provided by the A87 trunk road, which winds around the bases of the mountains and around the heads of the lochs, results in this area being highly popular with tourists and visitors.
- 2.4.5 Section 2 comprises hilly and mountainous terrain in places, with steep hillsides and fast flowing watercourses. Elevations within the vicinity of the Proposed Development range from sea level to circa 150 m AOD.

Description of the Proposed Development Relative to Section 2

- 2.4.6 Section 2 commences at a CSE compound to the north of Sligachan (at approximate OS Grid Reference 148064, 832119). From here, the Proposed Development would comprise an underground cable for approximately 15 km until Luib, at which point it would transition to a steel lattice OHL, via another CSE compound (at approximate grid reference 156389, 827438), until Broadford Substation.
- 2.4.7 From the CSE compound north of Sligachan, the underground cable is routed south south-east towards the River Sligachan, under which it would cross by Horizontal Directional Drill (HDD). The underground cable would then run along the route of the A87 for approximately 1.8 km, before crossing the lower slopes of Glamaig, to the south of Sconser (Figure V1-3.1N). The underground cable then follows the contours of the slopes to the southeast until Gleann Torra-mhichaig, whereby it would follow a southerly course within the valley for approximately 3 km. At the southern extent of Gleann Torra-mhichaig, to the east of Beinn Dearg Mhor, the underground cable would cross the A87 and descend towards Loch Ainort (Figures V1-3.1O and 3.1P).
- 2.4.8 The underground cable is then routed south then east around the head of Loch Ainort, crossing the A87 again (Figure V1-3.1P), before continuing north-east on the south side of the road, traversing the north slopes of Glas-Bheinn Mhor prior to terminating at the CSE compound south of Luib (at approximate grid reference 156389 827438).
- 2.4.9 **Figures V1-3.1Q and 3.1R** show that, having transitioned back to OHL, the Proposed Development moves east around the south side of Am Meall, and to the south of Loch nam Madadh Uisge, before heading southeast at a point south of Dunan. The Proposed Development would then broadly follow the route of the existing OHL towards Broadford Substation, passing to the west of Strollamus.

- 2.4.10 As described above, within this Section it is proposed that the existing 132 kV wood pole OHL would be replaced with approximately 15 km of double circuit underground cable and 8 km of new double circuit steel lattice 132 kV OHL.
- 2.4.11 For steel lattice tower construction within this section, a combination of new temporary and permanent stone access tracks would be required to access each tower location (as shown on Figure V1-3.1M to 3.1R). In some places, existing tracks are present and these would be utilised, upgraded as required, where practicable. Access from the A87 is proposed to be taken from Luib, Strollamus and Broadford (via Old Corry Road to Broadford Substation).

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- 2.4.12 For underground cable sections, the overall cable construction corridor would typically be approximately 37 m wide to accommodate excavation and cable installation equipment, and the storage of excavated materials during construction for reinstatement once the installation process is complete. A temporary haul road would be constructed along the length of the cable during the construction phase, with the circuits installed on either side. Access from existing public roads to the proposed haul road would be required at Luib, Loch Ainort, Gleann Torra-mhichaig, Torr Dubh (west of Sconser) and at Sligachan.
- 2.4.13 Joint bays would be required every 900 m to 1,100 m (approximately) along the length of the cable. These would comprise an underground concrete lined structure approximately 9 m in length, 3.5 m wide and 2 m deep. In areas where there is a potential risk of localised flooding within underground joint bays, a cable link box may be required to be installed. This would be an above ground structure, approximately 1.3 m in height, 1.1 m wide and 0.4 m depth (see Appendix V1-3.2 for photographs and plans of link box structures). Indicative locations for cable link boxes within Section 2 of the project are shown on Figure V1-3.1m to V1-3.1q.
- 2.4.14 Approximately 1.8 km of underground cable would be installed under the A87, between Sligachan and Sconser. Whilst the precise method of installation would be determined by the successful Principal Contractor, it is anticipated that a trench would be cut in a single carriageway of the road for each of the two circuits, with the bundles of cable laid in each trench. This would require one circuit to be installed in a single side of the carriageway, with traffic management measures in place to maintain flows of traffic along the other side of the carriageway. It is anticipated that closed sections of carriageway can be kept to a minimum as works would happen sequentially and it should not be necessary to close the entire length of carriageway within which the circuit is being installed. Once one circuit is installed, the road would be reinstated, and the same process repeated on the other carriageway for the second circuit. The duration of these works along the A87 is anticipated to be approximately 12 weeks.
- 2.4.15 The cables would be terminated at either end by a CSE compound, which would allow for transition between underground cable to OHL. A permanent access track would be required at each CSE compound.
- 2.4.16 Further information on the construction process for elements of the project of relevance to Section 2 is provided in **Volume 1, Chapter 3: Project Description**.

2.5 Section 3 – Broadford to Kyle Rhea

Overview

- 2.5.1 This Section of the project is located between Broadford Substation and the existing crossing towers at Kyle Rhea, which connects the OHL 132 kV electricity network between Skye and the mainland. The Proposed Development within this Section comprises a new 132 kV steel lattice OHL to replace the existing 132 kV steel lattice OHL, which would be dismantled once the Proposed Development has been constructed and energised. The Proposed Development within Section 3 is shown on Figures V1-3.1S to 3.1W. An overview of Section 3 is shown in Plate 2.4.
- 2.5.2 The landscape of Section 3 differs in character between its eastern and western parts. The western part is characterised by the southern fringes of Broadford and associated crofting communities which make up its outskirts. These neighbour broad, open swathes of moorland and large-scale forestry plantation. To the east, the landscape is characterised by the remote southern coastline of Loch Alsh and Kyle Rhea with a rocky shoreline and steep wooded slopes, rising up into a group of high, rounded summits. Here, the Proposed Development crosses the Kyleakin and Kinloch Hills Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI). To the north of the Proposed Development at this point is the settlement of Kyleakin, whilst to the south and east, is Kylerhea, on the shore of the Kyle Rhea channel. Access to the northern and western parts of this Section is provided by the A87 and A851, whilst further east access is limited to single track roads and forestry tracks.

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TRANSMISSION

2.5.3 Section 3 comprises relatively flat terrain between Broadford Substation and the minor road to Glen Arroch, ranging from circa 10 m AOD to 100 m AOD. To the east of this section, the terrain becomes hillier and more challenging, ranging from 40 m AOD to 200 m AOD within the vicinity of the Proposed Development.

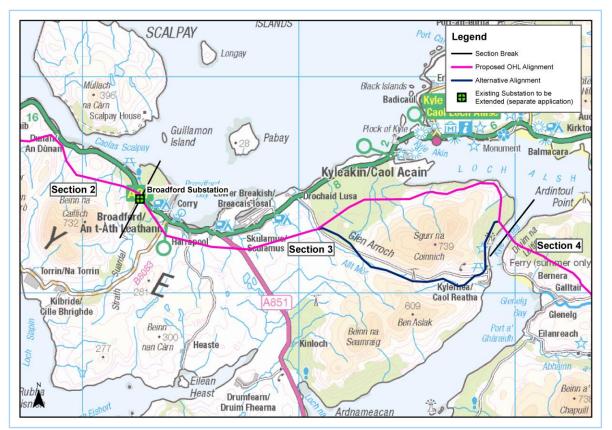


Plate 2.4: Overview of Section 3

2.5.4 As outlined in **Volume 1, Chapter 1 (Part 1.2)**, the Applicant is also presenting an Alternative Alignment as part of the consent application in Section 3 of the project between Broadford and Kyle Rhea, via Glen Arroch. The Alternative Alignment is discussed and assessed within **Volume 6** of this EIA Report.

Description of the Proposed Development Relative to Section 3

- 2.5.5 From Broadford Substation, the route follows the existing OHL south-east through forest plantation. The OHL then crosses the existing OHL to be on its southern side, and heads east, to the south of Broadford and Harrapool (Figure V1-3.1S). Figure V1-3.1T shows that the OHL crosses the A851 north-west of Lochan Cruinn, and continues across open moorland prior to reaching the minor road to Glen Arroch. At this point, the OHL crosses the minor road and the Allt Mor, before entering commercial forestry plantation to the south of Kyleakin (Figure V1-3.1U).
- 2.5.6 The Proposed Development continues to follow the existing OHL north-east before increasing in elevation compared to the existing OHL which is routed along the coast (Figure V1-3.1V). The Proposed Development continues east, along the southern extent of the woodland at Mudalach before following the contours of the lower slopes of Sgurr na Coinnich and returning close to the existing OHL to the south-east of Sron an Tuirbn (Figure V1-3.1W). The Proposed Development then follows the route of the existing OHL to the existing crossing towers that are to be utilised, subject to steel work and foundation improvements, at Kyle Rhea.



Construction of the Proposed Development within Section 3

- 2.5.7 Within this Section, it is proposed that the existing 132 kV steel lattice OHL would be replaced with a new double circuit steel lattice 132 kV OHL.
- 2.5.8 For steel lattice tower construction within this Section, a combination of new temporary and permanent stone access tracks would be required to access each tower location (as shown on Figure V1-3.1S to 3.1W) as they offer the most robust means of providing access for the heavy construction plant required. In the more remote parts of the Section (including within the SAC), permanent tracks are proposed to facilitate operational and maintenance access. Existing forestry tracks would also be utilised, upgraded as required, where practicable. The type of track construction would be determined by the Principal Contractor. However, given the sensitivities of the SAC, preliminary design work has identified those areas that are likely to require cut tracks, and those that would likely use a floating construction within the SAC. Track construction type specific to the SAC is shown on Figures V1-3.1V and 3.1W.
- 2.5.9 Access from the A87 is proposed to be taken from Broadford (via Old Corry Road to Broadford Substation and the B8083), the A851 south of Skulamus, the minor road to Glen Arroch close to the existing OHL crossing point and west of Kyleakin. To minimise construction traffic within the SAC and to reduce the width of construction access tracks (given that this would remove the requirement for cranes), it is proposed that a number of towers would be constructed by helicopter. Whilst this construction technique does not avoid the requirement for track infrastructure, it does considerably reduce the frequency of track use by construction vehicles, thus minimising potential damage to habitats. Plant and aggregate for towers to the east of the SAC (i.e. Towers BF63 to BF79) would be delivered by landing craft onto a temporary pontoon, utilising an area that has previously been used for timber extraction. It is anticipated therefore that construction traffic utilising the minor road through Glen Arroch would be limited to light vehicle use only for the Proposed Alignment.
- 2.5.10 Works within the SAC would be prioritised to be completed in as short a time as practicable to minimise adverse effects on habitats within the SAC. As such, it is estimated this could be completed in 6 to 9 months.
- 2.5.11 Further information on the construction process for elements of the project of relevance to Section 3 is provided in **Volume 1, Chapter 3: Project Description**.
- 2.5.12 The existing OHL would be dismantled upon completion of the Proposed Development. This would be achieved by a combination of helicopter, all terrain vehicle and foot access (refer to **Appendix V1, 3.8): Dismantling Plan**.

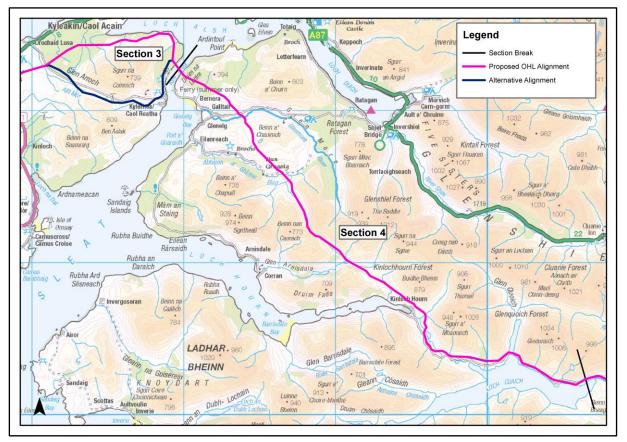
2.6 Section 4 – Kyle Rhea to Loch Cuaich

Overview

2.6.1 This Section is approximately 38 km in length, running north-west to south-east between the east landing point of the Kyle Rhea crossing on the mainland to Loch Quoich dam. The Proposed Development, a steel lattice tower 132 kV OHL, is a replacement to the existing 132 kV steel lattice OHL, which would be dismantled once the Proposed Development has been constructed and energised. The Proposed Development within Section 4 broadly follows a similar route to the existing OHL line, with some localised deviations, and is shown on Figures V1-3.1X to 3.1GG. An overview of Section 4 is shown in in Plate 2.5.



Plate 2.5: Overview of Section 4



- 2.6.2 The landscape of Section 4 is characterised by an extensive stretch of remote mountains, upland moorland and long, sweeping glens, interspersed with large bodies of water comprised of the long finger sea-loch of Loch Hourn and the expansive Loch Cuaich. This section is largely uninhabited but small scale agricultural use and settlement is present around the coastal fringes and within some of the coastal glens including Glen More and Gleann Beag. Scattered properties are also present at Balvraid and Kinlochhourn.
- 2.6.3 Access to the west of this Section comprises minor, often single-track roads, connected to the A87 via the old military road from Shiel Bridge. To the east of this Section, access from the A87 is available via the minor road to Kinlochhourn. The area between Balvraid and Kinloch Hourn has no public road access at all, although there are some forestry and estate tracks, as well as walking paths through this remote part of the route.

Description of the Proposed Development Relative to Section 4

- 2.6.4 **Figure V1-3.1X** shows the OHL as it crosses the Kyle Rhea channel from Section 3 and continues south-east through forestry, following the existing OHL on its south side. The Proposed Development passes between Creag Dubh and Cnoc Mor before crossing Glen More. After crossing the valley, the OHL climbs the hill to the south of Glen More, requiring some felling of native woodland, before continuing south and passing to the east of Loch a' Mhuillin (**Figures V1-3.1Y to 3.1Z**).
- 2.6.5 Conitnuing in a south easterly direction, the OHL heads toward Druim Iosal. The area around Druim Iosal is a particular pinch point given the presence of the existing OHL and local topography. As such, the Proposed Development would be built on the same alignment as the existing OHL for a short stretch up and over the hill (Figure V1-3.1Z). This would require outages of the electricity network for a short period of time to enable works to be completed safely.

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- 2.6.6 Between Balvraid and Kinlochhourn (Figures V1-3.1Z to 3.1DD), the Proposed Development closely follows the alignment of the existing OHL. Given the complex topography and terrain, some cross overs of the existing OHL are inevitable. On approach to Kinloch Hourn, the steepness of the topography and terrain is such that the most viable option is to utilise the existing alignment. This would require new towers to be built approximately 15 20 m from the existing towers (or where terrain is favourable). In these circumstances, outages of the elctricity network would also be required to enable safe working.
- 2.6.7 After passing the north side of Kinloch Hourn, the OHL turns south at Tom nan Ramh, towards Loch Coire Shubh, whereby it crosses the minor road and follows a southerly course to the west of the road and loch, prior to crossing back over the road to the south of Loch an Doire Dubh (Figures V1-3.1DD to 3.1EE). Here, the existing OHL is routed to the east of the lochs, on very steep gradient. As discussed within Volume 1, Chapter 4: Routeing Process and Alternatives, the Proposed Development in this location has sought to minimise landscape and visual impacts where possible, whilst also ensuring the constructability of the OHL in accordance with health and safety requirements and legislation.
- 2.6.8 After passing Loch Coire Shubh and Loch an Doire Duibh, the route turns east, past the north shore of Loch Coire nan Cnamh and eventually meeting the north shore of Loch Cuaich (**Figure V1-3.1EE**). The OHL continues to the north of the minor road, and to the south of the existing OHL, before crossing Glen Quoich just to the north of the bridge, then continuing south-east and following the existing OHL to the north of Loch Cuaich whereby it would connect with the existing NeSTS poles (**Figures V1-3.1FF to 3.1GG**).

- 2.6.9 Within this Section, it is proposed that the existing 132 kV steel lattice OHL would be replaced with a new double circuit steel lattice 132 kV OHL. At Kyle Rhea, on the mainland side, the existing crossing towers would be utilised, subject to steel work and foundation improvements.
- 2.6.10 In general, new stone tracks would be required to access many of the towers within this Section, many of which would be retained (albeit reduced in width) to facilitate operational and maintenance access in this remote section. There are a number of forestry and estate tracks, as well as walking paths through the more remote parts between Balvraid and Kinloch Hourn, and the construction access strategy has focussed on utilising existing tracks and paths where possible. Some of these would require upgrading but would be partially reinstated upon completion. Where access to tower positions is difficult due to steep terrain, of particular consideration in parts of this Section, alternative methods would be proposed such as using smaller items of plant, specialist tracked plant and, in some cases, using helicopters for delivering materials and tower components to tower work areas.
- 2.6.11 Construction access to the Proposed Development within the west of Section 4 would utilise the Old Military Road between Shiel Bridge and Glenelg. This would be subject to public road improvement works, expected to be largely undertaken under permitted development rights held by The Highland Council (see Appendix V1-3.4 for a preliminary appraisal on public road improvement works). The area around Druim Iosal and between Balvraid and Kinlochhourn is anticipated to be made from Glen More, utilising existing forestry tracks through Moyle Wood (to be upgraded) prior to a new track being required, and Balvraid, whereby the existing track (also a core path) would be upgraded. This would form the primary access for construction traffic to access the remote section of the new OHL between Balvraid and on approach to Kinloch Hourn.
- 2.6.12 The descent into Kinloch Hourn is considered too steep for standard construction vehicles, meaning alternative methods of construction would be required such as the use of helicopters and the use of wide-tracked excavators.
- 2.6.13 From Loch Coire Shubh east towards Loch Cuaich, construction access would utilise the minor road to Kinloch Hourn. This would also be subject to public road improvement works, which would also expected to be largely



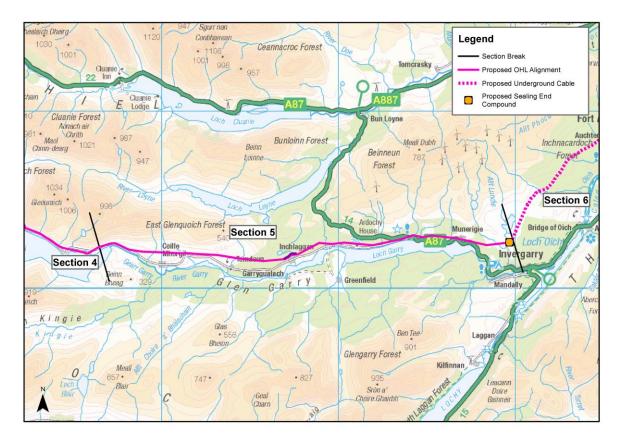
undertaken under permitted development rights held by The Highland Council (see **Appendix V1-3.4** for a preliminary appraisal on public road improvement works). Construction traffic would typically avoid use of the public road between Loch Coire Shubh and Kinloch Hourn, instead using new or existing tracks (to be upgraded) along the route of the OHL.

- 2.6.14 Between Loch Coire Shubh and Glen Quoich, given proximity to the public road, new temporary or permanent tracks typically comprise short lengths off the public road. At Glen Quoich, construction traffic would be required to avoid the existing bridge due to weight limits, and instead would utilise the existing track via Glen Quoich. Beyond Glen Quoich towards Loch Cuaich, new temporary access tracks are proposed, either along the alignment of the OHL, or from the public road. Existing tracks would be utilised where available.
- 2.6.15 Throughout this Section, given its remote nature and lack of suitable access, permanent tracks are proposed to facilitate operational access. It would be intended to reinstate the construction access to a width suitable for 4x4 vehicles.
- 2.6.16 Further information on the construction process for elements of the project of relevance to Section 4 is provided in **Volume 1, Chapter 3: Project Description**.
- 2.7 Section 5 Loch Cuaich to Invergarry Overview
- 2.7.1 This Section of the project is located between Loch Quoich Dam and a point northwest of Invergarry, south of Loch Lundie. The Proposed Development within this Section comprises a new 132 kV steel lattice OHL to replace the existing 132 kV steel lattice OHL between Loch Quoich Dam and Kingie, and the 132 kV wood pole OHL between Kingie and Aberchalder (itself a replacement for the previous 132 kV steel lattice OHL), which would be dismantled once the Proposed Development has been constructed and energised. At Loch Quoich Dam, three NeSTS¹ poles form a permanent replacement to the existing towers in this location following a landslip in 2018. The NeSTS poles would be retained to form part of the Proposed Development in this location. The Proposed Development within Section 5 is shown on Figure V1-3.1HH to 3.100. An overview of Section 5 is shown in in Plate 2.6.
- 2.7.2 The Proposed Development in this Section closely follows the existing OHL for much of its length, from Loch Quoich Dam, and following a route to the north of Loch Poulary and Loch Garry prior to crossing the A87 and heading towards Loch Lundie, to the north of Invergarry. Here, the OHL would terminate at a CSE compound to the south of Loch Lundie (at approximate grid reference 229695, 802602).
- 2.7.3 The landscape of Section 5 is characterised by large expanses of coniferous forest plantation which cloth the slopes to the east and west of the large open waterbodies of Loch Garry and Loch Poulary. At the western end of the section, open, moorland slopes with small clumps of native woodland characterise a steep-sided valley which contains the Quoich Dam with panoramic views towards the western mountains. Dispersed, rural properties are scattered throughout this section, alongside the lochs and within the edges of the forest (including Tomdoun, Poulary, Inchlaggan and Garrygualach), reached by narrow single track roads and tracks leading from the A87 and rural road alongside Loch Garry.

¹ A project to create and implement a new design of overhead transmission line structures.



Plate 2.6: Overview of Section 5



2.7.4 From the northeast shore of Loch Cuaich, the OHL continues to route east, following the existing OHL (Figures V1-3.1HH to 3.1KK). Upon reaching Inchlaggan, the OHL diverts to the rear of the properties in the area, unlike the previous steel lattice OHL that was routed through some property boundaries, before continuing east north-east towards Loch Garry (Figure V1-3.1LL). The line continues to route in an easterly direction, to the north of the minor road and Loch Garry. The A87 is crossed by the Proposed Development at a similar point to the existing OHL, and the OHL continues to head east, to the north of the A87 and within the vicinity of Munerigie prior to terminating at a CSE compound to the south of Loch Lundie (at approximate grid reference 229695, 802602) (Figures V1-3.1MM).

- 2.7.5 Within this section, it is proposed that the existing 132 kV OHL (part steel lattice, part wood pole) would be replaced with a new double circuit steel lattice 132 kV OHL.
- 2.7.6 A temporary diversion of the existing 132 kV OHL is required during construction of the Proposed Development in the vicinity of Inchlaggan, as it is proposed to utilise the same alignment as the existing OHL for approximately 500 m. The temporary diversion is proposed for approximately 750 m (see Figure V1-3.1KK) and would be in place for a period of approximately 9 months.
- 2.7.7 Construction access would utilise the A87 as well as the minor road to Kinloch Hourn. As discussed in paragraph 2.6.13, this road would be subject to public road improvement works, which are expected to be largely undertaken under permitted development rights held by The Highland Council (see Appendix V1-3.4 for a preliminary appraisal on public road improvement works).
- 2.7.8 Stone access tracks would be required to access each tower location, albeit good existing access is present, and would be utilised where practicable, from other existing OHL infrastructure and commercial forestry operations.



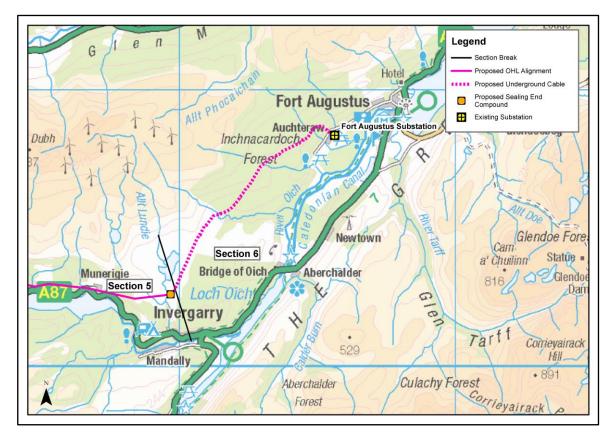
2.7.9 Further information on the construction process for elements of the project of relevance to Section 4 is provided in **Volume 1, Chapter 3: Project Description**.

2.8 Section 6 – Invergarry to Fort Augustus

Overview

2.8.1 This Section of the project is located between a CSE compound to the north-west of Invergarry, south of Loch Lundie (at approximate grid reference 229695, 802602), and Fort Augustus Substation. The Proposed Development would be underground cable for the entirety of this Section, a distance of approximately 9 km. The existing 132 kV wood pole OHL would be dismantled once the Proposed Development has been installed and energised. The Proposed Development within Section 6 is shown on Figures V1-3.100 to 3.1QQ. An overview of Section 6 is shown in in Plate V2-2.7.

Plate 2.7: Section 6 Overview



2.8.2 The landscape of Section 6 is broadly characterised by a mosaic of upland moorland by Loch Lundie and coniferous forestry on higher ground, and a low-lying pastoral glen floor with rural settlements, including Invergarry, Auchterawe and Fort Augustus. Existing OHLs are a noticeable feature within this landscape, crossing through forestry, across moorland and along valleys and other built features, such as wind turbines and substations, are also present.

Description of the Proposed Development Relative to Section 6

2.8.3 From the CSE compound, the underground cable would follow the route of the existing wood pole OHL northeast, between Loch Lundie to the west, and forestry plantation to the east (**Figure V1-3.100**). Continuing north-east, the Proposed Development follows the route of the wood pole OHL, crossing beneath Invervigar Burn before entering Inchnacardoch Forest plantation (**Figure V1-3.1PP**). Continuing north-east through an area marked as Auchteraw Wood, the Proposed Development then meets the existing Beaulty to Denny



wayleave corridor and follows this south-east where it terminates at Fort Augustus Substation (Figure V1-3.1QQ).

- 2.8.4 For underground cable sections, the overall cable construction corridor would typically be approximately 37 m wide to accommodate excavation and cable installation equipment, and the storage of excavated materials during construction for reinstatement once the installation process is complete. A temporary haul road would be constructed along the length of the cable during the construction phase, with the circuits installed on either side. Existing access tracks within this area would be utilised with access anticipated to be taken from Fort Augustus (Auchterawe) and Invergarry (via existing and new tracks at Munerigie). The existing access due south from the proposed CSE compound to Invergarry would be utilised for light vehicle emergency use only.
- 2.8.5 Joint bays would be required every 900 m to 1,100 m (approximately) along the length of the cable. These would comprise an underground concrete lined structure approximately 9 m in length, 3.5 m wide and 2 m deep. In areas where there is a potential risk of localised flooding within underground joint bays, a cable link box may be required to be installed. This would be an above ground structure, approximately 1.3 m in height, 1.1 m wide and 0.4 m depth (see **Appendix V1-3.2** for photographs and plans of link box structures). Potential locations for cable link boxes within Section 6 are subject to ongoing studies.
- 2.8.6 Further information on the construction process for elements of the project of relevance to Section 6 is provided in **Volume 1, Chapter 3: Project Description**.